

Physical Education Teachers' Perceptions of Support for Basic Psychological Needs in Primary Education

La percepción del profesorado de Educación Física sobre el apoyo a las necesidades psicológicas básicas en Educación Primaria

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Abstract

Introduction: In the context of Physical Education (PE), supporting basic psychological needs (BPNs; autonomy, competence, and relatedness) is regarded as essential for fostering self-determined motivation and promoting pupils' wellbeing. However, limited evidence exists regarding how teachers perceive and experience this process in their everyday practice. This study aimed to explore the perceptions of Primary Education PE teachers concerning the support they provide for these needs, with a focus on both the strategies they implement and the meanings they ascribe to them.

Method: A qualitative methodology based on a case study design was adopted, employing individual semi-structured interviews. Five in-service PE teachers participated in the study, all of whom were teaching at the Primary Education level in state schools in the Balearic Islands.

Results: The results indicate that the participating teachers perceive themselves as supporting these needs through a range of pedagogical strategies, albeit with differing levels of depth. Moreover, tensions were identified between discourse and practice, arising from organisational structures, pedagogical beliefs, and policy requirements.

Conclusions: The importance of understanding support for BPNs as an evolving ethical and professional responsibility is emphasised, one that demands collective reflection, distributed leadership, and institutional conditions conducive to a more motivating and coherent approach to PE.

Keywords: physical education, basic psychological needs, self-determination theory, teacher perception.

Introduction

Regular physical activity (PA) constitutes a fundamental pillar in children's holistic development. Its physical, psychological, and social benefits have been extensively documented (Dhuli et al., 2022; World Health Organization [WHO], 2024). Despite this scientific evidence, current data highlight a worrying decline in PA levels among children and adolescents, accompanied by increasingly sedentary lifestyles (Chaput et al., 2020). In the Spanish context, the PASOS Study indicates that 47% of young people do not engage in physical exercise during their leisure time, and only 38% meet the recommended 60 minutes of moderate-to-vigorous daily PA (Gasol Foundation, 2022). Within this scenario, PE, as a compulsory subject in Early Childhood, Primary, Secondary, and the first year of Baccalaureate education, emerges as a key setting and, in many cases, the only opportunity for students to engage in regular PA. However, high-quality PE should not be confined to increasing PA levels during school hours. It also holds the potential to provide meaningful experiences that foster long-term, voluntary, and autonomous engagement in physical and sporting activities beyond the school context (Arenas et al., 2024).

In recent years, Self-Determination Theory (SDT; Deci & Ryan, 1985; Ryan & Deci, 2000, 2017) has become one of the most robust theoretical frameworks for understanding human motivation in educational contexts. Within SDT, BPNs Theory posits that, in order to develop autonomous motivation and function optimally, individuals must experience the satisfaction of three innate and universal needs: autonomy, competence, and relatedness (Vansteenkiste et al., 2020). In the context of PE, *autonomy* refers to the desire to be the origin of one's actions, acting voluntarily and in alignment with personal interests and values. *Competence* involves students' aspirations to feel effective in carrying out tasks and to perceive that their efforts lead to expected outcomes.

Relatedness refers to the desire to establish meaningful social connections and to feel a sense of belonging with others (Ryan & Deci, 2017). When these needs are consistently supported by the PE teacher, more autonomous forms of motivation tend to emerge, alongside increased task engagement, improved psychological well-being, more positive attitudes towards the subject, and, potentially, a stronger intention to remain physically active (Castillo-Roy et al., 2021). Conversely, when these needs are systematically undermined, more controlled forms of motivation may arise, along with disinterest, emotional discomfort, and disengagement from the learning environment (Vasconcellos et al., 2020).

The PE teacher's interpersonal style, understood as the way in which they communicate and interact with students, plays a pivotal role in this motivational equation (White et al., 2021). Unlike other curricular areas, PE, due to its embodied, social, and emotional nature, constitutes a privileged context for nurturing students' autonomy, competence, and social relationships (Haerens et al., 2015).

