Article

Teaching issues perceived to be controversial in history: Estonian teachers' epistemic cognition

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- Issues perceived to be the most controversial were topics from the 20th century.
- Teachers' views on history are often not reflective; epistemic cognition is influenced by epistemic aims and is also topic specific.
- It is important to concentrate on more complex epistemological interpretation schemata concerning history and learning and the connections between them in teacher training.

Purpose: The purpose of this study was to discover topics in history education in Estonia that are perceived to be controversial, and to analyse how teachers' epistemic cognition is reflected in the teaching of issues perceived to be controversial.

Design/methodology/approach: Qualitative research based on group and individual interviews with 12 teachers, plus data from lesson observations among 10 participants.

Findings: Issues perceived to be the most controversial are topics from the 20th century. The reflection of epistemic cognition in practice is a result of a complex interplay between knowledge and knowing related beliefs and processes.

Research limitations: The small number of participants (12). Developed categories must be considered with caution as exploratory findings

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Declaration of conflicts of interests: No potential conflict of interest was reported by the authors.

1   INTRODUCTION

As the world is becoming more interconnected and diverse, the need for citizens who are able to understand the complexity of problems and make justified knowledge claims becomes ever more prominent. There is also growing political expectation from international organisations such as the Council of Europe, the UN and UNESCO, stressing education's crucial role in conflict prevention and the development of common values of freedom, tolerance and non-discrimination.

Teaching and learning about ill-structured problems, such as issues that are perceived to be controversial in history can foster those aims, but it can also pose a challenge. Controversial topics are linked to historical culture (Grever & Adriaansen, 2017), with the reasons for controversy being connected among other aspects with social memory and master narratives. Teachers play a pivotal role in desensitising topics, as their actions determine how and whether such topics will be addressed in the classroom (Misco, 2019).

Studies have shown that choices in the classroom are also a question of teachers' epistemic beliefs about history and their explication of knowledge and knowing-related mental processes—epistemic cognition—in the teaching process (Ahlrichs et al., 2015; Hess, 2005; Kello, 2016; Maggioni, 2010). Research has shown that teachers' epistemic beliefs are often unreflective and that when they teach issues perceived to be controversial without deliberate epistemic awareness, it can result in cognitive bias and naïve, relativistic, or subjective understandings of history or in the silencing of different perspectives (Carretero, 2017; VanSledright & Maggioni, 2016).

Although a rich variety of texts discuss what ought to be going on in the classroom when teaching issues perceived to be controversial, there is a lack of understanding of which aspects of epistemic cognition, as a broader network of connected beliefs and procedures (Chinn & Rinehart, 2016), are prominent in teachers' understandings of history and history teaching. Furthermore, although previous studies have shown that teachers' personal epistemologies influence their teaching practice, there has been a lack of research on how epistemic cognition is reflected in the teaching of supposedly controversial historical issues (Kello, 2016; Radstake & Leeman, 2010). Moreover, as topics perceived to be controversial are history- and culture-specific and dynamic in nature, there has been a lack of research on such current topics in Estonia.

Thus, the aim of this article is to find out which topics are perceived to be controversial in teaching history in Estonia and to analyse how teachers' epistemic cognition is reflected in their teaching of such topics. More specifically, the article is intended to answer the following questions:

1. Which issues are perceived to be controversial in the context of teaching by Estonian history teachers in contemporary society?

2. Which aspects of epistemic cognition are prominent in teachers' understandings of history and history teaching?

3. How is teachers' epistemic cognition about history and history teaching reflected in their practice when teaching about issues perceived to be controversial?

2   THEORETICAL BACKGROUND

2.1   Teachers' epistemic cognition and its role in teaching

One of the challenges related to the field of epistemic cognition has been terminology, as many different terms have been used in regards to knowledge and knowing related mental processes. In research on teachers, the personal epistemology approach has been prevalent (e.g. Bendixen & Feucht, 2010; Lunn Brownlee, Ferguson & Ryan, 2011); however, several researchers have insisted on using epistemic cognition, which refers not only to individuals' beliefs, but also to mental processes related to knowledge and knowing (Feucht, Lunn Brownlee & Schraw, 2017; Greene, Sandoval & Bråten, 2008). This article uses epistemic cognition as an overarching term, understanding it as a cognition that 'concerns how people acquire, understand, justify, change and use knowledge' (Chinn, Buckland & Samarapungavan 2011; Chinn & Rinehart, 2016; Greene, 2016; Hofer, 2016). Furthermore, calls for closer alignment between the research traditions of epistemology in psychology and philosophy have been prominent (Chinn et al., 2011; Chinn & Rinehart, 2016; Greene et al., 2008). One of the most recent models in this approach is an AIR model (AIR stands for epistemic Aims and values, epistemic Ideals and Reliable epistemic processes), which stresses the centrality of epistemic aims, values, ideals and reliable epistemic processes in epistemic cognition (Chinn et al., 2011; Chinn & Rinehart, 2016).

Thus, to analyse teachers' epistemic cognition in teaching, Buehl and Fives's (Buehl & Fives, 2016; Fives, Barnes, Buehl, Mascadri & Ziegler 2017) integrated framework, which contextualises the AIR model (Chinn et al., 2011; Chinn & Rinehart, 2016) in teacher learning and praxis, is used. The model states that teacher knowledge is complex and that, in an instructional context, teachers rely on different information domains, such as pedagogical knowledge, subject-matter knowledge, knowledge of children, management and organisational knowledge, knowledge of self and others, and contextual knowledge. Each domain and how it is activated are determined by the epistemic aims one has and how they are reflected in the goals for oneself and one's teaching. Epistemic cognition is visible in the assessment of the nature of knowing and knowledge and in evaluation of reliable processes; its quality is influenced by teachers' self-system, which includes domain-specific knowledge, prior teacher knowledge, epistemic stances, epistemic vices (such as close-mindedness, dogmatism, and conformity), and virtues (such as open-mindedness, sincerity, intellectual courage, ability for self-reflection and experiences from teaching practice). The results of epistemic cognition are *epistemic products*, which in the case of teaching are reflected in specific epistemic stances and are transformed into epistemically informed praxis, resulting in 'instructional decisions informed by the

process of epistemic cognition engaged in to assist others in achieving specific epistemic aims' (Buehl & Fives, 2016, p. 260).

