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Research paper

Teaching immigrant students: Finnish teachers' understandings and attitudes



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HIGHLIGHTS

- Finnish teachers had knowledge about second language acquisition and positive attitudes towards students' first languages.
- The teachers had a strong sense of responsibility to promote equity and social justice.
- There were some areas indicating lacked knowledge concerning e.g. the significance of the first languages.
- These findings provide guidance for the improvements in teacher education.

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ABSTRACT

This study analysed Finnish teachers' (N=820) understandings and attitudes about teaching students from immigrant backgrounds and how these relate to linguistically and culturally responsive education. The data were gathered via an online-survey in 2016. The results indicate that the Finnish teachers surveyed had knowledge about second language acquisition, had positive attitudes towards students' first languages, and had a strong sense of responsibility to promote equity and social justice. However, there were specific areas in which teachers lacked knowledge and demonstrated uncertainty about teaching students with immigrant backgrounds. These findings provide guidance for the improvements in teacher education.

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1. Introduction

Globally, students with immigrant backgrounds do not succeed as well as native students (OECD, 2019). One way to positively influence the situation is the implementation of a linguistically and culturally responsive education that works from the students' perspectives, and is reflected in their learning outcomes (see, e.g.

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Benediktsson et al., 2019; Byrd, 2016; Cummins, 2001; Thomas & Collier, 1997). However, as research suggests, teachers are still not completely equipped to teach culturally and linguistically diverse students from immigrant backgrounds (see e.g. Aalto, 2019; Aalto & Tarnanen, 2015; Harju-Autti & Sinkkonen, 2020; Iversen, 2020; Kimanen et al., 2019; Lundberg, 2019; Repo, 2020; Rodriguez-Izquierdo et al., 2020; Shestunova, 2019; Sullivan, 2016; Tarnanen & Palviainen, 2018). Further, teaching students with immigrant backgrounds is not a widely researched area in Finland. This study

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¹ Most of the recent studies are related to the language acquisition, multilingualism and intercultural competence.

examined Finnish teachers' understandings and attitudes about teaching students from immigrant backgrounds, and how they relate to research on linguistically and culturally responsive education.

Outside of Finland, the successful teaching of linguistically and culturally diverse students has been studied for several decades. In the 1970s, Geneva Gay (2010, 2013) began writing about effectively teaching ethnically diverse students. She later termed this culturally responsive teaching and has since further refined and deepened the concept. The concept connects students' cultural knowledge, prior experiences, and performance styles to academic knowledge in a way that legitimize what students already know. Based on her observations of exemplary teachers of African-American students, Ladson-Billings (1995) proposed the construct culturally relevant pedagogy, which empowers students by using cultural referents to impart knowledge, skills, and attitudes. Both these frameworks are grounded in a strong commitment to social justice in education and view schools as grounds for social change (Aronson & Laughter, 2016). Paris and Alim (2014; 2017) who argue that to sustain and to support multilingualism and multiculturalism, relevance and responsiveness is not enough, and advocate instead for what they call a culturally sustaining pedagogy, a concept also reflected by Ladson-Billings (2014). Culturally sustaining pedagogy focuses on fostering pluralism by offering students opportunities to sustain community cultural practices as well as to access to dominant cultural competence (Paris & Alim, 2014).

In addition to taking students' cultural backgrounds into consideration, it is important for teachers to consider aspects of language as well. Linguistically responsive teaching (LRT) as described by Lucas and Villegas (2011; 2013) refers to pedagogy where teachers are aware of the multiple roles of language in learning, identity development and belonging in society, and have pedagogical knowledge and skills to support all kinds of learners in language related issues. The framework of LRT, used as the main theoretical background in this study, includes, for example, valuing linguistic diversity, namely viewing all languages as equally valuable and as resources for learning. Thus, linguistically responsive pedagogy includes implementing instruction that builds on students' entire linguistic repertoire. For example, students' home languages are viewed as essential resources for learning, and pedagogy that only allows the use of the language of the school results in poorer academic outcomes (Cummins, 2001; Ganuza & Hedman, 2018; Ramírez, 1992; Thomas & Collier, 1997).

Linguistically responsive teaching also entails teachers' understanding of language learning which is the foundation for understanding language learners (Villegas et al., 2018), and the use of this knowledge in lesson planning. Recognizing which linguistic features are challenging for learners during content lessons, and what kind of language knowledge is required to be able to comprehend and produce various text types at school is essential as well (Gibbons, 2009; Lucas & Villegas, 2011, 2013; Schleppegrell, 2002; Wong-Fillmore & Snow, 2018). Language related knowledge and skills include the importance of knowing the backgrounds of students in order to be able to make learning meaningful for them. Finally, linguistically responsive teachers should advocate for their multilingual students to able to participate fully in schools or the wider society and promote their learning with different kinds of pedagogies (Gibbons, 2009; Lucas & Villegas, 2011; 2013).

Language and culture need to be viewed critically as issues of equity, recognizing how power structures can impede the goals of social justice (Nieto & Bode, 2012). Promotion of equity as a part of social justice is central to the academic success of minoritized groups, including students with immigrant backgrounds. Thus, views on linguistically and culturally responsive education emphasize questions of both equity and social justice. Enterline

et al. (2008, p. 270) state that teachers "can and should be both educators and advocates who are committed to the democratic ideal and to diminishing existing inequities in school and society by helping to redistribute educational opportunities". To promote social justice also includes what teachers believe and think about their job in a larger context, and how they identify and challenge inequities (Enterline et al., 2008). In Nordic countries providing equal access and good education for all is seen as the way to create a more just society (Beach, 2017). However, according to research, Finnish teachers have an idealistic view of school as a democratic and disposition neutral institution, and they lack understanding and knowledge about how schools are part of a wider sociocultural system in the society (Juva & Holm, 2017; Talib, 1999).

To measure student teachers' capability to teach for social justice the Boston College (BC) Evidence Team created a *Learning to Teach for Social Justice-Beliefs* (LTSJ-B) scale, which contributed to the questionnaire used in this study. The LTSJ-B scale includes, amongst other things, high expectations for all students, an assetbased view on the cultural and linguistic resources students' bring to school, the role of teachers as advocates for their students, teachers' own beliefs and attitudes about race, social class, sexual orientation and disabilities, and that issues related to racism and inequalities should be discussed openly in the classroom (Cochran-Smith et al., 2012) These ideas are also reflected in the LRT framework (Lucas & Villegas, 2011; 2013), in culturally relevant pedagogy (Ladson-Billings, 1995; 2014), and in culturally responsive teaching (Gay, 2002; 2010).