From the perspective of SDT, it has been suggested that teachers who experience greater satisfaction of their own BPNs, for instance, by feeling competent in classroom management, autonomous in their pedagogical decisions, and connected with their students and colleagues, are more likely to adopt motivational, empathetic, and context-sensitive teaching styles (Ryan & Deci, 2017; Moè & Katz, 2022). This satisfaction not only influences their professional practice but also affects their well-being, sense of vocation, commitment, and retention in the profession (Huić et al., 2024).

However, teachers' perceptions of their capacity to support students' BPNs are not neutral. Rather, they are shaped by a combination of personal and contextual factors. These include initial and ongoing teacher education, institutional pressures, the school's organisational culture, perceptions of students' motivation and engagement, as well as the degree of satisfaction or frustration of their own BPNs within the professional context (Franco et al., 2024). Consequently, this perceived level of efficacy in implementing BPN-supportive strategies may generate feelings of personal fulfilment, but also of frustration or emotional exhaustion, directly impacting teachers' motivation and job satisfaction (Amorim & Ribeiro-Silva, 2022).

Although most research on SDT in PE has focused on students' perceptions, the need to broaden the scope to include teachers' lived experiences is becoming increasingly evident. The analysis of BPN support has been largely dominated by quantitative studies exploring students' perceptions of teaching styles (Leo et al., 2022). However, the teacher's perspective has received considerably less attention, particularly from qualitative approaches that examine how teachers perceive their capacity to support these needs, how they experience this process, and what meanings they assign to it. This gap is especially relevant in Primary Education, where the PE teacher is not only responsible for teaching motor content, but also for fostering an emotional, inclusive, and relational climate that can influence students' long-term engagement in physical activity (Ladwig et al., 2018).

Therefore, the aim of this study is to explore and gain an in-depth understanding, from a qualitative perspective, of Primary PE teachers' views and perceptions regarding the support they provide for students' BPNs (autonomy, competence, and relatedness), as well as to identify the specific pedagogical strategies they employ. This approach will not only enable the identification of common patterns, but also offer deeper insights into the particularities of teachers' discourse, contributing to both teacher training and professional development in the PE field.

Based on this aim, the study hypothesises that Primary PE teachers perceive that, through their day-to-day teaching practice, they contribute to the satisfaction of their students’ BPNs by employing a range of pedagogical strategies.

Methods

Participants

Based on purposive sampling and taking into account the researcher’s access, the study involved five in-service PE teachers working in state primary schools on the island of Mallorca (Balearic Islands). The selection aimed to reflect a range of teaching experiences by including professionals with diverse career trajectories who taught across different levels of the primary stage. This heterogeneity facilitated the collection of rich and complementary perspectives on the support for BPNs within the subject area.

The sample comprised two men and three women, all of whom held university degrees specifically related to PE. Table 1 presents further details about each participant.

Table 1
Sociodemographic characteristics, training, teaching experience, and current professional roles of the participants

Participants	Age	University Education	Years of teaching experience	Roles Performed	Levels Taught
Teacher 1	49	Diploma in Teaching with a specialisation in PE	20	PE teacher, ICT coordinator	3rd, 4th, 5th, 6th
Teacher 2	40	Diploma in Teaching with a specialisation in PE Master’s in Psychomotricity	17	PE teacher, school secretary	1st to 6th
Teacher 3	41	Diploma in Teaching with a specialisation in PE	18	PE teacher, class tutor, head of studies	4th, 5th, 6th
Teacher 4	48	Diploma in Teaching with a specialisation in PE	24	PE teacher, class tutor, head of studies	1st
Teacher 5	32	Diploma in Teaching with a specialisation in PE Degree in Social Education	2	PE teacher, class tutor	4th, 5th, 6th

To ensure confidentiality, participants were identified by numerical pseudonyms (e.g., ‘Teacher 1’, ‘Teacher 2’) in both the results and discussion sections.