For the framework to be applicable in regards to the epistemology of history and history didactics, concepts from historiography, history philosophy and didactics have to be considered (e.g. the nature of history and its aims, reliable processes in history, the question of historical objectivity, historical consciousness, memory etc.), but with the awareness that even within these fields, these constructs are not precisely defined (VanSledright & Maggioni, 2016), are influenced by the different epistemic modes historians work in, and have meanings which have witnessed considerable conceptual change (Carretero, 2017; Kainulainen, Puurtinen & Chinn, 2019; Segall, Trofanenko & Schmitt, 2018).

Previous research regarding teachers' personal epistemologies stressed that epistemic beliefs can be seen as a socially constructed dynamically changing filter through which they interpret reality, with awareness of their own epistemic beliefs and their influence on epistemic cognition being important (Buehl & Fives, 2016; Muis, Bendixen & Haerle, 2006; Muis, Trevors & Chevrier, 2016). Teachers' personal epistemologies (e.g. beliefs about the nature and source of knowledge) and the complexity of their epistemologies influence teaching practice—for example, their preferences in teaching methods and setting goals (Feucht, 2011; Lunn Brownlee et al., 2017; Muis et al., 2006). Regarding teachers' epistemic beliefs and their reflection in practice, the results are ambivalent—some studies indicate that teachers' beliefs are in concord with their practice, some that they are not (Lunn Brownlee et al., 2011). The results depend, among other aspects, on teachers' motivation to use knowledge in practice, previous role models from studies and self-reflection (Feucht et al., 2017; Löfström& Poom-Valickis, 2013; Heuer, Resch & Seidenfuß, 2017; Lunn Brownlee et al., 2017).

Epistemic cognition in history didactics has primarily been researched in terms of effective history teaching (VanSledright & Maggioni, 2016) and in regards to critical theory approach, challenging the assumptions regarding history education (Segall, Trofanenko & Schmitt, 2018). One seminal work related to teachers' epistemic cognition was conducted by Maggioni (Maggioni, 2010). Studies regarding history teachers' epistemic beliefs have found that teachers' beliefs about history and history didactics are separate domains and differ, are influenced by teachers' education, and are often held in unreflective manner, and that becoming aware of them can cause cognitive conflict or need to switch intentionally between different epistemic modes (Gottlieb & Wineburg, 2012; Heuer, 2019; Muis et al., 2006; Nitsche, 2019; VanSledright & Burkholdt, 2019; Virtta, 2011). Furthermore, epistemic beliefs differ among professional historians and history teachers (Muis et al., 2006). Other studies have found that epistemic aims are central to understanding teachers' choices (Sakki & Pirttilä-Backman, 2019), that the identity-building historical consciousness approach to history teaching can impede the implementation of disciplinary inquiry-based approaches (Carretero, 2011) and explore in discussions, what should be the (epistemic) aims of history teaching and the specific

knowledge taught (Ahonen, 2017; Carretero, Rodrigues-Moneo & Asensio, 2012; Chapman, 2021; Lee, 1983; Segall et al., 2018; Seixas, 2015; Van Boxtel & Van Drie, 2018).

2.2   Issues perceived to be controversial in history

Several different terms for issues that are perceived to be controversial have been used, often interchangeably, in the literature. These include among others controversial issues (Dearden, 1981), sensitive topics (Levinson, 2006; Stradling, Noctor & Baines, 1984), sensitive past (Van Boxtel, Grever & Klein, 2016) or difficult histories (Gross & Terra, 2019). This article uses the term 'issues perceived to be controversial' in reference to such topics and does not distinguish between different definitions. Reasons for controversy can be political, ideological or emotional, and contradictions can rarely be resolved by appealing to the evidence, may entail dispute over facts and can evoke strong emotions, specifically for topics related to ethnic, cultural and religious identity (McCully, 2006; Zembylas & Kambani, 2012). Moreover, controversy is influenced by time and place, and can be longstanding or recent (Council of Europe, 2015).

Investigations into the role of teachers in dealing with controversies have suggested, that theoretically different types of teachers based on their epistemic mode might exist (Heuer, 2019; Seixas, 2000, Grever & Adriaansen, 2019), empirical research though indicates that teachers might use different mixed strategies for teaching (Goldberg, 2017; Kello, 2016) and tend to avoid issues perceived to be controversial for various reasons. These include a lack of knowledge about how to teach them, a disagreement with the presented view or the threat of putting the loyalty of students in question based on their family context (Goldberg & Savenije, 2018; Hess, 2005; Kello, 2016).

In the literature of history didactics, the importance of both cognitive and socio-emotional dimensions of learning has been stressed. Using multiperspectivity and inquiry-based teaching, supporting the development of first- (e.g. names, dates, concepts such as democracy) and second-order concepts (e.g. cause, consequence, evidence, empathy) in history (Stoel, Van Drie & Van Boxtel, 2016; VanSledright & Limón, 2006) is important in order to support the development of critical thinking and transforms their views on the world (Lee, 2011). Furthermore, taking into account students' motivation and emotions, creating a democratic classroom climate, using historical perspectives and affective connections to the past while also differentiating between more emotionally-charged topics have been stressed (Barton & McCully, 2007; Beckerman & Zembylas, 2012; Goldberg & Savenije, 2018; Savenije, 2014). Teaching about issues perceived to be controversial is important because it motivates students, empowers them for discussions in a democratic society, develops their more complex epistemic interpretation schemata (e.g. through developing argumentation skills), makes them more tolerant, prevents polarisation and radicalisation, supports students' different cultural identities and helps them to come to terms with ethical dilemmas (Ehala, 2018; Erasmus+, 2018; Goldberg & Savenije, 2018; Seixas, 2017).