Based on the aforementioned perspectives, teachers' understandings and attitudes on teaching immigrant background students are investigated in the following areas: second language (L2) acquisition, students' cultural and linguistic backgrounds and promoting social justice. These three issues framed the examination of teachers' stance on linguistically and culturally responsive education, the term we use to broadly encompass the principles of linguistically and culturally relevant, responsive and sustaining teaching and pedagogies mentioned above providing a theoretical grounding for the research project that this particular study is part of. This study is guided by the following research questions:

- 1. How do the teachers surveyed understand second language acquisition, the students' background and L1 in teaching, and how do they report promoting social justice?
- 2. How are teachers' background factors linked to the three areas mentioned above?
- 3. What kind of teacher groups emerge based on teachers' understandings within the three areas investigated?

2. Context of the study

The number of immigrant background students in Finland has been growing steadily since the 1990s. The most common countries of origin are former Soviet Union, Estonia, Somalia and former Yugoslavia. Overall, immigrant background students are very heterogenous group in many ways. Immigration to Finland is mostly related to work, family and studying, and only 7,4% of immigrants have another reason (Valtioneuvosto, 2021.). In this article, the term immigrant background student refers to the all aforementioned groups generally, even though this kind of grouping is never unproblematic. However, regardless of their background, immigrant background students often face educational challenges that teachers need to consider in their work (Borgna, 2018). Increasing global migration is evident in Finnish society and schools, and educators throughout the country are teaching growing numbers of students from linguistically and

culturally diverse backgrounds.

Teaching students with various levels of language proficiency in the Finnish language, with different cultural practices, and diverse experiences and backgrounds in education before arriving in the Finnish school system, can make teachers uncertain about their teaching abilities (Aalto, 2019; Aalto & Tarnanen, 2015; Harju-Autti & Sinkkonen, 2020; Kimanen et al., 2019; Repo, 2020; Shestunova, 2019; Talib, 1999; 2005). In addition, recent studies (Harju-Luukkainen et al., 2014; Kauppinen & Marjanen, 2020; Kirjavainen & Pulkkinen, 2017; OECD, 2019; Vettenranta et al., 2016) on PISA 2012 and PISA 2018 (Leino et al., 2019) suggest that children with immigrant background do not benefit from basic education as much as native Finnish children. At the age of 15, the difference between children with immigrant background and native Finnish children is an average of one year of studies. This difference is much larger in Finland than in other OECD-countries. According to a study by Kuukka and Metsämuuronen (2016), although the overall language proficiency of Finnish as a second language pupils was fairly high, for many students with immigrant backgrounds their level of proficiency in Finnish was not sufficient for studying advanced subjects.

In Finland, education is free for everyone, and there are not many private schools, in addition there is no early stratification system. Further, one of the basic values of education in Finland is that education has to be equal and provide equal opportunities for all students. Thus, the Finnish education system is considered democratic, fair and equal for all students. When Basic Education was reformed in Finland in the 1970s, one of the core values was equality and the main goal ever since has been providing high quality education for all children independent of social class, gender, ability or geographical location. According to Ouakrim-Soivio and Hietala (2016), however, Finnish schools are facing challenges in providing educational equity, and in particular, they are not providing all students with immigrant backgrounds the prerequisites they need for full participation in Finnish civil society. In addition, ethno-centrism, nationalism, and discrimination based on ethnicity are common in Finnish schools (Juva & Holm, 2017; Souto, 2011). Furthermore, Finnish teachers have lower expectations of immigrant background students' performance in school and the belief that to be integrated into the school they should fit into the norms of the cultural practices of "Finnishness" (Juva & Holm, 2017).

In Finland, the current national curriculum for basic education (National Agency for Education, 2014) and upper-secondary education (National Agency of Education, 2015) implemented in 2016 reiterates the focus on equity and calls for linguistic awareness on the part of teachers and requires them to take into account cultural diversity in their pedagogy. The core curricula state that teaching should support students' own cultural identity and developing into active participants in their culture and community, to understand the multitude of cultures, and become interested in other cultures (National Agency for Education, 2014; 2015). Each student's cultural and linguistic identity should be supported in multiple ways. A special goal in teaching multilingual students is to support students' multilingualism and the development of identity and selfconfidence (National Agency for Education, 2014; 2015). The support in the curricula for linguistically and culturally responsive teaching reflects the research cited above (see e.g. Gay, 2010; Ladson-Billings, 1995; Lucas & Villegas, 2013; Paris & Alim, 2014, Cummins, 2001, Nieto Bode, 2012). The guidelines of the curricula require every teacher to take into account the role of language in all learning and the challenges that not knowing the language of instruction poses for learners. Further, all students should be able to use their whole linguistic repertoire as a resource for learning (National Agency for Education, 2014; National Agency for Education 2019). Making these changes a practical reality presents challenges, as reflected in the comments of an administrator from the National Board of Education in Finland in a study about curriculum changes in Finland: "It is a big leap to make multilingualism as a part of mainstream thinking" (Alisaari et al., 2019, p. 44).

As ethical professionals, teachers are responsible for supporting the personal and academic growth of all their students (Nieto & Bode, 2012), and the requirements of the national curricula include every teacher, regardless of the subject they teach. Nevertheless, recent studies (see e.g. Juva & Holm, 2017; Kauppinen & Marjanen, 2020; Kirjavainen & Pulkkinen, 2017; Leino et al., 2019; European Union, 2015; Vettenranta et al., 2016) show that the Finnish comprehensive school does not cater equally to all children from different backgrounds. This raises the question of whether Finnish teachers are aware of linguistically and culturally responsive education. In order to support teachers in enacting the new curriculum, and better devise appropriate initial teacher preparation and subsequent professional development it is important to understand how Finnish teachers perceive their immigrant students and their understandings and attitudes related to second language acquisition, valuing backgrounds and home languages, and promoting social justice.