Data collection techniques

To collect data, semi-structured interviews were conducted with each participant, as this technique allows for an in-depth exploration of individual experiences and perceptions (Ruslin et al., 2022). This format enabled teachers to elaborate on their responses and offer spontaneous contributions that enriched the content. The interview guide was developed by the research team in line with the study's objectives, drawing on the dimensions of BPNs Theory and adapting items from the BPNs Support Questionnaire in PE (Sánchez-Oliva et al., 2013), as well as from the Spanish version of the BPNs Scale in PE (Menéndez-Santurio & Fernández-Río, 2018). The guide was reviewed by two experts with experience in qualitative research and the application of SDT in school contexts, which contributed to enhancing its clarity, internal coherence, and alignment with the research aims. Table 2 presents the questions used in the interviews.

Table 2
Interview guide used in the semi-structured interviews

Variable	Factor	Questions
Teacher support for BPNs in PE	Autonomy support	1. Do you think it is possible to foster students' autonomy in Physical Education?
		2. What strategies do you use to promote students' autonomy in your teaching practice?
		3. Do you take students' interests and preferences into account? How?
		4. Do you offer opportunities for choice during activities or in other aspects of the session? Could you give an example?
		5. Do you encourage students to make decisions during the session? In what way?
	Competence support	1. Do you think it is possible to promote students' sense of competence in Physical Education?
		2. How important is this aspect in your lessons, and how do you work on it?
		3. Do you adapt activities to your students' level? When and how do you usually do so?
		4. What do you do to encourage students to participate and trust in their own abilities?
		5. In what other ways do you contribute to their learning and sense of competence?
	Relatedness support	1. How important is it for you to foster positive social relationships in your teaching practice?
		2. What do you do to promote a positive classroom climate? Could you give an example?
		3. How do you organise group work? What criteria do you use, and why?
		4. Do you use specific strategies to strengthen relationships among students?
		5. How do you usually manage interpersonal conflicts in your lessons?
		6. How do you try to ensure that all students feel included in your lessons?

Procedure

Once the interview script had been finalised, each selected teacher was contacted individually to inform them of the aim of the study and to request their participation. All agreed to take part voluntarily. Prior to each interview, participants were given detailed information about the study, assured of the confidentiality of their responses, and asked to provide verbal consent for the recording and use of the data for scientific and dissemination purposes only.

The interviews, which lasted approximately 30 minutes, were conducted in December 2022 in quiet, neutral locations agreed upon with each teacher. All interviews were conducted by one of the researchers, a PE teacher with training in qualitative methodology and previous experience in studies related to SDT. This dual role may have fostered a greater sense of empathy and a more egalitarian relationship, facilitating more open and authentic responses from the participants (Aburn et al., 2021).

Data collection concluded when no new interviews yielded substantially novel information in relation to the analytical categories, indicating that theoretical saturation had been reached (Fusch & Ness, 2015). This saturation was assessed iteratively by the researchers during the coding process through a constant comparative approach. It was confirmed that the emerging themes were redundant, reiterating previously identified patterns, and that no new conceptual subcategories were emerging (Charmaz, 2006).

Data analysis

Once the interviews had been completed, they were fully transcribed and analysed through a deductive thematic analysis, following the systematic procedure outlined by Braun and Clarke (2024). The analysis was organised into several phases: familiarisation with the data through repeated readings of the transcripts; initial generation of codes; identification and review of themes; definition of categories and subcategories; and the production of the final report.

The analysis adopted a deductive approach, using the three dimensions proposed by BPNs Theory (Ryan & Deci, 2017) as pre-established categories: autonomy support, competence support, and relatedness support. Within each of these categories, subcategories were developed inductively, based on meaning units derived from the teachers' discourse. These subcategories refer to the specific strategies employed by teachers to support each of the BPNs in their PE lessons, as outlined in the categorical structure presented in Table 3. This structure enabled the data to be organised and interpreted within a clear theoretical framework, while preserving the richness and specificity of the teachers' narratives (Kushnir, 2025).

Data coding and organisation were carried out using MAXQDA software (version 2022, VERBI Software, Berlin, Germany), which facilitated the systematic management of meaning units, grouping of codes based on shared patterns, and construction of a final matrix comprising the three main categories and their respective subcategories. Throughout the process, internal triangulation was undertaken among the researchers, who independently coded the transcripts and subsequently discussed and resolved any discrepancies to ensure the rigour and reliability of the analysis.

