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“Don’t Forget the Whistle”: Novice Physical Education Teachers’ Reflections on Their Beliefs, Teaching Practices, and Identities

Muhammad Hamid Anwar , Herka Maya Jatmika and Caly Setiawan 

Department of Physical Education, Universitas Negeri Yogyakarta, Colombo St. #1, Yogyakarta 55281, Indonesia; herka_mayajatmika@uny.ac.id (H.M.J.); csetiawan@uny.ac.id (C.S.)

* Correspondence: m_hamid@uny.ac.id

Abstract: The purpose of the current study was to investigate novice PE teachers’ reflections regarding beliefs and how they played out in teaching practices and identity formation within the settings of their profession. We recruited 31 PE teachers in their early careers to participate in this study. Data were collected through their written accounts of their reflection and in-depth interviews. Analysis of the collected data followed the procedures of thematic analysis through which reflexivity had been emphasized during the analysis process. The results showed three constructed themes. These were teachers’ reflections on their beliefs, PE teaching practices, and PE teachers’ professional identities. We conclude that PE teachers’ reflections on belief systems, as well as the purpose of the subject, have, in one way or another, shaped practices and professional identities. Teachers take up contemporary discourse regarding education, which is not fully aligned with available professional development programs that effectively improve the practices. Teachers form, maintain, and negotiate their professional identities in relation to their beliefs and their actual practices.

Keywords: physical education; teachers’ reflection; teachers’ beliefs; teaching practices; professional identities



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1. Introduction

The educational endeavour is relational in nature, involving a complex web of political interests, power, and ideologies. As teaching is located at the heart of this endeavour, it cannot merely be considered instrumental, being evaluated heavily on its effectiveness. It has been argued that the works of teachers are also governed by normativity, ethics, and affection (van Manen, 1995). This is especially obvious when considering the increasing aspiration to situate children at the centre of today’s pedagogical works. At this point, reflection has become a fundamental component of teaching practices.

Teaching practice in physical education (PE) is no exception. The relational nature of the subject matter may even be more intense, multifaceted, and complicated. In fact, PE teachers encounter realities that could hinder the transformation toward more children-centred PE. Examples of these realities have been richly illustrated by Ward et al. (2021), showing that teachers in the U.S. deal with challenges regarding this subject, such as the marginalized status of the subject and problems with accountability. Other scholars demonstrated various social justice issues resulting from pedagogies of the body that operate to promote particular ideologies, norms, and values (Azzarito, 2016; Johnson et al., 2013; Joy & Larsson, 2019). The professional learning literature shows that teachers dealing with the complexity of their practice might be hindered from envisioning possibilities

outside traditional practices (Warr & Mishra, 2023). Epistemologically speaking (van Manen, 1995; Schön, 1987), reflective practice potentially produces practical knowledge that could not only help teachers conceive novel possibilities but also provide them with unique feedback from the complexity they are dealing with. Consequently, the need for PE teachers' reflections to address the multi-dimensional nature of their practices becomes vastly crucial. The literature has confirmed that there is a need to thoroughly design teacher preparation programs geared toward the development of reflective skills (Azevedo et al., 2022). During the in-service period, the body of research on professional development has highlighted teachers' reflections as central to the programs (Blair & Capel, 2011; Gonçalves et al., 2022; Hemphill et al., 2015; Peralta et al., 2021).

Hence, research on the methods of reflection generally neglected the multi-dimensionality of practices and focused solely on the technical aspects of teaching (e.g., Lee & Choi, 2013). A few exceptions include the works of Azevedo et al. (2023a, 2023b), Peralta et al. (2021), and Uhrich (2009). Some other scholars have offered methods and reflective frameworks intended to help pre-service teachers reflect on various aspects of their practices. One such example is the Reflective Framework for Teaching Physical Education, which is designed to walk teachers through reflection on the technical, situational, and sensitizing aspects of teaching with three different levels of depth for each aspect (Crawford et al., 2011; Tsangaridou & O'Sullivan, 1994). Despite the available framework, a review of studies has demonstrated that socially critical reflection was mostly absent from the prospective teachers, even from those enrolled in well-reputed programs (Standal & Moe, 2013).

