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The use of autonomy among physical education teachers in Finland and Kurdistan region of Iraq

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Introduction: The aim of the study was to examine fifth-grade physical education (PE) teachers' reflections and perceptions about PE teaching in Finland and Kurdistan region of Iraq (KRI), using analyses of in-depth interviews with a phenomenological-hermeneutic approach.

Methods: This was accomplished by exploring eight Finnish and six KRI PE teachers' opinions, attitudes, experiences, and reflections regarding their work as PE teachers, using semi-structured in-depth interviews about PE, as well as their reflections related to an indoor and an outdoor video from ordinary PE teaching in the other country. The initial analyses of the two groups of teachers using the qualitative analysis program NVivo revealed interesting findings related to student autonomy, and these differences were examined closely.

Results: While the analyses showed that all the Finnish PE teachers highlighted the importance of providing student autonomy within the open-ended questions related to PE, PE teachers in KRI seldom discussed autonomy during the open-ended questions. Instead, they seemed to organize their teaching in a way that decreased autonomy. The Finnish PE teachers indicated that the use of autonomy was central in the curriculum, and that they used autonomy to increase the students' motivation and to make PE more meaningful for the students. With such a strategy, the use of autonomy would also activate and include more students, even if Finnish PE teachers reported certain challenges with students' autonomy. The PE teachers from KRI, however, related PE to be mainly focused on performing sport activities and reflected a strategy of "just do as I do" - a strategy that created little room for autonomy, even if the findings pointed to some traces of autonomy among the PE teachers in KRI.

Discussion: Considering the findings and the theoretical concept of self-determination theory that highlight students' autonomy as essential for students' motivation, integration, wellness, and well-being in PE, our findings suggest that new perspectives and practices are needed among teachers in KRI to ensure autonomy in PE teaching. In this vein, increased exchange of experiences and collaboration between educators from Finland and KRI could be beneficial.

KEYWORDS

autonomy, physical education, teachers, Finland, Kurdistan region of Iraq

Introduction

This study is the result of a longstanding collaboration between Tampere University (TAU) and the University of Duhok (UOD), including workshops about the identification of educational challenges, and potentials for joint research and collaboration. The selection of Finland and the Kurdistan Region of Iraq (KRI) for this research is based on both theoretical and practical considerations. This study draws on theories related to the influence of cultural diversity on education and personality development, particularly in multicultural environments. Finland and the Kurdistan Region of Iraq (KRI) represent two distinct contexts—one Western country in the Global North and one Middle Eastern region in the Global South offering a valuable comparative framework. One of the key reasons for selecting Finland is the country's evolving educational landscape, shaped in part by increasing immigration. A significant proportion of these immigrants come from Middle Eastern countries, especially Iraq and Syria. According to Statistics Finland (2018), Iraqis and Syrians represented the largest immigrant groups in Finland in 2017, with populations of 2,369 and 1,422, respectively. While much research has focused on the broader impact of immigration on schools, there is a notable gap in exploring how this demographic shift affects specific subjects like physical education. Physical education can be particularly sensitive to cultural, gender, values, and educational background differences. Similarly, the Kurdistan Region of Iraq (KRI) was selected for its multicultural context and significant migration since 2011. With a population of 5.7 million, KRI has hosted many Syrian refugees and internally displaced people from Iraq, including 226,934 registered Syrian refugees by 2014, with 60% living in local communities. This demographic shift has resulted in a diverse population with varying religious and cultural backgrounds. KRI, like Finland, presents an ideal setting to explore the intersection of migration, education, and culture, especially in relation to physical education, where cultural sensitivities can be especially pronounced. By comparing these two distinct yet relevant contexts—Finland and KRI-this study provides valuable insights for educators and policymakers on how to address the unique challenges of teaching physical education in increasingly multicultural school environments.

To address this, an interview study was conducted among several PE teachers in Finland and the Kurdistan Region of Iraq (KRI) about their PE teaching. The initial analyses of the two groups of PE teachers' reflections in Finland and KRI revealed interesting findings related to the status of autonomy for PE teachers in Finland and KRI. Accordingly, the aim of this research project is to examine the use of autonomy in PE teaching in Finland and KRI.

While numerous studies have explored teacher autonomy within the PE context (Haerens et al., 2010, 2018; De Meyer et al., 2016; Huhtiniemi et al., 2019; Lonsdale et al., 2009, 2013; Oldervik and Lagestad, 2021; Van den Berghe et al., 2015), there is limited research that specifically examines the perceptions and reflections of PE teachers, particularly in a comparative manner with other regions, such as the Kurdistan Region of Iraq (KRI). Furthermore, there is a paucity of research investigating the perceptions and reflections of PE teachers in KRI. Therefore, this study specifically focuses on autonomy in PE lessons by examining how PE teachers in both Finland and KRI utilize and reference autonomy in their teaching practices.

In Finland primary school, PE is usually taught by class teachers who have master's degrees in education. Class teacher studies are offered in eight Finnish universities. In some universities, students can also specialize in PE and take 25 credits of basic studies in PE. Subject teachers in PE (Masters of Sport) are educated only in the University of Jyväskylä, and most of them are working in secondary school or high school. Some of those PE teachers can also teach in primary school, but this is not usually the case. Overall, Finnish teachers in primary school are very well educated, but their background in PE studies may vary greatly.

In Kurdistan region of Iraq, a standardized curriculum sanctioned by the Ministry of Education (MoE) is conspicuously absent from primary school physical education (PE). As a result, PE instructors are tasked with developing a comprehensive yearly plan that allows them to tailor their teaching methods to their students' specific developmental stages. This strategy ensures that all students make progress in an equitable manner. The curriculum is divided into two seasons, each comprising 40 units that combine practical and theoretical elements, followed by an additional 60 units of the same type. A cumulative assessment is administered at the end of both seasons to determine the students' final grade. The educational requirements for PE instructors include a diploma that is equivalent to or comparable to a bachelor's degree. While pursuing a master's or Ph.D. degree is an option, most PE educators have bachelor's degrees or diplomas.

Theoretical perspective of the study

When examining the use of autonomy in PE, Deci and Ryan (2000) self-determination theory constitutes an important theoretical lens. Deci and Ryan (2000) assert that three basic psychological needs exist in all humans: autonomy; relatedness; and competence. This article focuses on autonomy. Indeed, autonomy is essential for optimal motivation, integration, wellness, and well-being in PE, which leads to intrinsic motivation. Intrinsic motivation refers to performing an activity because it is inherently interesting and provides its own reward by satisfying one's basic needs for autonomy, competence, and/or relatedness (Ryan and Deci, 2000). Intrinsic motivation comes from within and leads to the kinds of behaviors that one wants to perform. If students feel that an activity has an inner value for them, this can lead to increased inner motivation, as indicated by Deci and Ryan (2000).

We argue that intrinsic motivation is especially essential for students to create lifelong delight in movement. Intrinsic motivation is also closely connected to learning. Previous research has demonstrated that autonomy has a particularly positive effect on motivation in PE, and especially inner motivation (Deci and Ryan, 1985, 2000; Ryan and Deci, 2007). According to Cheon and Reeve (2013), students will benefit from teachers' adoption of an autonomy-supportive teaching style.

Previous research related to PE and autonomy

A study showed that pupils with more autonomous motivational profiles reported being more active at secondary school and in early adulthood (Haerens et al., 2010). In their study of students at the age of 13 reporting on their PE teachers, Haerens et al. (2018) found that

according to four clustered motivating profiles, the high autonomy support group exhibited the most optimal pattern of outcomes according to need satisfaction and autonomous motivation. Another investigation demonstrated that all students showed less oppositional defiance and were more engaged when they interacted with an autonomy-supportive PE teacher, instead of a controlling PE teacher (De Meyer et al., 2016). Moreover, Van den Berghe et al. (2015) showed that students' behavioral and emotional engagement in PE was positively related to the PE teachers' need support in PE. Two studies (Lonsdale et al., 2009, 2013) found a positive association between selfdetermination in PE and motivation in PE, and that a sense of autonomy occurred when students were able to make choices. Several other studies also indicated that self-determined instruction is positively reflected in pupils' motivation (Prusak et al., 2004; Ntoumanis, 2005; Ward et al., 2008; How et al., 2013). Leisterer and Paschold (2022) found that PE teachers can employ a high autonomysupportive teaching style to improve students' positive affectiveemotional perception, and that high autonomy-supportive teaching has strong effects on students' enjoyment. Ntoumanis (2005) determined that if teachers manage to support pupils' basic psychological needs, pupils' well-being is positively impacted. Also, the study of Cronin et al. (2019) revealed that perceived PE teacher autonomy support was positively associated with students' basic need satisfaction and life skills development, and that perceived controlling teaching was positively related to students' basic need frustration. Furthermore, the intervention research of Oldervik and Lagestad (2021) showed that providing autonomy in PE gave the students a significantly increased experience of happiness, well-being, contentment, and a higher activity level in PE lessons. Also, an investigation of Finnish fifth-grade students revealed that autonomy was directly associated with enjoyment in PE (Huhtiniemi et al., 2019). Also, the meta-analysis of Vasconcellos et al. (2020) and White et al. (2021) found that teachers who support students' basic psychological needs foster motivation and engagement in PE and teacher's behavior is essential in autonomy promotion. The presented results indicate strongly that increased student autonomy in PE positively impacts students, and that teachers should strive to encourage selfdetermination among pupils in PE. However, when applying selfdetermination theory in practice, it should be carefully considered what are the key elements of theory and how to use them as the comprehensive research of Ahmadi et al. (2023) points out. They created a classification system of teachers' motivational behaviors related in self-determination theory interventions with Delphi method among 34 international expert panel. Regarding the autonomy, Ahmadi et al. (2023) concluded that it is not only important to support students' autonomy but also to avoid behaviors of thwarting students' autonomy. Authors presented several detailed practical teachers' behavior models to promote students' autonomy in interventions and other researchers as well. SDT has particular relevance to low SES communities because, compared with their wealthier peers, students in these schools are exposed to more controlling behaviors from their teachers which undermines their perceptions of autonomy (Noetel et al., 2023).