Table 3
Categories and subcategories related to support for BPNs and contributing factors

Categories	Subcategories
Autonomy support	Open-ended tasks
	Activity selection
	Decision-making and responsibility-taking
	Interests and preferences
	Cooperative learning
	Classroom routines
	Formative and shared assessment
Competence support	Varied content
	Level-appropriate tasks
	Feedback
	Assessment
	Confidence
Relatedness support	Group formation strategies
	Creation a positive classroom climate
	Conflict management
	Use of specific learning situations

Results

The following section presents the results organised according to the pre-established analytical categories, accompanied by an interpretative narrative aligned with the theoretical framework and the aims of the study. The selected excerpts illustrate the participants’ perceptions, highlighting the most salient and recurrent patterns in their discourse.

Autonomy support

The participating teachers agreed that fostering autonomy is a fundamental objective in PE. All of them stated that this basic psychological need can and should be promoted from the early stages: “Children at school learn to live alongside others and to be self-reliant, and we, as teachers, must encourage this” (Teacher 5).

Among the strategies mentioned, the use of open-ended activities was particularly prominent, allowing for multiple valid solutions: “Most of the activities [...] are open-ended, where they can make decisions: sociomotor games, cooperative learning, sports approached through Teaching Games for Understanding, and modified games, etc.” (Teacher 1).

However, when asked about offering students choices regarding activities or content, most acknowledged that they generally do not provide much decision-making power: "As a general rule, the games or activities are already planned" (Teacher 1). Some justified this by referring to organisational difficulties: "Although I sometimes let them choose between one activity or another, I don't usually do it, because [...] we then have to spend time reaching an agreement" (Teacher 5). In contrast, there were also cases of teachers who did offer such choices: "Some topics are flexible, such as when choosing an alternative sport" (Teacher 2). Nevertheless, most teachers agreed that a certain degree of choice is offered in secondary aspects of the session, such as warm-up or cool-down games: "In many sessions, they are the ones who choose the game" (Teacher 5).

Another key aspect was involving students in decision-making and the assumption of responsibilities. One teacher described how students are encouraged to take an active role: "They create activities/games [...] they have to [...] prepare the equipment and also explain it to the rest" (Teacher 5). Some teachers mentioned that, in certain sessions, they allow students to form their own working groups, thereby promoting autonomy: "They are the ones who organise the groups" (Teacher 5). However, others preferred to assign the groups themselves in order to avoid exclusion: "It's always the same pupils who are left out of the groups" (Teacher 3).

A recurring strategy was gathering information about students' interests and preferences at the start of the school year: "I give them a questionnaire to get to know their interests better: the sport they practise, video games, TV series, films, books, songs, etc." (Teacher 5). This knowledge not only helps to contextualise activities but also to establish a closer relationship: "I think it's the basis for creating a personal connection with them" (Teacher 3).

With regard to assessment, some teachers emphasised the importance of using formative and shared assessment to enhance autonomy, helping students reflect on their own learning process: "It's an important way for them to know where they're starting from and how they're progressing" (Teacher 1). However, some doubts also emerged regarding its implementation: "I'm not entirely convinced that assessment should be shared with them; sometimes I think they're still not mature enough to evaluate their own process" (Teacher 2).

Similarly, cooperative learning was highlighted as a tool that fosters individual autonomy: "Each pupil has a role within the team, and positive interdependence means they have to be responsible for their group tasks [...], showing initiative" (Teacher 3).

Finally, some teachers pointed out the role of routines in facilitating autonomy, as they provide a sense of security and structure to the session: "Following the same routines [...] also promotes autonomy, because they know how the session is organised" (Teacher 4).

Competence support

The participating teachers unanimously stated that they regard fostering students' perception of competence as essential in PE lessons, "as [...] it encourages participation and motivation towards Physical Education sessions" (Teacher 1).

To support this perception, they explained that they adapt their teaching proposals to the characteristics of their groups, ensuring that activities are both accessible and suf-

ficiently challenging: "I propose and select activities appropriate to their level" (Teacher 2). This adaptation occurs both in advance and during the session itself: "They are activities in which everyone can take part. Still, sometimes you realise things aren't going as expected. If that's the case, I change it on the spot" (Teacher 5).