2.3 The Estonian context

After the Second World War, by the 1980s nearly half a million Russian-speaking immigrants had moved to Estonia (Lauristin & Heidmets, 2002). Due to the totalitarian regime and immediate post-war repressions and deportations, the terror and fear associated with the new Soviet Rule, and also because of clashes between Estonians and Russians in culture and mentality, the two communities did not communicate much. Estonians developed a double morality (Aarelaid-Tart, 2000), thereby creating a distinction between 'us' and 'them'. Estonian re-independence caused cultural trauma for Russians (Aarelaid-Tart, 2006), so even today the Russian-speaking community, currently forming 27% of the whole population, has strong affiliations to Russia's cultural-religious symbols, values and practices, and has little contact with Estonian culture, community and media (Kalmus & Vihalemm, 2017).

The separateness of the two communities during Soviet rule also manifested itself in the school system, which was centrally coordinated from Moscow. After Estonian independence, the school systems remained segregated until 1996, when they were unified (Oja, 2017). Despite formal unity, pupils in schools with Russian as the main language of instruction have lower results on the Programme for International Student Assessment (PISA) and on the Trends in International Mathematics and Science Study (TIMSS), reflecting their lack of Estonian language skills and integration into Estonian society (Lauri, Põder & Rahnu, 2017).

In the field of history education, the approach taken after 1991 in Estonia has emphasised the nation-building function of history teaching (Ahonen, 2017). The new unified curriculum from 1996, however, caused controversy among history teachers in schools with Russian as the main language of instruction, as they believed that it did not reflect enough Russian history (Oja, 2020). Additionally, history teachers in schools with Russian as the main language of instruction did not have enough knowledge about Estonian history and considered history textbooks to be biased (Oja, 2017). The current national curriculum stresses the importance of multiperspectivity (but not explicitly the importance of discussing issues perceived to be controversial) in history teaching, though the same attitude is not always reflected in textbooks or society (Kello & Raudsepp, 2017; National Curricula for Upper Secondary Schools, 2011/2021; National Curricula for Basic Schools, 2011/2021). Furthermore, differences exist between history teachers in schools with Estonian and Russian as their main language of instruction, with the latter being more conservative in their teaching methods and not fully agreeing with the national curriculum (Kaarlõp-Nani, 2013).

One issue perceived to be highly controversial in both society and school history teaching has been the Second World War. The sensitivity of the topic is related to Estonians and Estonian-Russians having contradictory narrative templates of the Second World War and the following occupation period (Kattago, 2009; Wertch, 2002). Different

interpretations of history have caused 'history wars', such as a dispute over 'The Bronze Soldier', a Second World War monument, in 2007.

3 METHOD

3.1 Participants

Participants in this research were part of a RITA-ränne project[1](Estonian Research Council, 2020). Sampling technique for the teachers was purposive sampling (Teddlie & Tashakkori, 2009) and it consisted of 12 history and civics teachers who were familiar with the teaching of issues perceived to be controversial and/or had a working experience with students from diverse cultural backgrounds in different parts of Estonia. Three of the participants were men, nine women, their work experience varying from 3 to 41 years. Four were teaching in a school with Russian as the main language of instruction, two in a school with Estonian as the main language of instruction and six in schools with both Estonian and Russian as the main languages of instructions. Participation in the study was voluntary, with the choice of withdrawing from the study anytime, and respondents' anonymity was secured.

3.2 Data collection and analysis

Although much data was gathered during the RITA-ränne project, in order to answer the research questions of this study results from a group discussion and qualitative interviews with teachers (12) and data from 30 lesson observations among 10 participants was analysed. All data analysis was performed using online software QCAmap.

3.3 Mapping of issues perceived to be controversial

The aim of the mapping was to find out which issues are perceived to be controversial. At the beginning of the project teachers had to name the most controversial issues in history teaching and the written answers were analysed based on their frequency and the answers of the teachers from the schools with Estonian and Russian as the main language of instruction were compared.

3.4 Individual interviews

The aim of the individual interviews was to find out what is characteristic of history teachers'epistemic cognition about history and history teaching and which methods and strategies they use. Semi-structured interviews concentrated on three main topics: (1) teachers'epistemic cognition (e.g. What history means for you?); (2) further understandings about issues perceived to be controversial (e.g. Please describe critical cases of issues perceived to be controversial teaching?); and (3) their teaching practice

including methods and strategies when teaching issues perceived to be controversial (e.g. According to your experience, what are the important aspects of teaching issues perceived to be controversial, especially in the case of the Second World War?). Interview questions were loosely based on the theory of epistemic cognition (Buehl & Fives, 2016), and were the same for all the participants and followed the same order. Interviews were held in schools in a quiet room or over the phone due to COVID-19 restrictions and lasted from 40 minutes to 1 hour and 40 minutes. Interviews were recorded and transcribed.

All interviews were analysed based on the suggestions of Hsieh and Shannon (Hsieh & Shannon, 2005) using qualitative and quantitative content analysis. The first step was to mark and code all the possible utterances referring to epistemic cognition, issues perceived to be controversial and the teaching methods mentioned in the interviews. The second step was coding of the previously marked utterances using a coding scheme developed on the basis of the epistemic cognition framework (Buehl & Fives, 2016; Fives et al., 2017) (Appendix 1). As a result of that, additional categories not mentioned in the initial framework, such as epistemic emotions, non-epistemic goals of history teaching and non-epistemic virtues and vices were constructed.