3. Methods

This study is an overarching analysis of the data from a research project to investigate Finnish teachers' understandings and attitudes about teaching immigrant background students. Data were collected via an online-questionnaire which was based on a preliminary version of the Linguistically Responsive Teaching (LRT) Survey constructed by Milbourn et al. (2017), which is based on the Linguistically Responsive Teaching Framework (LRTF) by Lucas & Villegas (2011, 2013). In addition, the survey included nine items from "Learning to Teach for Social Justice-Beliefs" (LTSJ-B) scale developed by the Boston College (BC) Evidence Team to measure beliefs and perspectives of teaching for social justice (Enterline et al., 2008; Ludlow et al., 2008). All twelve items of the LTSJ-B scale were included in the original LRT Survey developed by Milbourn et al. (2017), but only nine of them were thought to be relevant in the educational context of Finland. The LRT survey was translated into Finnish and modified to fit the Finnish context and does not include all items in the original English version. The Finnish adaptation of the questionnaire (by Alisaari and Acquah), was reviewed by and commented on by the National Agency of Education of Finland as well as by the scholars working in The Finnish Network for Language Education Policies and in the Centre for Applied Language Studies. Based on the comments, the questionnaire was further modified and finalized with the university statistician, and then transformed into an online survey.

The research data were collected online in spring 2016 using the questionnaire described above. The questionnaire included both Likert scale items and open-ended questions, as well as questions about demographics and background information related to participants' training and experience as teachers. In total there were 29 questions in the questionnaire. Questions related to teachers' practices and open ended questions have been analysed in previous studies where the focus has been on: teachers' orientations towards multilingualism and the use of students' L1s as resources for learning (Alisaari et al., 2019b, 2021a); teachers' understandings on language development and linguistically responsive pedagogy (Alisaari & Heikkola, 2020); teachers' practices in linguistically and culturally diverse classrooms (Heikkola et al., 2022) and teachers' perceptions of aspects that bring them joy when teaching immigrant background students (Alisaari et al., 2021b). In the present

study, responses to questions number six and seven including 38 of the Likert scale items (Table 2) related to linguistically and culturally responsive education were analysed. The teachers responded to the Likert scale items on a scale from 1 to 5 (1 = strongly agree, 2 = agree, 3 = I do not know, 4 = disagree, 5 = strongly disagree), with lower scores indicating a greater awareness and knowledge on linguistically and culturally responsive education.

In order to reach the largest possible number of Finnish teachers, a link to the online survey was widely distributed on various email lists, social media, websites for educators, and at the national educational fair. A link to the survey and a cover letter either in Finnish or in Swedish depending on the language of the department, were also sent to all local education departments in Finland, for distribution to all the teachers within the department's area. The language of the questionnaire was Finnish, but it was possible to answer the open-ended questions also in Swedish.

Eight hundred and twenty persons (79% female, 21% male) from all over Finland responded to the questionnaire. Respondents represented classroom (elementary) teachers, subject (content area) teachers, special education teachers, and teachers with more than one qualification (e.g. having qualification of both classroom teacher and subject teacher), headmasters, and school counsellors ranging from preschool and basic education to upper-secondary and vocational school. The respondents' first language was 91% Finnish, 7% Swedish and 2% other than Finnish or Swedish. In addition to the demographics, the participants were asked about their experience with immigrant background students and if they had participated in any training related to second language acquisition and/or cultural diversity. Respondents' demographics and background information corresponded well to those of Finnish teachers overall (Kumpulainen, 2017), and hence the sample can be viewed as representative of Finnish educators in general.

For the statistical analyses, the reverse items were reverse scored. In order to have a continuous scale from strongly agree to strongly disagree number three "I don't know" was moved to number five. Hence, the scale in the statistical analyses is from 1 to 4: 1 = strongly agree, 2 = agree, 3 = disagree, 4 = strongly disagree.Number 5 "I don't know" was not included in the summed variables, as it does not represent either agreement or disagreement, but it was used for the analyses in the case of individual items. Based on inter-item correlation and the content of the items, 19 items were used to construct three summed variables (Table 1), reflecting the three key areas of linguistically and culturally responsive education discussed in the theoretical section. Also the items that are not included in the summed variables were analysed. Items that were considered to give additional information are presented in the Findings and Discussion. The reliability of the summed variables was evaluated by Cronbach Alpha (see Table 1). Thereafter, the summed variables were used for analyzing teachers' understandings and attitudes by comparing information concerning the participants' demographics and background information using one-way ANOVAs, and t-tests. For multiple comparisons, Bonferroni was used for normally distributed datasets, and Tamhane for datasets that were not normally distributed. Finally, Kmeans clustering was used to determine whether the outcomes of the summed variable applied equally to all respondents.

The summed variables were named according to their content. *Understanding* L2 includes items on knowledge and attitudes on second language acquisition, items in the summed variable *Background and* L1 relate to valuing and understanding the role of the home culture and the home languages, and the third summed

variable *Social justice* includes items on promoting social justice at both the teacher and curriculum level. The items in each summed variable are marked in Table 2 with V1, V2 and V3 accordingly.

4. Findings

The findings are presented based on the three summed variables constructed from the Likert scale items as explained above and followed by the results of the K-means cluster analysis. The summed variables outline the overall image of Finnish teachers' (N=820) understandings and attitudes related to language, culture and social justice when teaching students with immigrant backgrounds. The link between the summed variables and the respondents' background factors was investigated, and the statistically significant background factors are reported here (see Table 3).

Some items had contradictory responses or a very high percentage of "Don't know" responses, and these items did not correlate in the inter-item correlation analysis with other items on the same topic, and hence, were not included in summed variables. However, some of these items are presented for discussion since they provide additional information on teachers' perspectives and a more complete description of the data.

The analyses of the summed variables indicate that, overall, the Finnish teachers surveyed reported having knowledge about and a positive attitude towards all three areas of analysis in this study: they indicated that they understood the principles of second language acquisition, valued the students' home cultures and home languages, and had an inclination towards social justice (see Table 4). Although, a closer look into the individual items revealed some misunderstandings and lack of knowledge in particular areas. According to the cluster analyses, most of the teachers had deep or solid understandings in all three areas studied. Next, the results for the three summed variables in more detail will be presented.

4.1. Understanding of second language acquisition

The summed variable *Understanding* L2 includes six items (Table 2: Q21, Q24, Q25, Q26, Q29, Q30) related to second language acquisition. The lower the mean, the more the respondents agreed with the survey items that reflected linguistically responsive teaching as defined by Lucas and Villegas (2011; 2013). The mean of 1.5/4 of this summed variable indicates that respondents had an understanding of second language acquisition. However, a more indepth examination reveals some differences between the different respondent groups depending on their background factors (see Table 3). Detailed information regarding the significant background factors will be presented next.