A widely mentioned strategy was varying the content to offer multiple opportunities for success: "I try to promote it by varying the types of content we work on (some will be competent in terms of physical abilities, others in coordination, and others in expressive skills)" (Teacher 1). Some teachers added that this variety also helps maintain motivation in their own teaching practice: "I try to vary the activities [...] because that helps me keep their interest [...] and I also feel I'm not just repeating without moving forward" (Teacher 4).

The use of feedback was identified as another key strategy: "I give them positive feedback so they can see that everyone is capable, each within their own abilities" (Teacher 2). This reinforcement is generally provided continuously throughout the session: "I try to give positive reinforcement constantly, encouraging them when they make small personal gains, staying very present at all times. It also helps me realise how the session is going" (Teacher 4).

With regard to assessment, the teachers explained that they use formative and developmental approaches to help pupils visualise their progress and recognise their achievements: "It's important for pupils to see and become aware of their progress (in whatever they improve on)" (Teacher 3). Another teacher added: "I support pupils in their learning and acquisition of content through formative and mindful assessment" (Teacher 1). Although mentioned less frequently, grading was also identified as a factor that may enhance perceived competence: "I also believe that grades are a motivational tool and contribute to a sense of competence" (Teacher 1).

Creating a climate of trust was another key aspect highlighted. Teachers encourage pupils to believe in their abilities and to persevere: "I don't encourage them to do the activities perfectly; I encourage them to practise so they can achieve what they set out to do." In a similar vein, teachers emphasised the importance of allowing room for trial and error: "It generates new learning, and I encourage perseverance so that they see that if they keep trying, they will eventually succeed" (Teacher 2).

Relatedness support

The participating teachers agreed on the importance of creating a positive classroom climate and fostering positive social relationships among pupils in PE lessons: "It's essential. Without a good classroom atmosphere, teaching Physical Education becomes much more complicated, as pupils are not sitting at desks in a controlled environment" (Teacher 5).

One of the most frequently mentioned strategies was the formation of varied and heterogeneous groups: "I'm convinced that the real value lies in diversity [...]. They develop empathy, patience, and tolerance, and reinforce their learning by helping their peers" (Teacher 3). This approach to grouping enables "everyone to contribute to their group" and helps pupils "to learn to respect and support each other" (Teacher 4). However, some teachers noted that the type of grouping often depends on the nature of the activity or the session's objective: "In large groups, I opt for heterogeneity, whereas in competitive situations, it's better if they are homogeneous, as this increases the challenge for those who are more skilled and the participation of those who are less

experienced" (Teacher 1). This flexible approach to group organisation is also linked to an inclusive perspective: "In cases of exclusion or Specific Educational Support Needs, I do try to pair them with someone they get along with" (Teacher 1).

Teachers also reported dedicating time and attention to nurturing a positive classroom atmosphere: "It's the key to effective teaching: everything runs more smoothly, time is used more efficiently, motivation is higher, and if problems arise, they're easier to solve" (Teacher 3). Key elements identified in building this environment included "group cohesion, restorative practices, and the bond developed with pupils" (Teacher 3).

The emotional bond between teacher and pupils was another frequently emphasised aspect. Beyond their role as content transmitters, teachers see themselves as supportive, approachable figures whom pupils can rely on and feel listened to by. This bond is developed through everyday gestures such as "being kind and listening to pupils" (Teacher 1), "making jokes, being available whenever they need me" (Teacher 2), or "showing interest in what they tell you, remembering it, and referring back to it later" (Teacher 3).

Peaceful conflict resolution was also commonly mentioned: "Conflict resolution [...] helps support social relationships" (Teacher 3). Teachers regularly implement restorative practices that promote autonomy and peer dialogue: "I send them to what we call the 'tree of harmony'. If it takes too long, I ask if they need a mediator" (Teacher 3). In more serious cases, the teacher facilitates reflection using restorative questions such as: "What happened? How did you feel? What can you do to fix it?" (Teacher 3).