In the Kurdistan Region of Iraq (KRI), the link between autonomy and continuous professional development (CPD) for physical education (PE) teachers plays a pivotal role during periods of educational reform. Amin (2020) reports that teacher autonomy often relies on the availability of CPD opportunities, which can be scarce in certain regions, such as KRI, due to disparities in resources. Despite

the clear need for educational policies grounded in evidence, a significant gap remains in data concerning teacher professional development within KRI (Vernes et al., 2016). In response to concerns about student readiness, the Ministry of Education (MoE) initiated a comprehensive educational reform in 2008, which included the introduction of a new PE curriculum.

In 2012, a national CPD program was introduced to assist PE teachers in implementing the new curriculum (Vernes et al., 2016). Nevertheless, Vernes et al. (2014, 2016) reported that although PE teachers highly value CPD, formal opportunities are restricted by financial constraints, which raises concerns about the quality and applicability of these programs. Recent initiatives, however, aimed at enhancing education in KRI have underscored the significance of continuous professional development (Vernes et al., 2014, 2016). Amin (2020) found that teachers who appreciate autonomy tend to engage in informal CPD activities, although participation in social learning practices remains infrequent.

The use of self-determination theory has also been shown to positively affect students' inclusion in PE (Bagøien et al., 2010; Ciyin and Erturan-Ilker, 2014; Deci and Ryan, 2000; Erturan-Ilker, 2014; Jang et al., 2010; Koka, 2014; Mouratidis et al., 2008; Standage et al., 2012). Interestingly, Noetel et al. (2023) noticed that self-determination theory has relevance particularly to low social economic status communities because students in these schools are prone to more controlling behaviors from their teachers which impair their perceptions of autonomy. Finally, a study also showed that the utilization of self-determination theory in PE increased PE teachers' motivation, competence, and well-being as a teacher (Cheon et al., 2014). Even if a large body of literature exists related to the significance of autonomy in PE, no study has yet investigated the use of autonomy among PE teachers from two markedly different countries. Based on the previous discussion, the research question of this comparative study is: "How do Finnish and KRI fifth-grade PE teachers' provide student autonomy in their PE teaching?"

Methods

Design

The study employs qualitative design, utilizing semi-structured in-depth interviews and a phenomenological-hermeneutic approach to investigate the research question (Tjora, 2017). This approach involves examining the opinions, attitudes, and reflections of Finnish and KRI fifth-grade PE teachers concerning their roles, as well as their insights on an indoor and an outdoor video showcasing typical PE teaching sessions from the other respective country.

From the perspective of teacher performance, the relationship between a teacher and the curriculum is fundamental. Consequently, understanding the interaction between the curriculum and teachers' practices, as well as the significance, meaning, and role of the curriculum for PE teachers in both KRI and Finland, has been identified as an initial step in developing PE teaching practices. This understanding also aims to foster mutual recognition of PE curriculum contexts for advancing teaching methods in PE. To explore this issue and compare how teachers in Finland and KRI work with their curricula, data collection was primarily conducted through recording 10–15 min instructional videos (both outdoors and indoors)

of fifth-grade PE classes in Tampere and Duhok. Videos are currently regarded as the most straightforward method for participants to observe and analyze each other's instructional planning and teaching execution. Recording videos facilitated insights into how PE teachers interpret and implement the curriculum in their daily work and revealed their teaching methods during PE lessons. Additionally, the videos highlight other contextual elements, such as social and cultural conditions, as well as the physical facilities available for PE lessons. The videos were translated into English to enhance comprehension. The video-recording process adhered to strict ethical standards, with all necessary permissions secured in both Finland and KRI.

Analyzing both indoor and outdoor videos facilitates the structuring of subsequent phases for data collection. Consequently, the research team developed an interview survey targeted at PE teachers who currently teach in fifth-grade or have prior experience at this level. All activities within this research project adhered to the ethical guidelines for research involving human subjects and human sciences established by the Finnish National Board on Research Integrity (2019) and the ethical standards for research in KRI, which meet the ethical requirements for empirical research. The study was also conducted in compliance with the Declaration of Helsinki. Participants were thoroughly informed about the study's protocol prior to participation, and written consent was obtained from all participants.

Participants

The participants were recruited using strategic selection (Thagaard, 2013) based on the inclusion criteria, which were being PE teachers for fifth-grade students in Finland or Kurdistan region of Iraq and having a candidate's or master's degree in PE or a master's degree in education (class-teacher). In total, eight Finnish PE teachers (four male and four female) and six KRI PE teachers (three male and three female), agreed to participate in the study, after being contacted by the researchers. Recognizing the relevance of gender equality in data collection, a concerted effort was made to ensure balanced participation from both genders. This decision stemmed from discussions held with colleagues from both countries, in which the shortage of female PE teachers in educational institutions and schools was addressed. The Finnish PE teachers' ages varied from 28 to 49 years (mean = 38.5 years; SD = 8.25), and their experience being a PE teacher ranged from 1.5 years to 30 years. The KRI PE teachers' ages varied from 24 to 59 years (mean = 37.8 years; SD = 12.77), and their experience being a PE teacher ranged from 5 to 25 years.

Procedures

Both a typical indoor and a typical outdoor PE lesson (45 min each) were filmed in both countries, and these videos were abridged to a 30-min video in each country, showing the essential parts of the typical indoor and outdoor PE lesson. A semi-structured interview guide with open-ended questions was created. The interview guide included two parts, i.e., questions at the start and questions after the participants had seen the video from the PE teaching outside of their country. The initial questions included the following: What goals do you have in your physical education teaching? Do you have any

specific teaching methods or other approaches that you use to achieve these goals? How are the social structures in your class and how are gender issues divided? How do you see the connection between competitive sports and physical education? What personally motivates you in physical education? What do you find challenging in physical education? In your opinion, what kind of position does physical education have at your school? In your opinion, what is the role of physical education in your society? What kind of suggestions do you have for the next curriculum? For the second section after looking at the videos, the interview guide included questions, such as: What were your initial thoughts when you saw these videos? What do you feel you have learned from these videos? Is there anything specific you would like to discuss after looking at these videos? Can you point out specific parts of the videos that caught your attention and explain why? Are there similarities and differences in the videos that you noticed in terms of your teaching? What are the similarities and differences between your teaching style and the teaching style in the videos? In your opinion, what kind of connection do the assessment methods you use have with students' motivation in physical education? Do you feel that you give autonomy in physical education? What is your feeling about how much autonomy your students have in physical education? Do you consider it important to consciously provide autonomy? How do you think this cultural context or the environment in which we live has influenced or is influencing physical education?

A pilot interview was conducted in Norway to test the interview guide. A 29-year-old male Norwegian PE teacher that was teaching PE in fifth grade was interviewed using the interview guide and watching the video from Kurdistan region of Iraq. The pilot interview indicated that the questions seemed relevant. However, small changes were made to the questions and the order of the questions.

The interviews with Finnish PE teachers were carried out face-to-face in the Pirkanmaa region, except for one which was conducted online using Microsoft Teams. The interviews with the KRI PE teachers took place face-to-face at schools in the Duhok region. Most interviews were conducted in the participants' native languages (Finnish or Kurdish), although three interviews with Finnish participants were conducted in English. However, these participants were also given the opportunity to communicate in Finnish toward the end of their interviews. All interviews were translated into English, facilitating their readiness for joint analysis. Each interview lasted between 90 and 100 min, including a 30-min segment in the middle that was dedicated to viewing videos.