Teachers younger than 41 had a greater understanding of second language acquisition than those aged 51 and over. Furthermore, those who had been working as teachers for fewer than 10 years indicated a greater understanding compared to those who had been working for over 20 years. Teachers with no experience in teaching students with immigrant backgrounds showed less

Table 1Summed variables.

summed variable	e number of items	s inter-item correlation	mean	std. dev.	alpha
Understanding L2	6	0.24-0.51	1.53	.48	0.77
Background and L1	7	0.34-0.60	1.86	.54	0.86
Social justice	6	0.25-0.70	1.62	.52	0.80

 $^{^{\}rm 2}$ In Finland, students can carry out their education in Finnish speaking or Swedish speaking schools.

Table 2 All 38 Likert scale items.

Code	Item
Q1r	Language and culture are independent of each other.
Q2r	Language learning has a minor role in my teaching.
Q3	Language, culture and identity are intertwined.
Q4V2	Teachers should consider immigrant background students' backgrounds when designing lessons for the whole class.
Q5r	It is important that teachers of students with immigrant background encourage immigrant families to use Finnish as much as possible at home.
Q6r	Language is only a minor aspect of one's identity.
Q7	Teachers should consider immigrant background students' backgrounds when designing assessments of any subject for the whole class.
Q8	People can be discriminated because of their language.
Q9	It is unethical to prohibit the use of students' home languages in the classroom.
Q10	The social status of a language is related to the power the people who speak that language have in the society.
Q11	If I had an opportunity to learn about new cultures, I would grasp it.
Q12r	I feel uncomfortable if I am in a group and others are speaking a language I do not know.
Q13V2	It is important for teachers to ask immigrant background students to teach others in the classroom words or phrases in their own language.
Q14	Teachers should allow students to write in their mother tongues.
Q15*V2	Good teaching incorporates diverse cultures and experiences into the classroom lessons and discussions.
Q16V2	It is important for teachers to ask immigrant background students questions about their mother tongues.
Q17V2	Teachers should use learning materials that reflect also the cultural, ethnic, and/or linguistic backgrounds of immigrant background students.
Q18r	It is the teacher's primary responsibility to teach content, not language skills.
Q19r	The responsibility to learn Finnish well rests primarily on the immigrant background students.
Q20V3	It is beneficial for teachers to examine school practices for their potential impacts on immigrant background students.
Q21V1	Teachers should advocate for the Finnish language development support for their immigrant background students.
Q22	Conversational language proficiency is fundamentally different from language proficiency needed for studying different subjects.
Q23V2	It is important for teachers to draw on immigrant background students' proficiency in their own mother tongue when teaching Finnish.
Q24V1	Social interaction for authentic communicative purposes fosters immigrant background students' Finnish language learning.
Q25rV1	The process of learning a second language is similar for all students.
Q26V1	Anxiety about performing in a second language can interfere with learning.
Q27r	Immigrant background students will learn subject specific language by just being in classrooms in which subject specific language is being used.
Q28V2	An immigrant background student's own mother tongue development is a valuable asset to his or her Finnish language development.
Q29V1	Immigrant background students benefit when Finnish language is studied while studying other subject areas.
Q30rV1	If an immigrant background student maintains his/her own mother tongue, he will have difficulty in learning Finnish.
Q31*V3	An important part of being a teacher is examining one's own attitudes and beliefs about race, social class, gender, disabilities, and sexual orientation.
Q32*V3	Issues related to racism and inequalities should be openly discussed in the classroom.
Q33r*V3	For the most part, covering multicultural topics is only relevant to certain subject areas, such as social studies and Finnish as a second language.
Q34r*	The most important goal in working with immigrant students is that they assimilate into Finnish society.
Q35r*	It is reasonable for teachers to have lower expectations for students who do not speak Finnish as their mother tongue.
Q36*V3	Part of the responsibilities of the teacher is to challenge school practices that maintain societal inequalities.
Q37r*V3	Although teachers should appreciate diversity, it is not their job to change society.
Q38r*	Whether students succeed in school depends primarily on how hard they work,

- a. Likert response categories: 1 = Strongly Agree, 2 = Agree, 3 = Disagree, 4 = Strongly Disagree, 5 = I don't know.
- b. r: denotes the categories were reverse scored.
- c. *: denotes the item is from LTSJ-B scale.
- d. V1: denotes the item is included in the summed variable Understanding L2.
- c. V2: denotes the item is included in the summed variable Background and L1.
- c. V3: denotes the item is included in the summed variable Social justice.

understanding than teachers with 2–5 years of experience, or 5–10 years of experience. The subject teachers who were teaching Finnish as a second language demonstrated the greatest understanding of second language acquisition compared to all the other teachers. The teachers who had received at least some training in second language acquisition and/or cultural diversity demonstrated more understanding of second language acquisition compared to no training at all.

Overall, the responses to the summed variable *Understanding Second language* indicated at least a basic understanding of the acquisition of a second language. However, there were some items related to the principles of linguistically responsive teaching that did not correlate with the items in the summed variables. The responses to some of these items were not in line with the overall knowledge shown in the summed variable, and hence they are presented here for more detailed consideration.

As many as 58% of the respondents thought it would be good to encourage the immigrant families to use Finnish (L2) at home (Q5). Moreover, 42% disagreed or did not know that "Conversational language proficiency is fundamentally different from academic language proficiency" (Q22), and almost equally as many, one third, perceived that a teacher's primary responsibility is to teach content, not language skills (Q18). Furthermore, 53% assumed that "students

with immigrant backgrounds will learn subject specific academic Finnish by just being in classrooms in which the subject specific language is being used" (Q27), and as many as 19% did not know whether it would be so. Thus, these aforementioned responses to the individual items present somewhat contradictory outcomes compared to the result based on the summed variable *Understanding L2*. Even though the overall picture indicated that the respondents had relatively solid understanding of second language acquisition, the individual items revealed that there are still a considerable amount of misunderstandings and lack of knowledge in relation to understanding the factors involved in the acquisition of a second language.