Finally, all teachers reported designing specific learning situations aimed at fostering social relationships, particularly at the start of the school year, through "sociomotor and paradoxical games [...] designed to help them learn to play with any classmate" (Teacher 1). These games were also said to "improve group cohesion" (Teacher 3). Some also integrated cooperative learning into various activities: "In the final term, we work on expressive movement in cooperative teams to create a final choreography" (Teacher 4).

Discussion

The aim of this study was to analyse primary school PE teachers' perceptions regarding the support they provide for their pupils' BPNs (autonomy, competence, and relatedness). The findings support the initial hypothesis, as the participating teachers reported fostering these needs through a range of pedagogical strategies. Beyond identifying such practices, the results offer a deeper insight into how teachers experience and interpret this process, which is marked by tensions, dilemmas, and personal meanings that shape their professional identity from a situated perspective (Villalpano et al., 2020).

With regard to autonomy, the analysis reveals a nuanced picture. Teachers claimed to intentionally promote this need in their lessons, aligning with findings from Cheon et al. (2020) and qualitative studies centred on pupils' perspectives (White et al., 2021). However, a closer examination of actual teaching practices highlights notable contradictions between pedagogical discourse and day-to-day classroom decisions.

A commonly employed strategy among the participating teachers was the use of open-ended activities, which can foster pupils' sense of agency when appropriately

designed (Schaefer et al., 2024). Pupils were also offered opportunities to choose specific games, organise equipment, or assume certain roles. While some teachers described instances where pupils were allowed to decide on key aspects of the session, most agreed that such choices were generally limited to peripheral elements, resulting in a partial or symbolic form of autonomy. These findings echo those of Aelterman et al. (2016), who caution that although teachers value autonomy, they often hesitate to relinquish real control over core curricular elements for fear of compromising order or efficiency. Therefore, autonomy support should not be reduced to superficial choices. As Kleinkorres et al. (2023) argue, promoting meaningful autonomy requires a fundamental rethinking of the normative and methodological frameworks underpinning teaching practice. This transformation entails not only revisiting teaching methods and content, but also questioning the institutional and school structures that frequently restrict pupils' genuine participation.

From a more optimistic perspective, the data also revealed experiences pointing towards greater autonomy. Some teachers described situations in which pupils made decisions and assumed responsibilities, such as forming their own groups, designing activities, or modifying the rules of a game. These practices represent a gradual delegation of autonomy rooted in a logic of shared responsibility. They also contribute to the development of transversal skills such as leadership and self-regulation, in line with the competence-based approach promoted by European educational policy (Council of the European Union, 2018). This logic of shared responsibility was further reflected in other practices identified in the interviews, such as formative and learner-centred assessment, which equips pupils with tools to understand their own learning process, make informed decisions, and regulate their own performance. Beyond its instrumental function, this type of assessment enhances pupils' sense of control, supports self-determined motivation, and fosters a more horizontal teacher-pupil relationship (Pérez-Pueyo et al., 2024). However, its implementation remains constrained by bureaucratic workload, time limitations, and a lack of specific training, all of which may dilute its transformative potential.

Another strategy identified in the findings was the attention to pupils' interests and preferences. This approach enables teachers to better contextualise their lessons and establish more meaningful connections with pupils, thereby supporting both autonomy and relatedness (Patall et al., 2008). In this regard, the integration of personal interests should not be used sporadically but rather considered an effective tool for adapting teaching without compromising its pedagogical purpose. The use of routines was also highlighted as a strategy for structuring lessons and fostering more autonomous pupil engagement. In the context of PE, which is characterised by open spaces and constant interaction, the predictability offered by routines helps reduce uncertainty and enables pupils to navigate activities with greater independence. Reeve and Tseng (2011) support this view, emphasising the importance of combining structure with autonomy support.

Cooperative learning was also mentioned by several teachers as a strategy that links the development of autonomy with the strengthening of peer relationships, through role assignment, positive interdependence, and group reflection (Gómez-Rijo et al., 2023). This form of interdependent autonomy, framed within a dialogical interpretation of SDT (Deci & Ryan, 2017), enables pupils to assume responsibility in collaborative contexts. It also enhances their self-management skills and social competence.