Analyses

The interview data were transcribed and analyzed with QSR NVivo 11 (London). The analysis was based on the participants' answers to the questions collected during the interviews, in which students' perceptions of experiences were taken as subjectively true (Armour and Griffiths, 2012). The data are based on subjective constructions that the teachers verbalized when processing their own interpretations and reflections on what takes place in PE lessons at school, and reflections related to the indoor and outdoor videos from PE in the other respective country. Furthermore, the analyses focused on meanings, as described by Johannessen et al. (2016). The PE teachers' statements are identified according to the theme of experiences related to their organization of PE and their

reflections of PE. With such an approach, the data from the interviews are sorted based on these categories to elucidate patterns, similarities, relationships, and/or differences between the statements. The analysis and this interpretation follow hermeneutical principles, in that the interpretation process led to an increasingly deeper understanding of the statements in the interviews (Kvale, 1983).

The data from the Finnish and KRI PE teachers were first read and coded into themes. The transcribed text was read through repeatedly, and themes were formed from the interpretations of the teachers' statements during this process. Four researchers, each from different cultural backgrounds, participated in the analysis process. Interpretations and perspectives were extensively discussed in a series of meetings among these researchers. This rigorous method enhanced the credibility of the findings and deepened the richness of the interpretations by incorporating the diverse insights and expertise of the researchers involved.

Through the coding of the teachers' expressions, several themes emerged. A prominent theme identified from the "open-minded" coding of the Finnish PE teachers' interview data was the use of autonomy. Statements from these teachers illuminated how they interpreted and implemented the curriculum, as well as how they viewed their roles as PE teachers. Moreover, statements from PE teachers in both KRI and Finland revealed varied interpretations concerning the primary objectives of PE and their roles as educators. These insights demonstrate how PE teachers' practices and their self-perceptions within PE classes vary. In KRI, a more teacher-centered approach has led to restricted autonomy in PE classes.

The analyses revealed that all the Finnish PE teachers mentioned the importance of providing students autonomy. All text that was related to autonomy was read through and coded into themes. This analysis indicated the following six codes: (1) autonomy in teaching and student autonomy; (2) autonomy due to the curriculum; (3) autonomy to increase motivation; (4) autonomy to make PE meaningful; (5) autonomy for inclusion; and (6) challenges with autonomy. Additionally, the analysis of the KRI PE teachers' interview data highlighted autonomy, although the teachers seldom discussed it explicitly. Instead, their teaching methods appeared to reduce autonomy, a point that will be elaborated on in the argumentation. Follow-up analysis of texts related to autonomy among KRI PE teachers identified the following three codes: (1) PE is about doing sport activities – less room for autonomy; (2) just do as I do - providing little autonomy; and (3) traces of autonomy. These findings will be detailed in the subsequent results section (Table 1). The categories derived from the analyses are presented in Table 1, where the quotations that are presented in the results section are structured in relation to the analytic themes.

To maintain confidentiality, participants were assigned pseudonyms in the presentation of the results (Table 2).

Results

The findings from the analyses have been divided into two sub-sections of autonomy, i.e., those in relation to Finnish teachers and those in relation to PE teachers from KRI. Each section has been explained under the emerged subcategories of autonomy.

Autonomy in relation to Finnish teachers

Autonomy in teaching and student autonomy

The analyses revealed that all the Finnish PE teachers mentioned the importance of providing students autonomy. The analyses also showed that all the Finnish PE teachers stated that they had the possibility of letting the students have autonomy, as pointed out by Anneli when she was asked about it: "Yes. I feel that I have autonomy to influence sports and how they are taught." Statements of Pasi also exemplified this autonomy: "Yes, teachers have a lot of freedom and in choosing what they want to do for the sessions. We can do anything in planning the session."

A main finding was that all the Finnish PE teachers stated that they were providing the students with autonomy. However, this autonomy to decide what would be done in classes was not given all the time, as stated by Anneli:

Yes, sometimes they can choose the activity. Sometimes, I can offer two options and let them choose which one they prefer. Especially if there's a colleague present, we agree to offer certain sports and decide whether the students can choose.

Anneli indicated that she sometimes creates the PE program for autumn for her class, but that "sometimes it's an ongoing process where it's open-ended or decided together with students." Heidi stated that there are certain weeks at school when specific sports are assigned—because of practical reasons, like having appropriate weather or skates sharpened, "but in terms of how I organize and shape the lessons, yes, I give autonomy." Leena stressed the significance of focusing on more autonomy rather than conducting disciplined instructions, especially when asking about the differences between teaching in Finland and in the KRI, as shown in the videos. She stated:

I think in the inside activity in the video children sit in the classroom a lot, and it looks like a mathematic lesson and the teacher talked a lot about rules ... and about the video in the outside, when they are outside I think they look like little soldiers ... we never walk in lines, and I think why they have to do these things at the same time ... and also they stand a lot when teachers talked about rules ... every pupil in the videos says what teachers say... I think moving is a key, rather than listening and standing for long time. I think. In Finland, we do not have such a thing, and there is always someone who wants to do something else than what the teacher says, and, for example, the student says, "I do not want to do this." And then the teacher should encourage the child and say you must do ... [communicate with the child].

Heikki pointed out that, in general, he listens to the students a lot. He said that he has a sort of system in which he "goes through different themes" and stated that he listens to the students' wishes at the beginning of each theme regarding what they would like to do in physical education. Then, he tries to incorporate those elements into the teaching. Heikki mentioned that this strategy takes place in the beginning:

In the beginning, when we start with a specific topic, like outdoor activities, I ask the students for their input on what they would like

TABLE 1 Description of the categories, themes and quotations that were derived from the analysis.

Category	Themes	Sample quotations
Finnish PE	(1) Autonomy	Anneli: "Yes. I feel that I have autonomy to influence sports and how they are taught."
teachers	in teaching and	Pasi: "Yes, teachers have a lot of freedom and in choosing what they want to do for the sessions. We can do anything in planning the session."
	student	Anneli: "Yes, sometimes they can choose the activity. Sometimes, I can offer two options and let them choose which one they prefer. Especially if there's a colleague present, we agree to offer certain sports and decide whether the students can choose."
	autonomy	Anneli: "Sometimes it's an ongoing process where it's open-ended or decided together with students."
		Heidi: "But in terms of how I organize and shape the lessons, yes, I give autonomy."
		Leena: "I think in the inside activity in the video children sit in the classroom a lot, and it looks like a mathematic lesson and the teacher talked a lot about rules and about the video in the outside, when they are outside I think they look like little soldiers we never
		walk in lines, and I think why they have to do these things at the same time and also they stand a lot when teachers talked about rules every pupil in the videos says what teachers say I think moving is a key, rather than listening and standing for long time. I think.
		In Finland, we do not have such a thing, and there is always someone who wants to do something else than what the teacher says, and, for example, the student says, "I do not want to do this." And then the teacher should encourage the child and say you must do"
		Heikki: "Goes through different themes, listens to the students' wishes at the beginning of each theme." Heikki: "In the beginning, when we start with a specific topic, like outdoor activities, I ask the students for their input on what they would like to do during that period,
		and we try to partially fulfill those requests. So, that's where it comes in. And I have also incorporated certain warm-up games suggested by students, for example, if someone has come from another school or if they have played a fun game with a previous teacher, we have
		included that game as part of the warm-up. So, ideas from students do come in, but of course, the teacher determines how they are implemented and what ultimately happens in the lesson."
	(2) Autonomy	Mauri: "Yes, definitely. As I mentioned earlier, with the curriculum being quite loosely defined, focusing on skills, like throwing, jumping, or running, it allows for different approaches."
	due to the	Heidi: "The fifth graders have had more opportunities to decide themselves because it is also mentioned in the curriculum."
	curriculum	Heidi: "Yes, it came from the curriculum. It provided a kind of justification for allowing it. Of course, in my opinion, the students have always wanted that, but now that it is mentioned in the curriculum, it somehow feels more permissible [laughs]."
		Heikki: "It's not specifically defined what needs to be done; the teacher has a lot of power in how to implement the lessons."
		Heikki: "But, still, between autumn and spring. I can decide when to have different types of lessons."
		Tuula: "I think I can do whatever is needed to achieve the goal. We teachers have some kinds of limits and between those limits, I can do different things, and I know what I can do or cannot do."
		Leena: "Sometimes, I ask children what they want to do for the PE session. In the curriculum, there is only one thing that we must do, and it is swimming. And the other thing that we must do is climbing, kicking, but it is not mandatory to do basketball or volleyball,
		and teachers can choose what they want to do []. In Finland, teachers have a lot of freedom in their classes and in PE classes, as well. Teachers can choose what they want to do for the lessons. For PE, for example, I can choose if we are going to do skiing or skating or
		football or volleyball or climbing or cycling and some other activity, and where [to do it]. We do not need to inform or get permission from the principal."
		Pasi: "It is because every man should go to the army, and the first test is the swimming test. And, in the meantime, we have many lakes and should know how to swim."
		Pasi: "There is a lot of freedom for teachers to choose what they want to do in the class."
		Matti: "Yes, I feel that the content and objectives of my subject are not imposed by anyone else. I have the freedom to decide them myself, although I do take suggestions from colleagues if they have good content or teaching methods. I consider it crucial that in Finland,
		we can implement physical education based on our own premises and approaches. Teachers can adhere to their own methods, and no one directs it excessively. Of course, the curriculum provides a framework, but teachers have a considerable amount of freedom in how
		they implement it, and I see that as a positive aspect."
	(3) Autonomy	Anneli: "Last year, I had a ninth-grade group with a couple of students who were socially limited and had various mental issues. I already knew that certain sports would not work for them, so we agreed on an individualized program."
	to increase	Anneli: "But I've noticed that it works best when students are allowed to choose for themselves. For example, if I set up two games, one being more energetic, efficient, and competitive, and the other being more relaxed, they work well."
	motivation	Heidi: "It also brings some understanding from the students' perspective. []. It also increases the students' appreciation that it's not just a matter of going there and things starting to happen."
		Mauri: "I do see that there is a good amount of autonomy in that regard."
	(4) Autonomy	Heidi: "Freer style instead of a more military-style approach."
	to make PE	Matti: Hm Well, it's maybe because of my own history. In primary school, we had a drum circle and open rows, and later, even in school, I experienced a more modern form of physical education. So, for me, the freer style felt more meaningful, and it still acknowledged
	meaningful	that children could wait in line and participate. It's not always about being in height order, where everyone knows they are the shortest or tallest. It's about Well, it somehow serves that good feeling in movement.
		Matti: "Yes, they do. It is important to meet each student as an individual in physical education and consider his or her strengths and how to develop them. It is also essential to remember that everyone can approach tasks in their own way; not everyone has to do things
		in the same manner. From my perspective, students have autonomy during the lessons themselves, and it is evident in physical education."
	(5) Autonomy	Heidi: "Well, in that case, it engages everyone. And maybe it also gives those students who do not consider themselves exceptional in physical education a say in something from time to time."
	for inclusion	Anneli: "Additionally, the inclusion aspect plays a role, too. When you have a very heterogeneous group, there may be individuals with specific diagnoses who cannot concentrate as easily."
	(6) Challenges	Mauri: "It's nice to see that everyone is involved."
	with autonomy	Pasi: "I think we talk a lot also in PE, so I can ask the kids what they want to do or like to do today, so they can also participate in planning to what to do. They can decide. Sometimes, if they want to do skiing or skating, I give them options, and they can choose. So, I ask
		about their opinion, but everyone should do something. They cannot do nothing and just sit. They need to do something. That is important in PE classes."