4.2. Valuing students' backgrounds and first languages

This section presents the teachers' responses to the summed variable *Background and L1* containing items related to students' background, cultural diversity, and first languages (Table 2: Q4, Q13, Q15, Q16, Q17, Q23, Q28), and how the teachers' background factors are linked to their responses. The summed variable reflects the principles of culturally and linguistically responsive education (see Gay, 2010; Ladson-Billings, 1995, 2009; Lucas & Villegas, 2011, 2013), presenting the respondents' stance on valuing the

Table 3The link between respondents' understandings and attitudes, and the background factors.

Background factor	Summed variable Understanding Summed variable Background and L1 L2		Summed variable Social justice	
Gender (M vs. F)	n.s.	t(808) = 3.83, p < .001 male (M = 2.0) vs. female (M = 1.8), Cohen's $d = .32$	t(805) = 3,03; p = .003 male (M = 1.7) vs. female (M = 1.6), Cohen's $d = .26$	
Age (<41 yrs vs. 41–50 yrs vs. >51 yrs)	F(2,808) = 6.96, $p = .001Multiple comparisons:<41 yrs (M = 1.4) vs. >51 yrs(M = 1.6), p = .001, \eta^2 = .02$	n.s.	F(2,808) = 4.00, p = .019 Multiple comparisons: <41 yrs (M = 1.6) vs. >51 yrs (M = 1.7), p = .018, $\eta^2 = .01$	
Teaching experiences in years (0 -10 yrs vs. 10 -20 yrs vs. >20)	F(2,805) = 5.41, p = .005 Multiple comparisons: <10 yrs (M = 1.5) vs. >20 yrs (M = 1.6), p = .004, η^2 = .01	n.s.	n.s.	
Teaching experience with immigrant students (no experience vs. 0–2 yrs vs. 2–5 yrs vs. 5–10 yrs vs. >10 yrs)		n.s.	n.s.	
Teachers' specialization (class teacher vs. subject teacher vs. special education teacher vs. counselor vs. principal vs. others)		$F(5,804)=2.30,\ p=.044$ Multiple comparisons: Special education teachers (M = 1.7) vs. subject teacher (M = 1.9), $p=.028$, $p^2=.01$	n.s.	
Finnish as a second language (F2) teacher vs. all other teachers)	t(811) = -3.66; $p < .001F2 (M = 1.3) vs. other teachers(M = 1.6), Cohen's d = .48$	n.s.	t(811) = -3.40; $p = .001F2 (M = 1.4) vs. otherteachers (M = 1.6), Cohen's d = .46$	
The percentage of students with immigrant backgrounds at the teacher's school (<1% vs. $1-5\%$ vs. $5-10\%$ vs. >10%)	F(3,773) = 3.09, p = .026 Multiple comparisons: n.s.	n.s.	n.s.	
Training on the L2 acquisition and/or cultural diversity (training vs. no training)	t(774) = -2.89, p = .004	t(775) = -4.91, $p < .001training (M = 1.8) vs. no training (M = 1.9), Cohen's d = .35$	t(774) = -3.65; $p < .001training (M = 1.6) vs. notraining (M = 1.7), Cohen'sd = .26$	

Table 4The clusters indicating teachers' level of understanding.

Summed variable	Clusters	$Limited\ Understanding\ (n=23)$	ANOVA		
	$\hline \text{Deep Understanding (} n = 342)$	Solid Understanding (n $=$ 353)	Basic Understanding ($n=95$)		F
Understanding L2	1.21 (.21)	1.68 (.30)	1.77 (.42)	3.20 (.72)	400.425
Background and L1	1.45 (.28)	1.94 (.24)	2.68 (.42)	3.20 (.39)	654.379
Social justice	1.25 (.21)	1.73 (.30)	2.14 (.46)	3.37 (.50)	554.626

backgrounds and first languages of the students.

This summed variable had the highest mean (M = 1.9/4) of all the three summed variables. In other words, the respondents generally agreed with the items, but there was also more disagreement expressed than in the other summed variables. The level of understanding of the acquisition of a second language presented in the previous chapter was related to respondents' demographics and background. In general, the results on the summed variable Background and L1 suggests that the role of the students' backgrounds and the value of the first languages was seen positively overall. However, the teachers' backgrounds were not often linked to their responses, and the results were very much the same between different groups (see Table 3 above). The female teachers gave more responsive answers related to their students' backgrounds and first languages compared to the male teachers. Teachers with training on second language acquisition and/or on cultural diversity indicated valuing their students' backgrounds and first languages more than teachers with no training in this area, and special education teachers were more responsive compared to subject teachers.

Related to the role of the students' backgrounds and the value of

the first languages, the response to the items outside the summed variable were not in line with the overall knowledge as was also the case for second language acquisition. For example, 25% of the teachers disagreed with the item that it would be unethical to prohibit the use of students' home language in the classroom (Q9), and 21% chose to answer "I don't know". The item regarding allowing students to write in their first language (Q14) raised a great deal of uncertainty: 31% of the respondents chose "I don't know" as their answer and 42% disagreed. Similarly, the item about considering the backgrounds of students with immigrant backgrounds when designing assessments for the whole class (Q7) divided the respondents into three almost equally divided groups: 36% agreed or strongly agreed, 37% disagreed or strongly disagreed, and 27% chose the option "I don't know". In conclusion, both the summed variable and the individual items show that the students' first languages and backgrounds were generally given value, but their reported use as resources in teaching and learning raised significant uncertainty in the teachers' opinions.

4.3. Promoting social justice

In this section, the summed variable *Social justice* is presented. This summed variable reflects the questions of equity and social justice (see Cochran-Smith et al., 2012; Gay, 2013; Ladson-Billings, 1995; Lucas & Villegas, 2011; 2013), and includes six items (Table 2: Q20, Q31, Q32, Q33, Q36, Q37) that present the respondents' stance on promoting social justice. The respondents' answers appeared welcoming towards promoting social justice (M = 1.6/4). A few differences were found between teacher groups, with the majority of the responses reflecting teachers' stated willingness to promote social justice (see Table 3 above). Similar to the variable, Understanding L2, female respondents were more responsive in promoting social justice. Moreover, teachers under the age of 41 were more responsive compared to teachers over 51. Additionally, teachers of Finnish as a second language were more responsive compared to all the other teachers. The responses of teachers with training on the acquisition of a second language and/or on cultural diversity reflected the promoting of social justice more than those of teachers without such training.