3.5   Lesson observations

The aim of the lesson observations was to analyse how teachers' epistemic cognition regarding history and history teaching reflects itself in teaching practice when teaching about issues perceived to be controversial. Due to COVID-19 restrictions in the schools, lesson observations were carried out among 10 teachers, who were the same with whom individual interviews were previously conducted. Two of them were teaching in a school with Russian as the main language of instruction, two in a school with Estonian as the main language of instruction and five in schools with both Estonian and Russian as the main languages of instructions. Students in the observed lessons were 15–18 years old. Topics taught in the lessons that were observed were: the Great Northern War and its prelude; the Russification period in Estonia; the Second World War; Estonia in the Second World War; the loss of Estonian independence in the Second World War and the following Soviet occupation; the Holocaust; Estonian re-independence; and Islam. Topics'were selected because they were previously named as controversial by teachers. Lesson observations were based on the observation worksheet, which was based on the elements of epistemically informed praxis (Buehl & Fives, 2016; Fives et al., 2017) such as meaningful epistemic goals, knowledge as construction, consideration of the learning context and learners, and general conceptualisation of teaching including methods and strategies used by teachers. The data from lesson observations was analysed following Point six from the coding scheme developed for interviews (Appendix 1).

3.6   Comparison of individual interviews and lesson observations

In order to analyse how teachers' understandings about history and history teaching reflect in their teaching practice when teaching issues perceived to be controversial, first the interview and lesson observation results from teachers were compared with each other, grouped according to similarities and results summarised.

The quality of data collection and analysis was ensured through the researchers' prolonged engagement with the participants. The working group meetings, memos, and the members' collaborative work on lesson plans throughout one and a half year gave a valuable context for interpreting the results and allowed for member checks (Flick, 2018). The participants' purposeful selection and triangulation of data (Flick, 2018) offered focused information regarding the research questions. However, due to the chosen sampling strategy, the results should not be empirically generalised (Schreier, 2018). With regard to the applicability of the findings to other contexts, the respondents' participation in the RITA-ränne project should be considered. Nevertheless, the results of this study could be interpreted as an emerging theory, which helps cast light on different aspects of teachers' epistemic cognition when they teach issues perceived to be controversial.

In order to assure reliability of the coding, codes were compared between the researchers, and differences were discussed until a common interpretation was found. The extracts from interviews are presented in the text in cursive and encompassed within the legend (R – teacher teaching in a school with Russian as the main language of instruction, RE – teacher teaching in a school with both Estonian and Russian as the language of instruction, E – teacher teaching in a school with Estonian as the language of instruction, numbers 1 to 12 indicating the respondent).

4   RESULTS

4.1   Issues perceived to be controversial

Participants named 23 different topics that can be controversial in history teaching. Three main categories : (1) topics from the 18th and 19th century – The Great Northern War, the Estonian national awakening, Russification; (2) topics from the 20th century – Estonian independence in 1918, the Estonian War of Independence in 1918, red and white terror during the War of Independence, the Estonian republic during 1920–1940, the authoritarian regime of President Konstantin Päts, the Second World War, the holocaust, mass deportations and repressions, the Gulag, Estonian loss of independence in the Second World War, the Soviet Era in Estonia, dissidents in Estonia during the Soviet Era, the collapse of the Soviet Union and the Singing Revolution in Estonia; (3) contemporary topics – Putin's Russia, US foreign politics, democracy and freedom, radicalisation, the nation and nationalism, Islam.

Perceived as the most controversial issue according to participants is the Second World War and related topics, which were named eight times. A comparison of the results of participating teachers in Estonian schools and teachers in schools with Russian as the main language of instruction shows that although the Second World War and specifically mass deportations are sensitive topic for both schools' teachers, the following Soviet Era and dissidents, also the collapse of the Soviet Union and contemporary topics such as Putin's Russia and US foreign politics are topics that tend to be more sensitive in schools with Russian as the main language of instruction. The topic of the authoritarian regime of Konstantin Päts was named only by the teachers teaching in Estonian schools, while the topic of The Great Northern War was named only by the participants teaching in schools with Russian as the main language of instruction.

4.2   Aspects of epistemic cognition prominent in teachers' understandings about history and history teaching

Aspects of participating history teachers' epistemic cognition regarding history and history teaching were analysed based on Buehl and Fives (Buehl & Fives, 2016; Fives et al., 2017) integrated framework. According to the model, *epistemic cognition* is an interconnected network of different beliefs regarding knowledge and their explication in practice consisting of the following beliefs about knowledge: beliefs regarding specific knowledge domains related to teaching, epistemic aims, beliefs about knowing, beliefs about knowledge and the explication of beliefs in epistemically-informed praxis. The analyses revealed 405 instances matching the six categories created based on theory (Appendix 1).

The first category *Domain* can be seen as an umbrella category, encompassing different aspects of teacher knowledge that teachers use and take into account when teaching. The category had the highest frequency of indications (f=141), with the most important field of knowledge under this category being teachers' subject-matter knowledge (f=54), which included understandings about history, multiperspectivity, historical truth and specific issues perceived to be controversial. Respondents described history mainly as our common past (f=9); a story of humans and their suffering; a story of repeating mistakes from which one can learn in the sense of *historia magistra vitae est*. Few respondents (f=3) saw it as a critical inquiry about the past or understood it both from the perspective of our common past and as a critical inquiry about the past.

> 'History is definitely a story about our past and about human beings in it… but we can investigate it thanks to different sources and at the same time learn something from it. This story is always written from one perspective, from the perspective of the author…History is like a puzzle, consisting of different puzzle pieces, which you can combine sometimes even a bit violently. For example, you have some archeological artefacts, some folk stories and some written sources,

and based on these sources you can make inferences and create explanations, but they are never absolute and are open for new interpretations.' R1

Multiperspectivity (f=6) was mentioned in regard to history as a way to understand the complexity of history as it helps to understand different historical perspectives and as a way to avoid polarisation and naive, simplistic understandings in history. At the same time, half of the respondents understood historical truth as relative in the case of controversial and sensitive topics; others appealed to discipline-based truth, ethical dimensions or truth based on one's identity. Choices were influenced by participants' cultural identity and general world view.