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TABLE 1 (Continued)

Category	Themes	Sample quotations		
PE teachers	(1) PE is about	Darya: "The students of the first three years of primary school are keener for sports, as they are younger [], some of them like arts, so it is difficult to draw them to sports" [].		
from KRI	doing sport	Darya: "We offer students social advice, as their families usually tell them not to practice sports as their level will drop both physically and academically. They tell them not to play football as they may fall. Many times, we open courses of sports and ask the students'		
	activities – less	parents to come and see how we teach their kids, and this makes them encourage their kids to practice sports. Or, some other times, we have championships of football matches between two classes, and the parents are invited. This makes the families encourage their		
	room for	kids, as we tell them that this sport is the student's desire."		
	autonomy	Jiyan: "Performing sports activities will draw students' attention to PE class, which means that activity makes students love PE class."		
		Jiyan: "I believe that our people are interested in sports as you go to school, you are the most prominent one, and all students have the desire to engage in conversation with you [PE teacher] and want to approach you."		
		Zilan: "My personal goal is to progress myself and a generation, as well. There are some students who are skillful in a sport, say futsal, but they have not discovered this potential in themselves, or their families consider sport to be an obstacle, so I try to support them"		
		Azad: "We get a timetable that we teach; for example, we teach basketball this year to specific grades. When championships come for us, we make them for basketball matches, as the students have been taught this game."		
		Azad: "When I was a child, I was a player of volleyball. Then, I went to study in the college of physical education. I like sports. Sports makes you get rid of negative energy, and it also, of course, improves one's health. If I do not do sports one day, I feel that I have a		
		heavy burden; that is, mentally and physically, one gets better."		
		Sherko: "At the beginning of each sport, I inform the students of the benefits of the sport in question."		
		Sherko: "Pay much attention to the PE class, and we make the parents eager to let their kids be members in sports teams because if the body is healthy, the mind will be healthy."		
		Karwan: "The government should provide us with equipped sports halls to increase the passion of students in sports If you do not wear sports clothes and you do not participate in sport activities, that means you do not value your PE class."		
		Karwan: "A sponge for the high jump, sports clothes, balls, and net baskets for basketball and nets for volleyball."		
		Karwan: "The first step to identify a student as an athlete in a specific sport is through the PE class. Through my PE class, I could identify very skillful athletes for the teams of my school, and then follow them up to nurture this skill in them. Every student is keen		
		about a specific sport, say one likes football, another likes basketball. Therefore, I give them diverse sports and small games to take their desires into account and to avoid boredom as 40 min will be very long to teach one sport only, say football or basketball.		
		Karwan: "I wear sport clothes at school. I have my whistle, and I run championships and the raising flag ceremonies."		
	(2) just do as	Darya: "My plan is that I tell them how I was, and they need to adopt the same steps of mine. Also, I show them a plan in a video, and there is a practical way to teach them how to learn gymnastics, for example. I teach them in a series what movements they should		
	I do - providing	learn, and they must have physical potentials, like power and passion. For example, if somebody says that he or she likes basketball or football, we need to check his or her body, height, and physiology regarding whether he or she fits the sport; if not, he or she goes to		
	little autonomy	nomy another sport."		
		Darya: "Must be taken more seriously in teaching physical education in the way of military recruitment, so that the students know that the subject of physical education has its own traits as other subjects have if you do not employ such methods in your teaching,		
		you will not be a successful teacher."		
		Darya: "Certainly, they were free, and this will be an example of a negative point in which students may fall and this needs more follow up from indoor classes." Jiyan: "Do as I do"		
		Jiyan: "It will be difficult for me to concentrate on all students equally."		
		Jiyan: "The method that I use is lecturing and practicing. This means that I show them how I do sports, and then we practice together."		
		Sherko: "Their kid's mentality was very different from ours. Our student, when he sees there is no supervision, he tends to be naughty or stops exercising sports, unlike their student, who continues doing the exercises even if the teacher is away. Additionally, we need a		
		very good whistle for outdoor activities. Their teacher did not get very tired to keep doing his PE lesson, while we got very tired in our PE class. [] Getting students to have roles in PE class is very difficult for me."		
		Sherko: "Who could do high jump on cement, so I took him to the institute and brought him sponge mats to practice. Then, he became second at the level of high schools."		
		Sherko: "With potential to become eminent players Among 700 students, there are some players. I put more focus and time on such students to support them, and some of them have become players in the Duhok Sports Club."		
	(3) traces of	Karwan: "I also give students freedom in my lessons."		
	autonomy	Karwan: "There is freedom of movement."		
		Karwan: "Their students have more freedom than ours. This may be due to the small number of students in their classes. We cannot give them this freedom because we have many students in our classes, and we will lose control. Freedom is important, as it makes		
		students avoid boredom, and they release their tension energy in a productive way."		
		Azad: "We should give the students freedom, but not full freedom; there should be control."		
		Azad: "There is a negative point that I noticed in the outdoor class, when the teacher let them free to play games alone; this may be dangerous for the students."		
		Jiyan: "What I learnt from this video is that the focal point is not only the teacher, but there are many activities in which students can be focal points and can-do things themselves, like forming rows from the shortest to the tallest. The students themselves can check		
		their heights and make rows; that means the student is a part of the lecture of PE. The arrangement of the students drew my attention as the activity is distributed between the teacher and the students. As for the activities, the students are fully responsible for them,		
		and I want our classes to be the same as theirs. Our teachers are as capable as theirs, and we can adopt similar techniques in our classrooms; allowing students to select their peers and arrange themselves into rows fosters independence, build self-confidence, and		
		equips them to manage their own futures and take care of their families."		

TABLE 2 Participants' country/region, name (pseudonym), and gender.

Country/Region	Name	Gender
Finland	Heikki	Male
Finland	Mauri	Male
Finland	Anneli	Female
Finland	Heidi	Female
Finland	Matti	Male
Finland	Tuula	Female
Finland	Leena	Female
Finland	Pasi	Male
KRI	Darya	Female
KRI	Jiyan	Female
KRI	Zilan	Female
KRI	Azad	Male
KRI	Sherko	Male
KRI	Karwan	Male

to do during that period, and we try to partially fulfill those requests. So, that's where it comes in. And I have also incorporated certain warm-up games suggested by students, for example, if someone has come from another school or if they have played a fun game with a previous teacher, we have included that game as part of the warm-up. So, ideas from students do come in, but of course, the teacher determines how they are implemented and what ultimately happens in the lesson.

Overall, the above statement shows the relevance of students' autonomy to activating and better engagement of students in PE classes. This also allows students to experience a sense of belonging and that their ideas are acknowledged and respected. Moreover, it indicates the importance of emotional aspects of PE and the significance of engaging students not only physically, but also emotionally and psychologically. Furthermore, providing autonomy for students supports the development of their skills of decision-making and their independence work, while also teaching them how to consider otherness.