Even though the summed variable showed a relatively positive orientation toward social justice, yet again, there were some discrepancies when looking at some of the individual items outside the summed variable. Fifty-five percent of respondents agreed and 22% reported not knowing whether immigrant children should assimilate into Finnish society (Q34). In addition, 37% of the teachers considered it reasonable to have lower expectations for students with a first language other than Finnish (Q35), and as many as 22% responded "I don't know". Further, 52% of the teachers agreed with the statement that school success is basically dependent on students' hard work (Q38). Thus, the individual items revealed some lack of understanding in this variable, as well.

4.4. Four profiles of teachers' understanding of linguistically and culturally responsive education

In order to determine whether the levels of understanding in all three summed variables were uniform across all teachers surveyed or whether the teachers formed different groups based on their understanding, a K-means cluster analysis was used. The cluster analysis produced four clusters (Table 4) that differed from each other representing four different levels of understandings as a combination of the three summed variables used: *Understanding L2, Background and L1,* and *Social justice.* ANOVA test revealed statistically significant differences between the means of various clusters for each summed variable.

The four emerging groups were labelled Deep Understanding, Solid Understanding, Basic Understanding and Limited Understanding. In this classification, the term understanding includes the teachers' knowledge, perceptions, interpretations, awareness and attitudes of items included in the summed variables. The level of understanding was considered deep when the means of the summed variables were below 1.5, which indicates that the respondents have mostly strongly agreed with the items related to linguistically and culturally responsive education. Understanding was considered to be solid when the means of summed variables were close to 2, which denotes that the respondents had on average agreed with the items related to linguistically and culturally responsive teaching. Group Basic Understanding was similar to the group with solid understanding, except for their valuing of background and L1, that this group disagreed with, unlike the group with solid understanding. When the means of the summed variables were over 3, the respondents had mainly disagreed showing a limited understanding of linguistically and culturally responsive education.

According to the cluster analyses, very few teachers surveyed

(3%) had *Limited Understanding* related to linguistically and culturally responsive education according to the areas surveyed. Nearly all the Finnish teachers surveyed had either a *Solid* (43%) or *Deep* (42%) *Understanding*. A relatively small group of teachers had a *Basic Understanding* (12%). The means for all four clusters are in line with the previously presented analyses of the summed variables indicating that the summed variable of *Background and L1* was least in line with the principles of linguistically and culturally responsive education to all participants notwithstanding their cluster.

5. Discussion

This study was conducted to gain information about Finnish teachers' understandings and attitudes about teaching immigrant background students. Diverse students in the classroom is an increasing global phenomenon and we need to know how to prepare teachers to effectively teach all students in this global world. In Finland, there has been some studies related to the issues of this study (see e.g. Harju-Autti & Sinkkonen, 2020; Juva & Holm, 2017; Kimanen et al., 2019; Repo, 2020; Shestunova, 2019), but not as large as this; both in content wise and in the amount of correspondents. The findings of this study will be discussed by first looking into the significance of the respondents' background factors related to the summed variables reflecting the concept of linguistically and culturally responsive education, followed by a discussion on the similar information gained from the individual items and the cluster analysis illustrating different teacher groups. The results are discussed in relation to earlier findings.

5.1. Significance of the background factors

In Finland, teachers of immigrant background students are more often female than male (Kumpulainen, 2017). This may be reflected in the finding that female teachers were more knowledgeable about the importance of recognizing their students' background and first languages, and promoted social justice more compared to their male counterparts. Similar findings were also found by Kimanen et al. (2019): female participants were more likely to consider affirming students' identities, and thus promoting a culturally responsive education.

In this study, younger teachers and teachers with less experience had a higher understanding regarding second language acquisition compared to older and more experienced teachers. This is in line with the findings of Sullivan (2016) and Ericsson (2006). Ericsson argues that experience per se does not provide expertise. On the contrary, to develop professionally, special training and reflection is usually required (see e.g., Kirsch & Aleksić, 2018). The results indicate that younger and newly graduated teachers seem to have more updated knowledge, and more supportive attitudes, and possibly simply more exposure to the ideas of culturally responsive pedagogy, in their teacher training. The older teachers have likely not received specific preparation related to second language acquisition in their educational studies to become teachers as it has only recently been introduced into teacher training. Further, promoting social justice reflected the same age group differences: the younger teachers were more willing to promote social justice. The precise reason for the differences based on age in promoting social justice is unclear and merits further investigation to determine whether these kinds of outcomes are more a matter of orientation and a willingness to support learners than to actual knowledge about instructional practices (Viesca et al., 2019). On the other hand, some understanding can be developed through experience, as could be seen in teachers who had two to ten years experience in teaching immigrant background students; they were more knowledgeable about second language acquisition compared to

non-experienced teachers. In addition, previous studies have shown that teachers with experience in teaching immigrant background students have more positive attitudes towards multilingualism (Lundberg, 2019) and better understanding of linguistically responsive teaching (Harju-Autti & Sinkkonen, 2020; Sullivan, 2016).

The finding that Finnish as a second language (F2) teachers had a better understanding of second language acquisition was expected. These teachers also promoted social justice more compared to other teachers. These findings could be partly explained by the nature of F2 teachers' training which includes topics related to second language learning. Further, promoting social justice may reflect the context where the F2 teachers work. They might be more aware of the struggles that immigrant background students encounter, and thus, may be more willing to advocate for their learners (see also Lucas & Villegas, 2013). The finding of special education teachers valuing students' backgrounds and home languages more than other teachers is similar to the findings by Kimanen et al. (2019). This might be related to the fact that in the training of special education teachers, the core idea is teaching diverse students and valuing varied skills and backgrounds of their students

For the purpose of this study, the findings that teachers who had received some training in second language acquisition or issues related to cultural diversity were more understanding within all the three areas investigated are meaningful and confirms the importance of such training. The significance of training and the influence of professional learning on teachers' knowledge and understanding has also been shown in previous studies (see the review by Egert et al., 2018). Additionally, in relation to linguistically responsive teaching, teachers who have had some relevant training have reported a better understanding of teaching multilingual learners in other studies as well (Kirsch & Aleksić, 2018; Kirsch et al., 2020; Sullivan, 2016).