'We all need something to believe in. For that, you know, you can make adjustments in truth...I don't share postmodernist views...I don't think everything is relative. I need firm beliefs in certain things...I have my country, my nation...because of that, whenever I teach in history lessons the topic of the Estonian declaration of independence, I approach it as an exceptionally special event.' E2

The second-highest frequency of indications under the first category *Domain* referred to the importance of contextual knowledge and reasons why issues are perceived to be controversial (f=39). For example, all respondents emphasised the importance of teaching context, including micro-, macro- and meso-level influences regarding topic controversy and teaching, especially the difficulty of bridging different interpretations that school and family might have, including potential loyalty conflict both of teachers and students in the case of differing interpretations. The third highest number of indications under the category *Domain* referred to pedagogical knowledge and included principles, teaching approaches and beliefs about teaching (f=37). The strategies adopted for teaching, based on interviews, were (1) neutrality of the teacher; (2) enhancement of heterogeneity; (3) taking distance from the topic; (4) emphasising the complexity of history; and (5) no strategy at all. The historical-thinking skills emphasised in the interviews were: historical perspective, primary source evidence, cause and consequence, and the main methods for working with class and group discussions, including work with different sources and oral histories. Participants' beliefs about teaching and learning encompassed teacher-centered and student-centered views about teaching and learning. The last subcategory in the category of *Domain* referred to classroom management and organisational knowledge (f=5), where the importance of the recognition of students' emotions was stressed.

The second category in the model referred to epistemic aims, which are central in the epistemic beliefs network and determine one's behavior explaining why people with similar epistemic beliefs but different aims behave differently. Answers in the category *Epistemic aims* (f=21) concentrated mainly on cultivating understandings about history-related thinking skills, historical temporality and historical consciousness as well as knowledge of facts. Besides epistemic goals, political goals (helping students see global and multicultural perspective through history; helping students make sense of their own and

their state's identity; fostering values and attitudes needed for democracy, such as tolerance and cooperation skills), and moral goals (such as supporting empathetic and ethically-responsible attitudes in students), and pedagogical goals (such as supporting students' generic skills, critical thinking skills and cooperation skills as well as reading and writing skills) were important.

In order to engage in epistemic cognition, one also has to reflect upon and evaluate knowledge. One of the important aspects in evaluating knowledge has been the group of beliefs related to the nature of knowing (Buehl & Fives, 2016). This category (f=42) indicated that the main source of knowing for participating teachers is academic education, but also categories such as myself, authority, different texts, formal training, self-reflection and memory were mentioned. In the case of issues perceived to be controversial the role of memory as a source of teacher knowledge was distinct: teachers used their family stories as an example when teaching, but those difficult memories can trigger emotional reactions.

> 'I remember in one lesson students made a joke and said that they will deport me to Siberia (in reaction to an exercise they didn't want to do). It was a joke, but after the lesson I just started to cry...all those stories of my family, how my grandfather was deported to Siberia, how my grandmother had to flee in the middle of the cold winter to escape the deportations.... all those stories came back to me... Soon after that incident I decided I will stop being a fulltime teacher.' R2

The same category also encompassed challenges related to knowledge justification in the case of multiperspectivity - for example, some participants referred to multiperspectivity as something one should 'learn by heart'.

The second important aspect when evaluating and reflecting on knowledge refers to the fourth category *Beliefs about the knowledge* (f=57) (e.g. knowledge as certain and stable or dynamic); what is the structure of knowledge (e.g. simple versus complex); and to the subcategory related to processes constructing reliable knowledge claims. Regarding issues perceived to be controversial, the aspect of knowledge as evolving was emphasised, referring to the unpredictable and changing nature of such issues. Historical knowledge was seen as complex and constructed by 10 respondents. As an example of reliable processes in history the structure of historical argumentation was mentioned.

Although the authors of the epistemic cognition integrated framework (Buehl & Fives, 2016; Fives et al., 2017) stress the centrality of epistemic aims in determining epistemic cognition, they also emphasise other aspects such as prior knowledge, epistemic vices and virtues as well as experiences from practice as highly influential on epistemic cognition. The results in the category *Influences on epistemic cognition* had the second highest frequency (f=95), showing the importance of epistemic virtues (f=36), participants'own cultural and political identity (f=20), the ability for self-reflection (f=13) and ability to come to terms with epistemic emotions as the most important elements influencing teachers' epistemic cognition. As virtues are connected with motivated actions and related to aims,

new categories related to moral virtues like justice, compassion, caring and tolerance were constructed.

The model stresses that when one strives to achieve epistemic aims, epistemic cognition results in epistemic products, which in the case of teaching is reflected in epistemically informed praxis. Therefore, the last category *Epistemic products* was analysed based on 30 lesson observations.

4.3 Reflection of participating teachers' epistemic cognition aspects about history and history teaching in classroom practice

The following section gives an overview of the lesson observation results. *Epistemic praxis* is being defined as informed action toward a meaningful epistemic goal, construction of knowledge, teachers' high-level conceptual knowledge and conceptualised praxis. The results (f=49) show that informed action toward a meaningful, explicit goal shared with students was not observed in any lessons; that knowledge was approached as constructed by teachers in 21 lessons; that the most used methods of explication involved group work and class discussions - preactivation of previous knowledge, usage of historical questions, multiple sources and construction of historical arguments. Nevertheless, the constructed nature of historical knowledge or different assumptions regarding the knowledge was not explicitly emphasised in any lesson. Teachers' knowledge about learners and context was high in 14 instances and included references to students' historical culture and historical consciousness (identity) and possible adoption of strategies for teaching issues perceived to be controversial such as 1) no strategy; 2) neutrality combined with epistemology of history; 3) taking distance from the topic; 4) enhancement of heterogeneity; 5) action based on self-reflection; 6) recognition of students' emotions combined with some other previously-mentioned strategy. Conceptualisation of praxis (theory and practice connected) was identified in 14 instances.