Autonomy due to the curriculum

Another main finding was that five of the eight Finnish PE teachers pointed toward the importance of the curriculum when discussing autonomy in PE, and that the curricullum open for teachers autonomy. When asked about experiences related to having autonomy in PE, Mauri stated: "Yes, definitely. As I mentioned earlier, with the curriculum being quite loosely defined, focusing on skills, like throwing, jumping, or running, it allows for different approaches." Heidi mentioned: "the fifth graders have had more opportunities to decide themselves because it is also mentioned in the curriculum." When Heidi was asked to clarify the relevance of the curriculum related to giving students autonomy, she claimed:

Yes, it came from the curriculum. It provided a kind of justification for allowing it. Of course, in my opinion, the students have always wanted that, but now that it is mentioned in the curriculum, it somehow feels more permissible [laughs].

Heikki also emphasized flexibility in the curriculum as being key for giving students autonomy. The fact that the curriculum is open to interpretation and does not mention which activities that shall be included in PE facilitates autonomy. Furthermore, Heikki stated that "it's not specifically defined what needs to be done; the teacher has a lot of power in how to implement the lessons." However, he also identified certain constraints, such as the fact that winter sports should be taught during the winter season, adding "But, still, between autumn and spring, I can decide when to have different types of lessons."

When Tuula was asked if he felt that she had autonomy related to PE, she asserted: "I think I can do whatever is needed to achieve the goal. We teachers have some kinds of limits and between those limits, I can do different things, and I know what I can do or cannot do." It is reasonable to infer that Tuula is referring to the curriculum as the "limits" here. Leena deepened this argument in her reflections:

Sometimes, I ask children what they want to do for the PE session. In the curriculum, there is only one thing that we must do, and it is swimming. And the other thing that we must do is climbing, kicking..., but it is not mandatory to do basketball or volleyball, and teachers can choose what they want to do [...]. In Finland, teachers have a lot of freedom in their classes and in PE classes, as well. Teachers can choose what they want to do for the lessons. For PE, for example, I can choose if we are going to do skiing or skating or football or volleyball or climbing or cycling and some other activity, and where [to do it]. We do not need to inform or get permission from the principal.

The statements of Pasi support Leena arguments, also identifying swimming as obligatory in the curriculum. The little flexibility related to swimming, however, is something that Pasi finds necessary: "It is because every man should go to the army, and the first test is the swimming test. And, in the meantime, we have many lakes and should know how to swim." He also thinks that the curriculum is "good." He continued, "There is a lot of freedom for teachers to choose what they want to do in the class." The Finnish PE teachers highlighted this freedom in the curriculum as an especially positive aspect of being a PE teacher, as Matti explained:

Yes, I feel that the content and objectives of my subject are not imposed by anyone else. I have the freedom to decide them myself, although I do take suggestions from colleagues if they have good content or teaching methods. I consider it crucial that in Finland, we can implement physical education based on our own premises and approaches. Teachers can adhere to their own methods, and no one directs it excessively. Of course, the curriculum provides a framework, but teachers have a considerable amount of freedom in how they implement it, and I see that as a positive aspect.

The above statements illustrate the impact of curriculum in Finnish PE teachers' autonomy and subsequently in considering students' autonomy, as well. The flexible curriculum allows Finnish teachers to apply different teaching methods and activities according to the readiness of students, and accessibility of specific spaces and devices. This helped teachers to position themselves as being able to decide what to do, how to do it, and when to do it.

Autonomy for inclusion

The analyses of the interview data related to autonomy showed that four of the eight Finnish teachers pointed toward autonomy as a key strategy to consider the diverse characteristics of students and better manage heterogeneous classrooms. Teachers expressed that the existence of enormous diversity in PE classes can make it challenging for teachers, as there are varieties of interests, feelings, and skills that teachers should consider in conducting their PE classes. Autonomy of teachers was seen as a significant factor in activating and engaging all students according to their physical characteristics, skills, and moods. When Heidi was asked about her reflections in relation to provide student autonomy, she stated: "Well, in that case, it engages everyone. And maybe it also gives those students who do not consider themselves exceptional in physical education a say in something from time to time." Anneli also stressed the significance of providing student autonomy to include students, especially students with certain diagnoses: "Additionally, the inclusion aspect plays a role, too. When you have a very heterogeneous group, there may be individuals with specific diagnoses who cannot concentrate as easily." When he was discussing autonomy, Mauri stated that "It's nice to see that everyone is involved." Pasi also emphasized the importance of student autonomy to activate students:

I think we talk a lot also in PE, so I can ask the kids what they want to do or like to do today, so they can also participate in planning what to do. They can decide. Sometimes, if they want to go skiing or skating, I give them options, and they can choose. So, I ask about their opinion, but everyone should do something. They cannot do nothing and just sit. They need to do something. That is important in PE classes.

The above statement confirms the importance of autonomy in making each student active, i.e., making them move physically. This explains the engagement of all students, despite their diverse characteristics. However, it also reveals the main goal of PE lessons, which emphasizes movement.

Autonomy to increase motivation

The analyses of the interview data related to autonomy showed that three of the eight Finnish teachers pointed toward autonomy as an important strategy to increase the students' motivation in PE. Anneli stated that providing autonomy motivates the students, for example, letting the students make their own decision about which sport to participate in. She argued that the strategy of autonomy is especially essential among students with certain challenges: "Last year, I had a ninth-grade group with a couple of students who were socially limited and had various mental issues. I already knew that certain sports would not work for them, so we agreed on an individualized program." Anneli indicated the use of autonomy as an important strategy in PE:

But I've noticed that it works best when students are allowed to choose for themselves. For example, if I set up two games, one being more energetic, efficient, and competitive, and the other being more relaxed, they work well.

Heidi identified the use of student autonomy as a key strategy to motivate students for PE lessons: "It also brings some understanding from the students' perspective. [...]. It also increases

the students' appreciation that it's not just a matter of going there and things starting to happen." Mauri also pointed to the use of autonomy as an important strategy to motivate students during the enjoyment and achievement that an autonomy-based teaching creates. Mauri highlighted that some students prefer specific sports, while other students prefer reference games or playful activities, in groups or individually, stating "I do see that there is a good amount of autonomy in that regard." The above statements explain the significance of considering diverse skills and interests of students in making them motivated for PE, and to be active and engage in PE classes.

Autonomy to make PE meaningful

Heidi and Matti identified autonomy as a key strategy to make PE meaningful for students. In the interview with Heidi after having seen the videos from the KRI PE teaching, she pointed out that she preferred the "freer style" instead of a more "military-style approach." When asked to expand on this reflection, she stated:

Hm ... Well, it's maybe because of my own history. In primary school, we had a drum circle and open rows, and later, even in school, I experienced a more modern form of physical education. So, for me, the freer style felt more meaningful, and it still acknowledged that children could wait in line and participate. It's not always about being in height order, where everyone knows they're the shortest or tallest. It's about.... Well, it somehow serves that good feeling in movement.

The statement of Matti is closely related to the relevance of creating meaningful experiences in PE. When asked about his provision of student autonomy in his PE classes, and the description of his strategy, he stated:

Yes, they do. It is important to meet each student as an individual in physical education and consider his or her strengths and how to develop them. It is also essential to remember that everyone can approach tasks in their own way; not everyone has to do things in the same manner. From my perspective, students have autonomy during the lessons themselves, and it is evident in physical education.

The above quotes express the importance of autonomy in designing a free style of teaching, considering individualization in PE lessons and activities, and the main goal of PE is to make all students motivated to do something and, in other words, to feel good and to move.

Some challenges with autonomy

Even if all the Finnish teachers provided autonomy and had positive reflections about this strategy, both Heidi and Mauri experienced some challenges with providing students autonomy. When asked about her use of autonomy in PE classes, Heidi claimed that the use of autonomy makes students choose the same activities, and that it decreases the variation in activities: "It's partly good, but it does tend to be one-sided because there are favorite activities that they always want to do, and it shows during the classes when the students get to decide." Mauri pointed toward the use of autonomy as difficult, because students want different activities, and a danger exists of creating a "shouting contest":

In our class, we have a system where students can earn points and use them to purchase games or specific warm-up exercises for physical education classes. Those options are used to some extent. Some students prefer to use the points for playing a specific sport, while others use them for warm-up activities. It's a combination of both. There are also places where I let them have an influence, but it needs to be carefully considered because everyone wants different things. I don't want it to turn into a shouting contest, so perhaps they can choose between two options, or if someone wants to lead a warm-up exercise, or use those earned moments to do their favorite activity during physical education class. It seems to work well because there is such a variety, and everyone participates in the activities. If someone wants to play soccer, for example, everyone joins because they know that if they don't participate, they won't get to do their preferred activity.

This statement shows PE teacher awareness of possible challenges of students' autonomy, and how teachers manage to avoid the same repeated activities by students while also taking students' autonomy into account.