With regard to competence support, the results indicate that this need is more consistently addressed in teachers' everyday practice than autonomy. It therefore appears

to be more embedded within the professional culture of the subject. This stronger presence may be partly explained by the motor and observable nature of PE itself, which facilitates the identification of tangible progress for both pupils and teachers. In line with this, reviews by Vasconcellos et al. (2020) and White et al. (2021) highlight the particularly strong influence of PE teachers on pupils' perceived competence. This influence tends to be even greater than their impact on the fulfilment of other BPNs.

One of the most representative practices identified in the interviews was the adaptation of activity levels, both in advance and during the lesson, in order to adjust the degree of challenge to the group's diversity. Striking a balance between accessibility and challenge is essential for pupils to perceive their efforts as meaningful. This aligns with the principles of SDT (Deci & Ryan, 2017). However, achieving this balance requires in-depth pedagogical knowledge of both content and learners, which highlights the importance of teacher expertise and the need for ongoing professional development (Ambon et al., 2024).

Teachers also emphasised the value of offering varied content, enabling each pupil to find opportunities for success in areas aligned with their strengths. Such diversification increases the likelihood that more pupils will feel competent. It also contributes to moving away from traditional performance-based models and promotes a more inclusive and holistic approach to PE (Etkin, 2024).

Both feedback and formative assessment were valued by the participating teachers as strategic tools that help pupils recognise their progress, understand their difficulties, and improve their performance. Although these practices are not yet fully systematised, they strengthen self-efficacy and reduce reliance on external grading (Pérez-Pueyo et al., 2024). However, the findings also revealed a persistent tension between the use of assessment for formative purposes and the administrative demands related to outcomes and grading. Some teachers expressed scepticism about involving pupils in these processes, arguing that they may still lack the maturity to evaluate their own progress. Others, in contrast, suggested that grading could enhance pupils' sense of competence. This range of perspectives reflects the coexistence of divergent assessment frameworks. Such coexistence can often hinder the development of autonomous motivation in pupils (Ryan & Deci, 2017).

Finally, another key pillar underpinning pupils' sense of competence, according to the participants, is the construction of a climate of trust in which mistakes are viewed as an inherent part of the learning process. This perspective, strongly embedded in the teachers' discourse, aligns with the principles of a growth mindset, as it promotes perseverance in the face of failure and a willingness to embrace new challenges (Vestad & Bru, 2023). For such experiences to occur, it is essential to establish an emotionally safe environment in which pupils feel recognised and validated (Moè & Katz, 2022).

In relation to support for social relationships, the findings indicate that teachers place central importance on fostering positive peer interactions and creating an emotionally supportive and safe atmosphere in PE lessons. These results are consistent with the systematic review conducted by White et al. (2021). Similarly, Sparks et al. (2017) note that interventions focused on interpersonally involving teaching practices can significantly enhance pupils' perceived relatedness support, increasing both their enjoyment and the quality of their experiences in PE.

One of the most prominent practices identified to support this need is the strategic formation of heterogeneous groups, aimed at promoting inclusion, cooperation, and respect for diversity. This approach, aligned with a relational view of learning, contrib-

utes to the development of social and emotional skills such as empathy, tolerance, and mutual support (Johnson & Johnson, 2014). However, the findings reveal differing views on who should organise the groups. While some teachers prefer to take on this responsibility to ensure inclusion or balance ability levels, others occasionally delegate this task to pupils as a way to foster autonomy. This variability underscores the importance of adapting group organisation not only to the specific context but also to the educational objectives and the characteristics of the group.

In a similar vein, the creation of a positive classroom climate is regarded as essential for the effective development of PE lessons. The teachers' narratives show that their actions go beyond the mere avoidance of conflict. They intentionally work on fostering cohesion, coexistence, and a sense of belonging, actively promoting an emotionally secure environment that facilitates pupil engagement in the learning process. In line with this approach, conflict management strategies such as peer mediation, dialogue spaces, and restorative questioning have become key pedagogical tools. In contrast to traditional disciplinary models, teachers described interventions based on dialogue and shared reflection, which reinforce pupils' emotional self-regulation and contribute to building a more just and empathetic classroom culture (López-González et al., 2021).