Comparing the results of classroom observations among 10 teachers and interviews with the same teachers, a possible typology of teachers was observable: (1) traditional teachers, (2) historical thinking-skills-based teachers, (3) teachers focusing on epistemology of history and (4) partisan pedagogues, who emphasised their identity-based values.

4.3.1 Traditional teachers

Characteristic to the two teachers belonging to this group is their perception of history as 'that what is gone, passed'. They understand multiperspectivity as something one should 'learn by heart' and have almost never experienced any topic in history classroom as controversial; they see controversy as a problem. The main goal for history teaching is to help students to understand the cause and consequence of historical events, but they also stress the importance of pedagogical goals such as supporting students' reading and

writing skills. In the case of conflicting interpretations, they tend to use their identity-based truth criteria or see it as relative. A lesson on the topic of The Holocaust is a traditional lecture without any particular strategy for teaching and combines work with textbooks and frontal questioning of students. Photos are used as historical sources to exemplify the topic, but their meaning is interpreted by the teacher, so no controversy or sensitivity intrudes in the classroom.

4.3.2   Historical thinking-skills-based teachers

Three teachers belonging to this group had not reflected much on what history means for them and mostly see it as a story: 'I would just say that it is a story. A story that influences our identity and our state.' Multiperspectivity is seen as a way of showing the complexity of historical explanations, contradictions are reconciled by stressing the ethical dimension of the events or admitting that the truth is relative. The epistemic goal in history teaching is to teach students historical thinking skills, but also other non-epistemic goals such as making students see multicultural perspectives through history and helping students to make sense of one's own and the state's identity. They emphasise values and attitudes needed for democracy and generic skills such as cooperation and critical thinking skills. In a typical lesson group discussions and work with historical sources are used, highlighting as well the importance of cooperation skills and teamwork. Students' prior knowledge is activated and contextualised through self-reflection. In a lesson about the Second World War, which is sensitive to both Estonian and Russian students, students learn calmly and the topic does not pose any challenge in the classroom. Classroom climate is open, democratic and reflexive.

4.3.3   Epistemology-based teachers

Typical to the three teachers belonging to this group was that they understood history from the historical consciousness perspective, stressing the constructed narrative structure and complexity of historical explanations and its dependence on historical culture. In the case of contradicting interpretations, they refer to disciplinary criteria such as context, sourcing and corroboration of sources or ask students to differentiate between facts and opinion. The main epistemic goal for history teaching is the development of students' historical consciousness, but also historical thinking skills are important. Among non-epistemic goals, political goals such as making students see global and multicultural perspectives through history education, or fostering values and attitudes needed for democracy are important. During a lesson about Islam, class discussion and groupwork (roleplay) are used and the lesson is framed by narration. The topic in the classroom is highly loaded and students keep commenting that 'They are all terrorists', 'Not being able to eat during Ramadan is inhuman', and some sing 'Allah'. A discipline-based approach

offering counter arguments to students' comments, asking students to differentiate between facts and opinions is used, but the emotions stay heated in the classroom.

4.3.4 Partisan pedagogues, who emphasise ethical dimension of historical knowledge

In this group were two teachers. They understand history as our common past or inquiry about the past, through which they identify themselves and to which they feel close emotional attachment hoping that 'By respecting the past, we can create a common better future'. In the case of conflicting interpretations in the classroom, they refer to the ethical dimension of historical knowledge or respect everyone's right to express their own relative truth. Their epistemic goal for history teaching is to teach students the most important facts and historical thinking skills such as working with primary source evidence, so students can build historically valid arguments and learn to think critically. During the lesson about the occupation of Estonia in 1940, class and group discussions are used, but also historical perspective, work with primary source evidence, role play, historical questions and acknowledgement of students' emotions are used, while creating the narrative frame for the story of the occupation of Estonia from the official Estonian states' point of view. Multiperspectivity is used formally as all different sources students read support one view, which in the case of the lesson about the occupation of Estonia in 1940 is the empathetic narrative helping students to understand Estonia's view, but in another lesson on the topic 'United States imperialism in the Cold War' represents the mainstream view of the teachers own cultural identity (e.g. Russian minority in Estonia).

In summary, one can say that similar epistemic beliefs about history and history teaching do not reflect in practice automatically. Rather, their explanation seems to be connected with the aims teachers have for teaching, which in the case of issues perceived to be controversial are not always epistemic. Regarding used methods, teachers with less sophisticated beliefs about history teach multiperspectivity formally.

5   DISCUSSION

With respect to the first question regarding issues, which are perceived to be controversial in teaching it was found that, according to participants, the most controversial are topics from 20th century Estonian history. These topics are emotionally charged as 'they outlive their times, for they are not only historical events, but emotional ones, bodily experienced, passed on from generation to generation' (Schweber, 2019), are recent and central in Estonians' and Estonian-Russians' identity narratives (Carretero, 2017; Kattago, 2009; Pääbo, 2011; Wertch, 2002). The differences are still present in the perceived controversy of topics between teachers' in schools with Estonian and Russian as the main language ofinstruction as noted before (Kaarlõp-Nani, 2013; Oja, 2020). Furthermore, comparison of the named issues perceived to be controversial with earlier findings (Kello & Raudsepp,

2017; Oja, 2016) indicates that the changes are visible in contemporary topics (e.g. radicalisation, democracy and freedom), but not in the issues perceived the most controversial. As noted by participants it is challenging to adopt new ways of seeing the events due to the contextual influences (e.g. teachers' and students' social memory), but also due to the discourse in media and politics (Carretero, 2017; Goldberg & Savenije, 2018; Kello, 2016). Additionally, when evaluating historical knowledge, teachers tend to see it as fixed contrary to their statements about its dynamic nature in interviews, for instance, the topics named by teachers did not reflect the latest debates in Estonia within historical culture circles and the discipline of history (see Niineste, 2013; Tamm & Burk, 2018).