5.2. Contradictory aspects in relation to summed variables

In this analysis, some individual items outside the summed variables are presented for further discussion. They revealed some contradictory aspects in relation to the summed variables that probably derive from teachers' outdated knowledge or lack of understandings. For example, teachers were notably uncertain about whether the use of their students' first languages would be beneficial or not (Q5, Q9, Q14, Q27), even though there is a substantial body of research indicating that strong skills in a first language support all learning (e.g., Cummins, 2001; Ganuza & Hedman, 2018, Ramírez, 1992). Their understanding was not completely in line with the approach presented in the current curricula in Finland that sees all languages as valuable resources for learning (National Agency of National Agency for Education, 2014; 2015) nor the principles of linguistically and culturally responsive education (e.g., Ladson-Billings, 1995:; Lucas & Villegas, 2013; Nieto & Bode, 2012). This finding indicates that the topic is relatively new to the participants and might be describing "teachers' lack of knowledge and overall confusion in teaching - language learners" (Sullivan, 2016, p. 81). In addition, the summed variables include items on more basic and general information about the different topics whereas the individual items are more specific and reflect a more critical stance; perhaps this explains the contradiction between the teachers' levels of understanding measured by the summed variables and differing understandings reflected in some individual items. On the other hand, similar results reflecting the basic value given for students' L1 and background have been found in previous research in Finland and other Scandinavian countries, both among in-service (Lundberg, 2019; Shestunova, 2019) and pre-service teachers (Aalto, 2019; Iversen, 2020). However, appreciation alone does not tell about practices but supportive attitude is one of the basic elements of linguistically and culturally responsive education (Gay, 2013; Ladson-Billings, 1995, 2009; Lucas & Villegas, 2011, 2013; Paris & Alim, 2014).

Teaching immigrant background students is a relatively new phenomenon for mainstream teachers in Finland, although there is a long tradition of learning additional languages and language immersion classes in Finland for native Finnish and Swedish-speaking students. Further, traditionally, the Finnish school culture has been very monolingual. Despite Finland being officially multilingual, the three national languages have been kept separate, each having their own education systems: schools operate in their specific language, often in their separate school buildings with their own separate administrational systems (Boyd & Palviainen, 2015).

Some of the contradictory issues found were related to the concept of social justice. The analysis of the summed variable indicated that the teachers' overall stance was to promote social justice, but the findings of some of the individual items were not in line with this. For example, one third of the teachers considered it reasonable to have lower expectations of students with a first language other than Finnish (Q35). It may be that teachers who hold this view consider that students' developing language skills should be taken into account, and thus, they should not require as much from the language learners as they do from native Finnish speaking students. However, previous international studies have shown that immigrant students were automatically evaluated with lower scores compared to first language speakers (Lorentz and Bergstedt, 2016). Furthermore, Iuva and Holm (2017) in their study concluded that many of the Finnish teachers simply did have lower expectations and were even quite surprised when immigrant background students succeeded. In addition, in this study, half of the teachers considered that school success depends on students' own hard work (Q38). Placing the whole responsibility on the students excludes the teachers' role in promoting and enabling learning by providing scaffolding according to their students' needs (see e.g., Gibbons, 2009; Lucas & Villegas, 2011). Although students' success depends on their own decisions and effort, it also requires teachers to commit to supporting their students' learning (Talib, 1999). These findings also relate to studies that have shown that mainstream teachers often do not feel responsible for modifying their teaching to suit immigrant background students (see, e.g., Iversen, 2020; Sullivan, 2016; Talib, 1999). Nevertheless, both statements are ambiguous and make the interpretation of the responses difficult. Statements are originally from the LTSJ-B scale (Enterline et al., 2008; Ludlow et al., 2008) developed to measure beliefs and perspectives of teaching for social justice. Only nine statements from the LTSI-B scale were deemed to be suitable for the Finnish context, but according to the results of this study, it seems that most of the statements used in LTSJ-B scale do not suite the Finnish context. It would require some further studies to understand whether it is due to the loss of actual meaning in translation or the Finnish society and schooling system being so different from the countries were the scale has been used before.

Teachers' responses to one item in particular requires attention, namely whether immigrant children should be assimilated into Finnish society (Q34). In Finnish, the term used usually indicates that students should lose part of their identities and become "Finnish". Despite the negative connotation, more than half of the teachers agreed with this item and further, one fifth replied 'I don't know.' On the one hand, these findings may be indicating a misunderstanding or a lack of understanding of the term assimilation, presumably confusing it with the term integration. This interpretation is in line with the suggestion by Cochran-Smith et al. (2012) who proposed that the term assimilation may be confusing

and hence, included an explanation of the term in the questionnaire in one of the countries where the study was carried out. On the other hand, the respondents may have thought that for the immigrant background students to succeed they actually need to "become Finnish", as argued by Juva and Holm (2017): teachers thought that the possibilities for success were limited for students with immigrant backgrounds, and the students had to assimilate into the majority Finnish culture to be included in the school and the wider community and to be able to find their places in the society; which is not in line with Culturally sustaining pedagogy (see Paris & Alim, 2014).

The finding that two third of the teachers disagreed or did not know whether they should consider taking immigrant students' backgrounds into account when designing assessments for the whole class (Q7), could be explained in various ways. It may be that teachers experience assessment as challenging, especially when the language of the students is different from the language of instruction (Lumme & Tainio, 2011). However, it could also be that the item does not match the guidelines of the Finnish core curriculum which states that in assessing immigrant background students, their language background should be taken into account, and thus, flexible and various ways of assessment should be used. In this way the curriculum guides teachers to use individual assessment, not group-based assessment. Even though the original English language questions were adapted to reflect the Finnish context, for future studies, this item should be reworded if used in surveys.

5.3. Various levels of understanding

To investigate whether teachers formed different groups based on their levels of understanding, cluster analysis was used. The finding that most of the teachers' surveyed had either a solid or deep understanding is promising. The cluster analysis shows that in all the four groups of teachers, the participants had the greatest understanding of second language acquisition. This might be partly explained by the fact that everyone in Finland has to learn at least one or two additional languages, and thus, the teachers have experienced language learning themselves. Further, this topic is often a focus in various professional development offerings, and thus, many teachers might have gained information about it from in-service training.