The emotional bond between teachers and pupils also emerges as a fundamental aspect. The interviewees emphasised the importance of being approachable, empathetic, and consistent, building relationships grounded in active listening, trust, and emotional support. This pedagogical approach, which transcends the traditional role of content delivery, positively influences both pupil wellbeing and the development of a more humane and committed professional identity (Castañeda-Vázquez et al., 2020). Moreover, the findings show that teachers deliberately design specific learning situations to foster social relationships, particularly at the beginning of the school year or during sensitive periods for the group. These activities are conceived as valuable contexts in which to practise respectful interaction, mutual acceptance, and collaborative work. As Hickey and Riddle (2022) caution, relational competence should not be viewed as a spontaneous by-product of coexistence. Rather, it should be understood as a pedagogical construct that requires intentionality, time, and careful planning.

While these strategies are both valuable and insightful, they must be considered in light of the limitations inherent in the research design employed. One of the main limitations of the study concerns the use of a small, purposive sample, which prevents the generalisation of the findings. Similarly, the exclusive reliance on individual semi-structured interviews, although it allowed for an in-depth and nuanced exploration of teachers' perceptions, limited the possibility of triangulating these views with other data collection methods, such as direct observation or focus groups. These limitations do not undermine the validity of the findings but call for their interpretation within a comprehensive and situated framework, which remains open to future research developments.

In this regard, future studies could benefit from a mixed-methods approach that combines qualitative and quantitative techniques. The qualitative component could be strengthened by incorporating focus group interviews and observational analysis of classroom practices. This would allow for a deeper exploration of the interactional dynamics and the meanings that teachers attribute to their pedagogical actions. The quantitative component, meanwhile, could involve the use of validated scales to compare teachers' perspectives with pupils' perceptions, thus enriching the understanding of the alignment between intended and experienced practice. Furthermore,

broadening the sample to include greater diversity in teaching trajectories and educational contexts would provide a more comprehensive picture of how BPNs are supported in PE.

Conclusions

This study has provided a deeper insight into how primary school PE teachers perceive and experience the support they offer for their pupils' BPNs. The findings indicate that the participating teachers believe they foster these needs in their day-to-day practice, drawing on a wide repertoire of strategies that are adapted thoughtfully and contextually to each need, albeit with varying degrees of implementation. These results highlight teachers' capacity to integrate motivational dimensions into their everyday professional routines, influenced by factors such as teaching experience, prior training, knowledge of their pupils, and the organisational culture of the school.

However, the analysis also reveals significant tensions between the pedagogical discourse articulated by teachers and certain decisions made in practice. The findings suggest that support for BPNs, particularly autonomy and relatedness, is in a state of transition. Although teachers express a clear intention to promote these needs, such intentions often give rise to practices that remain at a surface level. While the strategies identified reflect progress, they also point to constraints linked to organisational logics, entrenched beliefs, methodological traditions, and hierarchical structures within schools.

From an applied perspective, the findings offer several practical recommendations. First, it is essential to promote both initial and ongoing teacher training focused on the design of learning experiences that nurture autonomy, competence, and relatedness. Second, it is crucial to create collaborative spaces for reflection, where teachers can examine their beliefs, practices, and tensions, and work collectively to develop new forms of pedagogical intervention. Finally, school leadership teams can play a pivotal role by fostering more flexible organisational structures and supporting forms of distributed pedagogical leadership.

This research is particularly relevant in that it offers a qualitative perspective focused on teachers' perceptions, an approach that has received limited attention in existing literature. Its contributions may be of value to in-service teachers, teacher educators, school leadership teams, and policymakers, as it provides concrete insights into how pupil motivation can be enhanced through the support of their BPNs. Listening to teachers' voices contributes to the development of a more coherent, inclusive, and motivating PE, one that is aligned with a holistic vision of learning.

Conflict of interests

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

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