The second question of this study sought to determine prominent aspects of the participating teachers' epistemic cognition about history and history teaching. The results illuminate epistemic cognition as a network of different knowledge- and knowing-related beliefs and processes (Chinn & Rinehart, 2016) wherein besides epistemic aims also other aspects—such as the nature and source of knowledge or the beliefs related to knowledge justification—are important. Like in previous studies (Nitsche, 2019; Virtta, 2011), participating teachers had not reflected critically upon the meaning of history and its epistemological nature. Their beliefs about it differ (our common story about the past versus inquiry about the past), and epistemic switching (Gottlieb & Wineburg, 2012) between those different epistemological lenses was challenging due to teachers' cultural identity and emotional connection with the topic, aspects seen to influence teaching of issues perceived as controversial on a more general level (Segall, Trofanenko & Schmitt, 2018; Schutz & Zembylas, 2009).

Participating teachers struggled to find a common ground for justifications in the case of multiple contradictory interpretations and had not always reflected critically on different assumptions regarding history and historical knowledge (e.g. memory), indicating that they teach partially without epistemic awareness (VanSledright & Maggioni, 2016). This can result in students' cognitive bias and naïve, relativistic or subjective understanding of history (Gross & Terra, 2018; Goldberg & Savenije, 2018), in the silencing of different perspectives, and the dismissal of history's influence on teachers' and students' present and future (Segall et al., 2018; Carretero, 2017). The latter aspect was observed in teachers' relative cultural blindness (Cochran-Smith, 1995) to students' different cultural backgrounds – the lesson observations showed that the classroom demographic situation has changed, which suggests that this should also be reflected in which topics are perceived as controversial; however, this was not observed. Nevertheless, participants' understanding of history teaching was more reflective, showing an understanding of possible strategies and suitable methods for it. The differences between these two main teacher knowledge domains can be partially explained by education (Muis et al., 2006). For instance, since the 1990s, Estonian history teaching tradition has been influenced by Western European associations disseminating ideas about multiperspectivity and constructivist history teaching (Kello & Wagner, 2017).

The third question sought to determine how participants' epistemic cognition about history and history teaching is reflected in their practice for teaching issues perceived to be controversial. The results indicate that epistemic cognition operates on different levels, such as general beliefs about knowledge, domain-specific beliefs, and topic-specific beliefs (Buehl & Fives, 2016; Muis et al., 2006; Strømsø, Bråten & Samuelstuen, 2008), and that links between them are not always automatic, neither assures theoretically sophisticated knowledge that it is reflected in practice. The difficulty of combining different knowledge domains is characteristic of the complexities that teachers commonly face (Muis et al., 2006; Heuer, 2019); nonetheless, it is worth noting that the same difficulty was visible within one knowledge domain as having theoretically sophisticated epistemic beliefs about history did not mean that the same level of complexity was shared in regards to all the topics perceived to be controversial. Additionally, teachers' incentive to use knowledge in practice is not always rational (Feucht et al., 2017; Löfström & Poom-Valickis, 2019; Heuer, Resch, & Seidenfuß, 2017; Lunn Brownlee et al., 2017) and, in the case of epistemic cognition, is connected with epistemic aims, but the aims for teaching controversial issues are not always epistemic. However, it was noted that teachers with a simplistic understanding of history taught multiperspectivity as something one should 'learn by heart'; neither did they set epistemically sophisticated goals such as aiming to develop students historical thinking skills. This is in line with previous findings that the complexity of teachers' epistemologies influences their preference for teaching methods and goal setting (Lunn Brownlee et al., 2011) and hints that different epistemic beliefs correspond to different aspects of teaching. Multiperspective history teaching, as one of the preferred methods for teaching issues perceived as controversial, requires complex epistemologies of history and learning, as well as practical knowledge of historical thinking skills (Wansink, Akkerman, Zuiker, & Wubbels, 2018).

The developed typology of teachers suggests that the disciplinary side of history teaching (Lee, 2011; VanSledright & Limón, 2006), as seen in epistemology-based teachers' lessons alone, is not always the most successful approach (see e.g., Wansink, Patist, Zuiker, Savenije, & Janssenwillen, 2019; Wineburg & McGrew, 2017). Balancing between partisan pedagogues, who are closer to critical pedagogy in their aspirations (Segall et al., 2018), and historical thinking skills-based teachers, who stress additionally metacognitive skills, could be possible alternatives depending on the teaching context and specific topic. Conversely, in the case of issues perceived to be controversial, deconstructing conflicting narratives explicitly and taking into account their influence on identity, inner- and outer-group dynamics and on the construction of the Other (Carretero, 2018; Seixas, 2000), this partially post-modern approach to history teaching (Seixas, 2000) was not observed in the typology of the teachers. Recent debates in the field of history didactics have also called for closer alignment of the disciplinary and historical consciousness approaches to history teaching (Carretero, 2013; Dessigue, 2020; Heuer, 2017), as the quality of history teaching is not only in its efficiency, but it should also help students to position themselves in time and space (e.g., historical culture) in a self-reflective manner (Alven, 2021; Christensen,

2013; Dessingue, 2020; Grever & Adriaansen, 2017; Heuer, 2019). As such, historical consciousness should be historicised in relation to time, space and evaluators' positions (Dessingue, 2020; Grever & Adriaansen, 2019; Retz, 2015; Segall, 2018; Seixas, 2017), and historical and moral consciousness should be drawn closer together to open the classroom up for discussions on historical moral dilemmas and their ethical implications (Löfström, Ammert, Sharp, & Edling, 2020; Rüsen, 2017).