Autonomy in relation to KRI teachers

Physical education is mainly about doing sport activities—less room for autonomy

The KRI PE teachers seldom discussed autonomy. However, the most prominent finding according to the analyses of the interviews data related to the theme of autonomy was that all the KRI PE teachers talked about PE as mainly being about performing sport activities. We argue that such a perception and strategy decrease autonomy, as it predominantly focuses on sport activities rather than other activities that are aimed at movement. With such a strategy, the role of the teachers is to show the students different sports—a finding that was evident among all the KRI PE teachers' reflections during the interviews. When discussing PE, all of them mentioned specific sport activities. When PE activities were mentioned during the interviews, all KRI PE teachers identified sport activities, such as Taekwondo, volleyball, basketball, soccer, swimming, and athletics. Darya argued that "the students of the first three years of primary school are keener for sports, as they are younger [...], some of them like arts, so it is difficult to draw them to sports" [...]. Darya's statement exemplifies the strong connection of PE to sport:

We offer students social advice, as their families usually tell them not to practice sports as their level will drop both physically and academically. They tell them not to play football as they may fall. Many times, we open courses of sports and ask the students' parents to come and see how we teach their kids, and this makes them encourage their kids to practice sports. Or, some other times, we have championships of football matches between two classes, and the parents are invited. This makes the families encourage their kids, as we tell them that this sport is the student's desire.

Jiyan stated that "performing sports activities will draw students' attention to PE class, which means that activity makes students love PE class." She further pointed to the significance of sport as crucial for students: "I believe that our people are interested in sports as you go to

school, you are the most prominent one, and all students have the desire to engage in conversation with you [PE teacher] and want to approach you." In addition, the statements of Zilan indicated the importance of providing sports in PE:

My personal goal is to progress myself and a generation, as well. There are some students who are skillful in a sport, say futsal, but they have not discovered this potential in themselves, or their families consider sport to be an obstacle, so I try to support them

Azad mentioned the lack of sport halls and talked about PE as doing sport and preparation for championships: "We get a timetable that we teach; for example, we teach basketball this year to specific grades. When championships come for us, we make them for basketball matches, as the students have been taught this game."

Furthermore, Azad indicated a strong relationship between sport and the PE teachers' own stories related to their perceptions, experiences, and wishes in terms of doing sport:

When I was a child, I was a volleyball player. Then, I went to study in the college of physical education. I like sports. Sports make you get rid of negative energy, and it also, of course, improves one's health. If I don't do sports one day, I feel that I have a heavy burden; that is, mentally and physically, one gets better.

When talking about his goals in teaching PE, Sherko highlighted the relevance of loving PE for students to obtain lifelong benefits. Sherko stated that "at the beginning of each sport, I inform the students of the benefits of the sport in question." Sherko also highlighted that his goal is to "pay much attention to the PE class, and we make the parents eager to let their kids be members in sports teams because if the body is healthy, the mind will be healthy." Furthermore, Karwan pointed to PE as being about doing sport activities, stating that "the government should provide us with equipped sports halls to increase the passion of students in sports," adding: "If you do not wear sports clothes and you do not participate in sport activities, that means you do not value your PE class." He also stated that he got money from the store inside of the school and bought "a sponge for the high jump, sports clothes, balls, and net baskets for basketball and nets for volleyball." The strong relation between sport and PE was also highlighted by Karwan:

The first step to identify a student as an athlete in a specific sport is through the PE class. Through my PE class, I could identify very skillful athletes for the teams of my school, and then follow them up to nurture this skill in them. Every student is keen on a specific sport, say one likes football, another likes basketball. Therefore, I give them diverse sports and small games to take their desires into account and to avoid boredom as 40 minutes will be very long to teach one sport only, say football or basketball.

Karwan, as Sherko talks about sport championships, that he had got many friends through sports championship. He also said that "I wear sport clothes at school. I have my whistle, and I run championships and the raising flag ceremonies."

The above statements describe the athletic nature of PE classes for KRI PE teachers. These perceptions and attitudes seem to place the focus of PE classes on specific sport activities, rather than just the significance of movement. Even though the positive tangential effects

of PE, such as a healthy body and a healthy mind, were acknowledged by PE teachers, great attention was given to performing sports and nurturing the athletic spirit through providing instructions by PE teachers.

Proving little autonomy—just do as I do

Another main theme that came out of the thematic analyses of the KRIteachers' interview data related to autonomy was providing little autonomy by telling the students to "do as I do." This was especially prominent among three of the six teachers (Darya, Jiyan, and Sherko). The strategy related to little autonomy by "do as I do" is rooted in different approaches, but is directed toward sport, as previously described. Darya stated:

My plan is to tell them how I was, and they need to adopt the same steps of mine. Also, I show them a plan in a video, and there is a practical way to teach them how to learn gymnastics, for example. I teach them in a series what movements they should learn, and they must have physical potential, like power and passion. For example, if somebody says that he or she likes basketball or football, we need to check his or her body, height, and physiology regarding whether he or she fits the sport; if not, he or she goes to another sport.

When being asked about his style of teaching to achieve his goals as a teacher, Darya stated that the last 3 years of primary school "must be taken more seriously in teaching physical education in the way of military recruitment, so that the students know that the subject of physical education has its own traits as other subjects have," and "if you do not employ such methods in your teaching, you will not be a successful teacher." To the questions about his reflections on the Finnish videos, Darya claimed that "certainly, they were free, and this will be an example of a negative point in which students may fall and this needs more follow up from indoor classes." Jiyan's statements pointed in the direction of "do as I do" and showed that she did not provide autonomy because "it will be difficult for me to concentrate on all students equally." When asked more about giving his students freedom in his PE class, she stated: "The method that I use is lecturing and practicing. This means that I show them how I do sports, and then we practice together." Sherko also seemed to have a strategy related to "do as I do." He told the students what was to be learned, as well as what the students can do and cannot do. When asked about his reflections about the Finnish PE videos, he raised some points regarding the differences of students' manner and their behaviors, which have been recognized as one reason for limited autonomy and freedom in PE classes, as he asserted:

Their kid's mentality was very different from ours. Our student, when he sees there is no supervision, he tends to be naughty or stops exercising sports, unlike their student, who continues doing the exercises even if the teacher is away. Additionally, we need a very good whistle for outdoor activities. Their teacher didn't get very tired to keep doing his PE lesson, while we got very tired in our PE class. [...] Getting students to have roles in PE class is very difficult for me.

During the interview, Sherko also talked about students with "some potential" and referred to a student "who could do high jump on cement, so I took him to the institute and brought him sponge mats to practice. Then, he became second at the level of high schools." He also

mentioned getting students "with potential to become eminent players," stating: "Among 700 students, there are some players. I put more focus and time on such students to support them, and some of them have become players in the Duhok Sports Club." In addition, Sherko made several other statements related to the strategy of "do as I do."

The statements above highlight a teacher-centered strategy for PE classes, in which instructors primarily focus on providing sports instructions. While teachers may assume responsibility for guiding instruction, the emphasis on structured sports activities may limit opportunities for students to make choices and exercise autonomy in their learning experiences. Therefore, while considerations for individual differences are acknowledged, the overarching instructional strategy still falls short of truly empowering students to take ownership of their learning and physical activities.

Traces of autonomy

While all the Finnish PE teachers reflected on autonomy in response to the open-ended questions about their PE teaching during the interviews, the importance of autonomy was not identified among the KRI PE teachers. However, the analysis did reveal traces of autonomy among some KRI PE teachers. Three of the PE teachers offered some positive reflections on providing autonomy, and all of these (except one reflection from Karwan) occurred when discussing the Finnish videos. Nonetheless, it is important to note that although three of the KRI teachers mentioned the use of autonomy in some of their reflections and had a few positive reflections related to its use, they also had reservations about the use of autonomy or made other statements that suggested a limited scope of autonomy.

Karwan, in the interview, was asked about what methods he used in teaching PE. He confirmed that "I also give students freedom in my lessons." When he was asked what he liked in the videos, he stated, "there is freedom of movement." When asked about similarities and differences between the Finnish videos and KRI PE lessons, Karwan claimed:

Their students have more freedom than ours. This may be due to the small number of students in their classes. We cannot give them this freedom because we have many students in our classes, and we will lose control. Freedom is important, as it makes students avoid boredom, and they release their tension energy in a productive way.

On the other hand, Karwan had several statements related to PE as doing sport, with no room for autonomy. One of the KRI PE teachers (Azad) stated that "we should give the students freedom, but not full freedom; there should be control." He pointed to the video of the outdoor class, stating that "there is a negative point that I noticed in the outdoor class, when the teacher let them free to play games alone; this may be dangerous for the students."