As discussed above, even though most teachers had a good understanding of second language acquisition and promoted social justice, their understanding of the importance of students' first language is narrower. Additionally, and as shown in the results of the summed variables and the individual items, the most unfamiliar topic was related to valuing students' backgrounds and first languages, which was the case in all four clusters. This may be related to the remarkable change in educational ideologies at the policy level in Finland, reflected in the current Finnish core curricula. At the time of the data collection, the idea of using all students' languages as a resource for learning was a new phenomenon in Finland. Only recently has there been more information about the benefits of multilingualism, and as Shestunova (2019, p. 72) concludes, "until teachers believe in the benefits of greater exposure to the target language and unless they start using their students' languages as a resource, it is unlikely that the need to promote students' L1 will enter into their interest area".

6. Conclusions

In Finland, as in many countries, the increasing number of immigrant background students in the classroom underscore the need for the education of teachers to include and reflect the demographic changes in society. Although the results of this study

were quite promising, it revealed also lack of knowledge and possible misunderstandings that obviously need attention in teacher education and in in-service teacher training. Furthermore, when the results were compared with other international studies on topics relating to teaching linguistically and culturally diverse students, similar results were found. This indicates that many countries are facing similar problems in providing equal education and access to the society for all members. As the findings of this study and others show, teachers with specific training related to linguistic or cultural diversity have a deeper understandings and more positive attitudes towards their immigrant students. Since these understandings and attitudes would increase educational equity, we suggest that training targeting linguistically and culturally responsive teaching should be included in teacher training more widely in order to support equality and social justice in the basic education.

Despite the lack of linguistically and/or culturally responsive pedagogical training, based on the findings of this study, many teachers in Finland seem to be quite open to cultural and linguistic diversity. This is a good prerequisite for changing the educational practices to be more supportive. The findings indicate that the role of students' first languages, teachers' attitudes and expectations towards immigrant background students, and understanding about the school being part of a wider sociocultural system in the society are areas that need special attention in teacher education and subsequent professional development.

Experience working with immigrant background students was related to more knowledge about linguistically and culturally responsive education. It follows that all student teachers should have experience in teaching multilingual and culturally diverse students, also suggested by Tainio et al. (2019). In addition, the findings of this study corroborate the call by Tainio et al. (2019) for more training in multilingualism specifically aimed at promoting and supporting students' first languages. There are a multitude of studies (Cummins, 1979, 2007; Ganuza & Hedman, 2018; Goldenberg, 2008; Krompak, 2018; Ovando & Combs, 2011; Relyea & Amendum, 2019; Slavin & Cheung, 2005) indicating how second language acquisition benefits from strong knowledge of first languages and how multilingualism can be used as a resource in all learning. Furthermore, teachers' attitude towards the possible success at school of students with an immigrant background needs to be addressed as it has been shown that teachers' prejudice on the academic potential of immigrant children may result in lower cognitive development of these students, and contributes to their learning disadvantage (Borgna, 2017). The aforementioned aspects all argue for more studies related to valuing varied skills and backgrounds of diverse students should be added to all teacher training.

According to Kirsch et al. (2020), explicit reflection and facing concrete realities and problems leads to a change in beliefs. Furthermore, Palviainen et al. (2016) noticed that teachers sometimes changed their practices when they noticed their old practices were not working, and the new practices did. Ladson-Billings (1995) investigated pedagogical practices of eight outstanding teachers of African-American students. We surely have this kind of exemplary teachers in Finland and in other countries as well, but how to engage their knowledge and effective pedagogical practices to the teacher education. For a better understanding of linguistically and culturally responsive education, both theory and practice are needed. An important matter that arises from the current study is how to ensure that new student teachers can gain experiences with diverse students already during their studies, and that inservice teachers are exposed to the latest research. More open access research is required, and in-service training needs to be planned and arranged more systematically instead of the current project-based system. This would ensure professional development that enables the teachers to respond to the needs of diverse students in a rapidly changing world.

The current Finnish curricula for all levels from early childhood education to basic education and education in upper secondary are based on the latest research and are very advanced when it comes to linguistically and culturally responsive teaching. A change in the curriculum can lead to a change in teachers' beliefs (Bergroth & Hansell, 2020; Sopanen, 2019). Since the implementation of the current curricula, there has already been a variety of pre-service and in-service trainings offered regarding linguistically and culturally responsive teaching. However, it is a considerable leap for teachers to implement the current core curriculum recommendations supporting the use of students' whole linguistic repertoire for learning (see Alisaari et al., 2019) and it requires strong support both for pre-service and in-service training. According to Kirsch et al. (2020, p. 198) "beliefs and practices are amenable to change through professional development". Teacher education has a key role in supporting teachers to become linguistically and culturally responsive: every teacher should gain the relevant knowledge and skills to support the academic achievement of all their students.

When interpreting the findings of the study, the voluntary nature of the survey should be considered as it might distort the results. Namely, teachers more interested and positively oriented towards teaching immigrant background students, may have selfselected themselves as the participants. At the same time about a quarter of the responding teachers had less than one year experience or no experience at all in teaching immigrant background students, and more than 60% of the respondents were working at schools with less than 5% of immigrant background students. However, the sample is relatively large and the demographic data on the study's participants reflected the overall demographics of the teaching population in Finland, which lends confidence to a cautious generalization of the results. Although the research group did carefully consider which items of the original LRT-survey (Milbourn et al., 2017) would be suitable to use in the Finnish context, there were still items that according to the analyses of the responses were either self-evident or too ambiguous and hence, in the future research the questionnaire needs to be further developed. Additionally, only cautious conclusions based on these items can be drawn. As this study was conducted before the implementation of the current curricula that have very advanced views about supporting multilingualism and cultural identities, follow-up research on the development of the Finnish teachers' understandings and attitudes on teaching immigrant background students is needed. Such research could determine what sort of professional development has had an impact and what further additional efforts are warranted.

Authors statement

Heli Vigren: Formal analysis, Validation, Data curation, Writing – original draft, Visualization, Writing – Review & Editing. Jenni Alisaari: Conceptualization, Methodology, Project administration, Funding acquisition, Investigation, Formal analysis, Validation, Data curation, Writing – original draft, Writing – Review & Editing. Leena Maria Heikkola: Formal analysis, Validation, Writing – original draft, Visualization, Writing – Review & Editing. Emmanuel O. Acquah: Conceptualization, Methodology, Writing – original draft. Nancy L. Commins: Conceptualization, Methodology, Writing – original draft.

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There is no conflict of interest for any of the participants.

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