Teachers' reflections have also been elaborated on, covering areas of investigation such as stages within teaching careers and PE practices from different geographical regions. Østerlie and Kristensen (2023) investigated students' reflections on the nature of the subject prior to enrolling in the Physical Education Teacher Education Program (PETE) at a Norwegian university. At the outset, the subjective warrant (Lawson, 1983) of these students within their reflections included the policy documents and physical literacy discourses, such as physical activity learning, motivation, and enjoyment. Another study by Tsangaridou and Polemitou (2015) explored dimensions of teachers' reflections among pre-service classroom teachers in Cyprus. Much of the participants' reflections addressed a range of issues regarding teachers' knowledge as well as social (in)justice in teaching PE. Similarly, Olson et al. (2021) worked with Health and Physical Education (HPE) specialists within their pre-service program to investigate aspects reflected against the backdrop of changes to the purpose and scope of HPE in Australian schools. The researchers demonstrated that content knowledge acquired during teacher preparation programs was deemed to be salient in response to those changes. In Germany, Greve et al. (2021) were concerned about PE pre-service teachers' reflections on their internship that tended to neglect Instructional Support. While this support was considered to be important, the participants took much more of their past experiences and advice from supervising teachers into account during their practicum. The setting of the current study was in Indonesia, one of the developing countries in which the subject faces marginalization and limited resources. This focus is particularly relevant since the reflection process would become a valuable means for navigating these challenges.

The process of conceptualizing reflection has endured prolonged debates among scholars. One of the earliest conceptualizations of reflection includes Dewey's work proposing reflection as a cognitive process through which one actively, persistently, and thoughtfully contemplates the underpinning belief and presumed knowledge of their action (Dewey, 1993). The conceptualization that emphasizes the thinking process was typical during the early theoretical development of reflection before other scholars criticized it for "its overreliance on rationalism and adherence to technical rationality" (Hébert, 2015, p. 383). Other

classic theorists offered a more experiential–intuitive approach to reflection (e.g., Bengtsson, 2016; Schön, 1987; van Manen, 1995). Schön analysed that practitioners' reflection consists of reflection-on-action and reflection-in-action (Schön, 1987). While the first type of reflection is literally about observing and evaluating actions, reflection-in-action can also become possible practical knowledge that is intuitively produced while doing something.

In more recent theoretical development, there appears to be more inclusive conceptualizations accommodating various aspects of reflection (e.g., Marshall, 2019; Nguyen et al., 2014). Nguyen et al. (2014) analysed existing definitions of reflection resulting in five components, concluding with a definition of reflection as “the process of engaging the self in attentive, critical, exploratory and iterative interactions with one's thoughts and actions, and their understanding conceptual frame, with a view on the change itself” (p. 1182). The first component focuses on the content of reflection including thoughts (e.g., beliefs, knowledge, ideas) and actions (e.g., experience, action, practice). The second component describes the process of reflection requiring one to be attentive, critical, exploratory, and iterative. Third, this interactive process should direct one into the depths of reflection, addressing the underlying conceptual frame beneath thoughts and actions. The authors argued that reflection is a purposeful activity that will lead to changes in some aspects of practice. The last component is the self that defines all four components as reflective when relating to the self.

The current study attempted to inclusively accommodate this recent conceptualization without neglecting earlier developments. As we positioned our study within an interpretive paradigm, these conceptualizations served as a guiding framework that shaped the overall research process. In particular, the components of thoughts and actions have helped us locate areas to be reflected upon (e.g., beliefs, identities, and teaching practices). This component of the process also informed us how to facilitate sessions of reflection with the participants. Together, both the inclusion of reflection concepts and the researchers' position would make this study innovative in the way that it offers novel insights into how beliefs, teaching practices, and professional identities dynamically interact and evolve.