Karwan, Azad, and Jiyan also made several statements related to PE as performing sport, with no room for autonomy. In his reflections on the video from the Finnish PE, Jiyan also made a statement that indicated the importance of giving the students autonomy:

What I learnt from this video is that the focal point is not only the teacher, but there are many activities in which students can be focal points and can-do things themselves, like forming rows from the shortest to the tallest. The students themselves can check their heights and make rows; that means the student is a part of the

lecture of PE. The arrangement of the students drew my attention as the activity is distributed between the teacher and the students. As for the activities, the students are fully responsible for them, and I want our classes to be the same as theirs. Our teachers are as capable as theirs, and we can adopt similar techniques in our classrooms; allowing students to select their peers and arrange themselves into rows, fosters independence, build self-confidence, and equips them to manage their own futures and take care of their families.

In addition to the potential for providing freedom in PE classes through task division and shared responsibilities with students, Jiyan further emphasized the broader implications of implementing this strategy for students' growth personally in their life and for their future.

Discussion

The findings regarding the use of autonomy in PE among fifthgrade PE teachers in Finland and KRI indicated distinct cultural approaches in these countries. The analysis showed that all Finnish PE teachers identified the significance of developing student autonomy in response to open-ended questions about PE, whereas KRI PE teachers rarely discussed autonomy. Instead, they structured their teaching in a manner that limited autonomy. Finnish PE teachers viewed autonomy as central to the curriculum, utilizing it to improve students' motivation and to make PE sessions more meaningful and enjoyable. Many students' autonomy supportive teachers' behavior (Ahmadi et al., 2023), like allow for student input or choice, teach in students' preferred ways and allow student own-paced progress, could be recognized in their discussions. Such strategies were also viewed to actively engage more students, despite Finnish teachers noting some challenges with autonomy, particularly in managing diverse student interests and abilities.

While Finnish PE teachers recognized that promoting autonomy can effectively increase student participation and involvement, given the diverse needs and abilities of students, KRI PE teachers predominantly associated PE with performing sport activities and adopted a "just do as I do" approach, which permits little room for autonomy. However, there were indications of some degree of autonomy among KRI PE teachers. Their teaching style, largely characterized by a teacher-centric instructional approach that focuses on directive teaching, offers minimal autonomy in PE classes. The concept of autonomy is viewed with both positive and negative implications. On the one hand, granting students autonomy is seen as beneficial, fostering self-confidence, self-efficacy, and selfresponsibility, and improving decision-making skills that are critical for their future. Conversely, the implementation of autonomy in PE classes presents certain challenges, including potential loss of control by teachers and safety risks for students without adequate supervision and control measures. These contrasting views highlight the complexity of balancing autonomy with safety and effective classroom management in PE settings.

The results showed that KRI teachers predominantly viewed themselves as the primary authorities on knowledge within the PE classroom. Following a teacher-centered education model, the KuRI teacher assumes a central and dynamic role, positioning themselves

as the primary source of knowledge which students are expected to follow. Although KRI PE teachers stressed the relevance of physical activities and sports, tailored to the abilities and physical characteristics of all students, their approach does not allow students the freedom to make decisions or choices; teachers dictate both the content and the method of learning. According to Ahmadi et al. (2023), this could be classified opposite to autonomy supporting teachers' behaviors. However, some KRI PE teachers showed potential for implementing strategies that enhance autonomy, such as providing rationales, teaching students to set intrinsic life goals for learning, and providing extra resources for independent learning (Ahmadi et al., 2023). This could be facilitated by addressing certain challenges, such as reducing high student-to-teacher ratios in PE classes, managing disruptive behaviors, promoting positive manners, and improving facilities and safety measures. In the Kurdistan Region of Iraq (KRI), Amin (2020) suggests that autonomy often depends on access to continuous professional development (CPD) opportunities, which can be scarce due to resource disparities. However, application on self-determination theory could be beneficial especially in lower social economy status schools (Noetel et al., 2023). Vernes et al. (2016) highlights the need for evidence-based educational policies but note a paucity of data on teacher professional development in KRI. A national CPD program launched in 2012 aimed to assist PE teachers in implementing the new curriculum, but Vernes et al. (2014, 2016) report that although CPD is valued, formal opportunities are limited by financial constraints, which raises concerns about the quality and relevance of these programs. Amin (2020) found that teachers who value autonomy are more engaged in informal CPD activities, although social learning is less common. Overall, promoting autonomy and expanding CPD opportunities for PE teachers in KRI are critical for effective educational reform and teacher development.

According to self-determination theory (Deci and Ryan, 2000), providing students with autonomy is essential for optimal motivation, integration, wellness, and well-being in PE, which leads to intrinsic motivation. By aligning teaching practices with the principles of selfdetermination theory, educators can promote greater engagement, motivation, and enjoyment in PE classes. We argue that in terms of providing autonomy, KRI teachers need to reconsider their perspectives, teaching practices, and strategies to grant more autonomy to students. However, since the contexts in the two countries are markedly different, more communication and collaboration may make their transformation more contextual, rather than just a facsimile of the Finnish teaching style. Self-determination theory has also been criticized for not fully accounting for social and cultural influences on motivation and behavior, over-emphasizing individualistic cultures, and neglecting collectivist cultures' impact; it seems, however, that autonomy is important in different cultures (Jang et al., 2009; Nalipy et al., 2020; Zhou et al., 2009). Indeed, it is the case that the impact of cultural context cannot be underestimated when applying new concepts.

Here, we highlight that interventions have been successful in increasing autonomy support among teachers (Tessier et al., 2010; Cheon et al., 2014; Aelterman et al., 2014; Cheon and Reeve, 2013; Ulstad et al., 2018). Teacher behaviors have the highest potential for interventions because they have strong effects on students while also being adaptable (Reeve and Cheon, 2021; Ryan and Deci, 2020; Su and Reeve, 2011). Our argumentation is based on self-determination theory, which posits that engaging in an activity because it is

inherently interesting and satisfies one's basic needs for autonomy can increase students' intrinsic motivation (Ryan and Deci, 2000), and promote lifelong enjoyment of movement. This aligns with the results of this study, in which Finnish teachers emphasized that the primary goal of PE is to foster lifelong physical activity and instill healthy lifestyle habits. They indicated the importance of movement not only for physical fitness, but also for overall well-being, aiming to develop a positive relationship with physical activity from a young age, thereby empowering students to maintain healthy and active lifestyles throughout their lives. We also argue that KRI students would benefit from developing their skills from perspectives that are broader than the "do as I do" approach. Both Cheon and Reeve (2013), Haerens et al. (2010, 2018) and Leisterer and Paschold (2022) found that students benefit from teachers' adoption of an autonomy-supportive teaching style, as pertinent literature has shown that students were more engaged when interacting with an autonomy-supportive PE teacher, as opposed to a controlling teacher (De Meyer et al., 2016), in terms of both behavioral and emotional engagement in PE. Several other investigations have identified positive associations between autonomy in PE and motivation in PE (How et al., 2013; Lonsdale et al., 2009, 2013; Ntoumanis, 2005; Prusak et al., 2004; Ward et al., 2008). An intervention study by Authors demonstrated that providing autonomy in PE significantly increased students' experiences of happiness, well-being, and contentment in PE lessons, as well as higher activity levels. A study by Soini et al. (2023) revealed that preservice teachers identified instilling the joy of movement as the primary goal of PE teaching, a sentiment that was echoed by Finnish teachers who have explicitly indicated joy as a goal of PE when asked about its objectives. Additionally, an investigation among Finnish fifth-grade students revealed that autonomy was directly associated with enjoyment in PE (Huhtiniemi et al., 2019). Autonomy has also been shown to positively influence students' inclusion in various research (Bagøien et al., 2010; Ciyin and Erturan-Ilker, 2014; Deci and Ryan, 2000; Erturan-Ilker, 2014; Jang et al., 2010; Koka, 2014; Mouratidis et al., 2008; Standage et al., 2012). Finnish teachers in this study also mentioned how granting autonomy to students could assist in engaging each student according to his or her abilities and interests. Furthermore, the use of student autonomy has been reported to increase the PE teacher's motivation, competence, and well-being as a teacher (Cheon et al., 2014). The results of this study indicate that Finnish teachers prioritize autonomy in PE classes to ensure students' happiness, freedom, and personal and PE growth. Conversely, KRI teachers have less room for autonomy and freedom in PE classes. However, they focus on encouraging and motivating students to succeed in their PE activities and cultivate healthy habits for life. Despite differences in approach, both Finnish and KRI teachers share a common goal of promoting student well-being and lifelong health through encouraging PE.

It should be noted that self-determination theory (Deci and Ryan, 2000) influenced the development of the current Finnish National Core Curriculum for Basic Education in PE (Finnish National Agency for Education, 2014). Many of the objectives within this PE curriculum focus on enhancing students' social skills, participation, and responsibility, achievements that necessitate the application of various student autonomy-related teaching methods. Self-determination theory is also integral to teacher education in PE studies at universities. Given this context, it was anticipated that Finnish PE teachers would emphasize student autonomy. However, the extent to which they stressed student

autonomy in their reflections was somewhat surprising, especially considering that the terms "autonomy" and "self-determination theory" are not explicitly mentioned in the PE curriculum.