As epistemic cognition has a socially constructed nature and academic education has an important influence on its development (Muis et al., 2006), the preservice history teachers' curriculum should support in its structure: the development of a critical and complex epistemological interpretation schemata about the dynamic nature of history and controversial issues including their meaning to the present (Retz, 2015); preservice teachers' critical self-reflection about their epistemic thinking and possibilities for epistemic switching; epistemic cognitions' relation to practice (see e.g., Lunn Brownlee et al., 2017) and ethical implications (e.g., dismissal of students' perspectives); and theoretical and practical links between different teacher knowledge domains (Ahonen, 2017; Heuer, 2017). Teaching historical thinking skills and methodologies for teaching issues perceived as controversial should be an integral part of teacher training.

Additionally, in order to support students' self-reflexive historical consciousness, the national curriculum should allow space for critical reflections about the nature, substance and boundaries of historical knowledge and its meaning to students' present and future. As in the case of issues perceived as controversial, the question is not only about how to teach, but also about 'what is taught and what is learned' (Carretero, 2017). The national curriculum should include issues perceived to be controversial at the levels of both content and learning objectives. Apart from that, further research is needed to determine whether the named topics are also perceived as controversial by students.

A limitation of this study is its relatively small number of participants (12) who were purposefully selected for the RITA-ränne project. Furthermore, the four developed categories must be considered with caution and as an exploratory finding at this point, and their manifestation in larger teacher samples or further research on atypical or critical cases should be encouraged.

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APPENDIX 1

The framework for analysing elements of teachers' epistemic cognition based on Buehl and Fives (Buehl & Fives, 2016, Fives et al., 2017)

Category	Theoretical explanation	Sub-categories in respondents' answers	Frequency
Domain	*Teachers use in their teaching different parts of teacher knowledge: pedagogical knowledge, knowledge of children, subject-matter knowledge, management and organisational knowledge, knowledge of self and others, contextual knowledge.*	Contextual knowledge including reasons for controversy and sensitivity (f=39), pedagogical knowledge: strategies and methods for teaching, beliefs about teaching and learning (f=37), classroom management & organisational knowledge about emotions management (f=5), subject-matter knowledge including understandings about history (f=29), historical truth (f=12), about sensitive and controversial topics (f=13) and multiperspectivity (f=6).	141
Epistemic aims	*Aims determine teachers' behavior and cognition, only epistemic aims activate epistemic cognition, different aims explain different behavior. Epistemic aims are goals, which aim for knowledge, understanding or true belief.*	Epistemic goals related to knowledge as facts (f=3), goals related to domain specific epistemic understandings such as cause and consequence, continuity and change, historical perspective, how to interpret primary source evidence, understanding time and temporality, historical consciousness (f=18).	21

Beliefs about the nature of knowing	*What is the source of knowledge? How is knowing justified and how do different sources interact? Various sources might include myself (personal knowledge and beliefs), authority (authors), philosophical, religious, political systems of thought, texts, perception, introspection, memory, reasoning, testimony of others, academic education, formal training, observations, collaboration, practice and self-reflection.*	Myself (f=1), authority (f=1), texts (f=2), memory (f=3), academic education (f=13), formal trainings (f=1), non-formal schooling (f=2), friends (f=2), different learning communities (f=2), self-reflection (f=4), in case of history different source materials (f=8), challenges related to knowledge justification in case of multiperspectivity (f=3).	42
Beliefs about nature of knowledge	*Nature of knowledge is absolute – knowledge is tentative, evolving; Structure of knowledge is simple–complex; universal – particular; deterministic – probabilistic. Which processes are considered reliable?*	Knowledge is absolute (f=4), evolving (f=15), constructed (f=36), reliable processes in history (f=2).	57
Influences on epistemic cognition	*Teachers' self-system: domain-specific knowledge; prior teacher knowledge; epistemic stances about certain specific ideas and constructed meanings of them; epistemic vices such as close-mindedness, dogmatism, conformity and virtues for example open-mindedness, sincerity, intellectual courage; ability for self-reflection; experiences from teaching practice.*	Experiences from teaching practice including challenges for teaching (f=4), ability for self-reflection (f=13), prior teacher knowledge (f=5), epistemic virtues (f=36), vices (f=7), teachers own cultural and civic identity (f=20), perception (f=2), epistemic emotions (f=8).	95

| Epistemic products (based on 30 lesson observations among 10 teachers) | *Epistemically Informed Praxis* *informed action toward a meaningful goal including explicit goals for learning;* *knowledge constructed by learners;* *teachers' understanding about learners and context high;* *teachers conceptualisation about praxis high, theoretical understandings visible in praxis.* | Action toward a meaningful explicit goal in 30 lessons (f=0), knowledge constructed by learners in 30 lessons (f=21) including methods: lecture, class and group discussions, lessons based on multiperspectivity and usage of historical thinking skills such as work with (primary source) evidence, historical perspective, historical significance; teacher's understanding about context and learners' high (f=14), conceptualisation of praxis (f=14). | 49 |
| Total | | | 405 |

ENDNOTES

[1] This research was part of a RITA-ränne project (Estonian Research Council, 2020), the general goal of which was to enhance social cohesion and integration in Estonia. One of the project's primary activities concentrated on teaching history and aimed to develop a methodological guide and lesson plans for multiperspective history classes in cases of issues that are perceived to be controversial. To achieve this, a group of teachers was gathered, each of whom conducted action research about the issues that are perceived to be controversial to teach in history classes. Based on their experiences, they offered possible teaching units for the topics. The working group met within a year and a half six times, reflecting during the meetings on the results of the action research and discussed topics such as multiperspectivity, cultural diversity and the historical thinking skills necessary to teaching history. The working group did not explicitly discuss the epistemology of history or its influence on teaching and learning.

ACKNOWLEDGMENTS

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