The study highlighted a critical issue: inadequate facilities significantly challenge KRI teachers in organizing PE lessons, which negatively impacts both teaching quality and student motivation. However, the findings suggest a promising solution: by shifting the focus from structured sports activities to promoting movement and joyfulness, these challenges can be effectively mitigated. Empowering teachers and students with autonomy opens numerous possibilities for innovative initiatives, thereby advancing PE teaching approaches within their cultural and educational contexts. Granting students autonomy allows teachers to improve their professional development and develops student motivation, facilitating both personal and professional growth. Learner autonomy promotes learning within and beyond educational settings, which contributes to sustainability. A change in perspective has the potential to elevate the status and significance of PE in the curriculum, as well as its position within schools and society at large. This approach not only empowers students to take ownership of their learning experiences, but also cultivates a culture of responsibility, independence, and lifelong physical activity.

Finnish and KRI teachers' divergent views on student autonomy in PE highlight intriguing cultural and pedagogical distinctions that are consistent with the findings of contemporary educational research. Student autonomy is highly valued by Finnish educators who see it as the foundation of their pedagogical approach. This is in line with Deci and Ryan (2000) observations which stress the importance of developing intrinsic motivation to cultivate a lifelong love of physical activity. For instance, Cheon et al. (2014) found that Finnish PE teachers frequently incorporate student choice into their lesson plans. Consequently, there was a considerable increase in engagement and drive.

Conversely most KRI PE teachers follow a more conventional teacher-centered methodology. Also, a study by Vernes et al. (2014) highlighted that such a command-and-control approach performance demonstrations are frequently the focus rather than promoting student agency. Ryan and Deci (2007) emphasized that this may lead to obstacles in the way of motivation and engagement. Also, a study showed that perceived PE teacher autonomy support was positively associated with students' basic need satisfaction and life skills development, and that perceived controlling teaching was positively related to students' basic need frustration (Cronin et al., 2019). However, it is encouraging to see that some KRI teachers are starting to experiment with more autonomy-supportive techniques indicating a changing understanding of the significance of student participation in their education. Thus, teachers will be able to find a balance between providing guidance and letting students make their own decisions to this excellent opportunity for growth through focused professional development. This change not only fits in with modern theories of education, but it also considers the various needs that students have in an increasingly globalized world.

Strengths and limitations of the study

The results of the study are based on recordings of four videos from fifth-grade PE classes - two in Finland and two in KRI, featuring

one indoor and one outdoor video from each location - and in-depth semi-structured interviews with 14 teachers, which is a substantial number for qualitative analysis. Filming both indoor and outdoor PE lessons in Finland and KRI provides a rich, visual context for the teachers to reflect on. Videos are valuable in cross-cultural studies as they help mitigate the risk of misinterpretation and allow participants to directly compare teaching practices across contexts. By including both indoor and outdoor lessons, the study ensures that a variety of teaching settings are represented, making the data more comprehensive. The use of a semi-structured interview guide is a strength, as it allows for flexibility in responses while maintaining consistency in the questions asked across all participants. The openended questions encourage participants to share their own perspectives and reflections, leading to richer and more nuanced data. Another strength is the effort to ensure gender balance in the sample. This is crucial in PE research, where gender dynamics can significantly influence teaching styles and student engagement. Furthermore, the inclusion of teachers from two distinct cultural contexts (Finland and KRI) is a major strength. This cross-cultural approach allows for comparisons between educational systems with different social, political, and educational norms, and strengthens the construct validity by ensuring a broad range of perspectives. It highlights how these factors shape PE teaching practices, and the autonomy granted to students. The inclusion of teachers who meet the specific inclusion criteria related to education and experience enhances internal validity, as the study ensures that participants have the necessary background to contribute meaningfully to discussions on PE teaching. The use of QSR NVivo 11, a reliable software for qualitative data analysis, enhances the rigor of the analysis, and the involvement of four researchers from different cultural backgrounds in the analysis process is a significant strength. The findings are discussed in relation to the validated and widely recognized self-determination theory, which has consistently shown that autonomy positively affects students' engagement in PE across multiple studies. However, the study does possess several limitations. Given the small, non-randomized sample and the lack of an experimental setup due to financial constraints, it is not feasible to generalize the findings to broader populations. While the strategic selection of participants ensures relevance to the study's aims, the small number may not fully capture the diversity of teaching practices and experiences, especially across different regions within Finland and KRI. Nonetheless, recording two PE classes from both regions enhances the credibility of the results. The general validity of the findings is also credible based on the consistency in participants' reflections relative to their country, and the fact that initial data analyses were carried out independently before being collaboratively discussed among four researchers. However, since most interviews were conducted in the teachers' native languages and then translated into English, potential exists for misinterpretation. Variations in educational backgrounds and qualifications among teachers in Finland and KRI could also influence the results, particularly since educational qualifications differ significantly between the two regions. While the study provides valuable insights into PE teaching in Finland and Kurdistan region of Iraq, its findings should be interpreted with caution, particularly in terms of their applicability to broader populations. Cultural differences in reporting practices and the unexplored influence of educational policies further complicate crosscultural comparisons, which may weaken the construct validity. Finally, although the study provides insights into PE teachers'

practices, the analysis could have benefited from a deeper exploration of the specific socio-political and educational contexts in both countries. Future research should involve more PE teachers from both Finland and KRI to reflect their perceptions and use of autonomy through questionnaires, which could help to generalize the findings. Conducting further mixed-method studies could also assist in generalizing the results. Additionally, implementing an intervention study that applies the principles of self-determination theory to PE teaching in KRI could constitute a valuable subsequent step to apply the results of this study.

Conclusion

The aim of this study was to examine the reflections, perceptions, and experiences of teachers in Finland and KRI regarding physical education (PE) teaching. This was achieved through the analysis of in-depth semi-structured interviews using a phenomenological-hermeneutic approach. The study involved exploring the opinions, attitudes, and reflections of eight Finnish and six KRI PE teachers concerning their roles as PE teachers. Additionally, their reflections on an indoor and an outdoor video showcasing ordinary PE teaching in the other country were analyzed. These videos were recorded as an initial step of the study and were instrumental in designing the interview questions for the PE teachers.

The initial analyses of the two groups of teachers using the qualitative analysis program NVivo revealed significant findings related to student autonomy, and distinct differences were closely examined. While all Finnish PE teachers identified the significance of granting student autonomy in response to open-ended questions about PE, KRI PE teachers seldom discussed autonomy. Instead, their teaching methods appeared to reduce autonomy. Finnish PE teachers indicated that autonomy is central to the curriculum and used it to improve students' motivation and make PE more meaningful. Such a strategy is also aimed at engaging more students, despite some reported challenges with managing student autonomy. In contrast, KRI PE teachers generally associated PE with performing sport activities and adopted a "just do as I do" approach, reflecting a teachercentered strategy that allowed little room for autonomy, although there were indications of minimal autonomy among some KRI teachers. Considering these findings and the theoretical framework of self-determination theory (Deci and Ryan, 2000), which underscores student autonomy as essential for motivation, integration, wellness, and well-being in PE, it is argued that KRI teachers should reconsider their teaching approaches. Shifting from a teacher-centered to a student-centered approach could provide their students with more autonomy and encourage a broader perspective on PE than merely instructing students to "do as I do." In this regard, fostering greater exchange of knowledge and practices in PE between teachers in Finland and teachers in the KRI could prove highly beneficial. Furthermore, it is recommended that collaborative research projects be conducted that are aimed at developing curricula for PE in both schools and higher education, as the constraints on teachers' freedom may reflect the curriculum for PE teacher-students in higher education, as well as in schools' curriculum.

This collaboration can also benefit Finnish teachers by providing a deeper understanding of the role of culture and different teaching strategies that may influence students' reflections and behaviors. This

understanding is particularly crucial as Finland encounters growing diversity among its student population, including migrants from various countries. By learning from the experiences and approaches of teachers in the Kurdistan Region of Iraq (KRI) and other regions, Finnish educators can gain invaluable insights into the diverse needs of their students and improve their support systems accordingly. Overall, through mutual learning and exchange, educators from both sides have a unique opportunity to enhance the quality of physical education and promote the holistic development of students in culturally diverse contexts. Future research that measures PE teachers' frequencies of provided autonomy and attitudes toward providing autonomy using quantitative design, is highly recommended.

Data availability statement

The raw data supporting the conclusions of this article will be made available by the authors, without undue reservation.

Ethics statement

The studies involving humans were approved by the Finnish National Board on Research Integrity. The studies were conducted in accordance with the local legislation and institutional requirements. The participants provided their written informed consent to participate in this study.

Author contributions

PL: Conceptualization, Data curation, Formal analysis, Investigation, Methodology, Writing – original draft. GM: Conceptualization, Data curation, Formal analysis, Investigation, Methodology, Project administration, Writing – review & editing. WM: Conceptualization, Data curation, Formal analysis, Investigation, Methodology, Writing – review & editing. JK: Conceptualization, Data

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Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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