In other words, we addressed a critical gap in the literature concerning multidimensional practices of reflection among novice PE teachers. Given the fact that contemporary educational terrain focusses more on a student-centred, constructivist approach to learning, it is crucial to examine how these teachers reconciled their beliefs with actual practices. Such information is relevant for today's endeavour in developing effective programs for teacher education and professional development. The purpose of the study was to investigate novice PE teachers' reflection regarding beliefs and how they played out in teaching practices and identity formation within the settings of their professionalism. The following three research questions were developed to illuminate the research process:

- How do novice PE teachers' beliefs about the purpose of PE influence their teaching practices?
- What are the key teaching methods and approaches used by novice PE teachers, and how do these align with their stated beliefs?
- How do participants reflect on and navigate the formation of their professional identities within their teaching context?

2. Materials and Methods

The current study adopted a qualitative research design within the interpretive paradigm in which our work was often concerned with understanding the world as it is from the subjective experience of the teachers. Such a design allowed for an in-depth exploration of how novice PE teachers' beliefs, practices, and professional identities are interconnected and evolve within their teaching context. A clear temporal framework

also provided guidance to the study, despite minor adjustments being made following the dynamics in the research process. The data were collected over a three-week period through iterative written reflections and in-depth interviews. The structured timeline facilitated continuous engagement, with thematic analysis applied to uncover patterns and insights. The following sub-headings detail the process of the study.

2.1. Participants and Research Setting

Participants of the study were PE teachers at the early stages of their careers. These participants were attending a teacher certification program at the time of the study. There were 23 male teachers and 8 female teachers. The mean age of the participants was 26.5 years, with a standard deviation of 1.9 years, indicating a relatively small variability in the age distribution. Their teaching experience had spanned less than 5 years (Henry et al., 2012) with a moderate degree of variability (mean: 3.4 years; standard deviation: 1.1 years). They were employed across 15 public schools and 16 private schools, reflecting a balanced representation of teaching environments. More specifically, the school contexts were also diverse, ranging from low-performing public schools to elite private schools. A portion of the participants taught at various educational levels, with 14 teaching at the elementary level, 7 at the middle school level, and 10 at the high school level.

All participants held an undergraduate degree in Education. Half of them had no prior experience with continuing professional development (CPD) programs specifically tailored to enhancing pedagogical practices. At the time of the study, they were enrolled in a certification program offered by a large urban university in Java, Indonesia. The second author facilitated the program and gained access to the participants through the course he taught. Informed consent was sought prior to collecting any information from the participants. All names and identities of the participants were protected, and they were given pseudonyms.

2.2. Data Collection

We conducted a series of sessions involving participants writing reflections on their beliefs about the purpose of PE and who they were as PE teachers. This comprised three weekly meetings held during the participants' first semester of their certification program. The session was facilitated by the second author, who served as both their course instructor and as a Ph.D. student specializing in PE pedagogy. The writing process was iterative, involving a dynamic interplay between small-group oral reflections and individual written reflections, fostering continuous engagement and deeper insights. They were also asked to reflect on their teaching practices in terms of dimensions in the Reflective Framework for Teaching Physical Education (RFTPE) including the technical, situational, and sensitizing dimensions of reflection (Tsangaridou & O'Sullivan, 1994). More specifically, participants reflected on their class instructions and management (technical); the contexts in which their teaching took place (situational); and morals, ethics, and ideologies entailed in their practice (sensitizing) (See Appendix A). A total of 149 pages of their reflections were collected in a PDF format.

Additionally, in-depth interviews were conducted to further reflect on other components of reflection (Nguyen et al., 2014) through which participants were asked three overarching reflective questions about their visions of teaching and their own teaching practices and the identification of challenges (see Appendix B). The first and third authors conducted individual interviews with 10 participants (2 females, 8 males) which were guided by an interview protocol. Both interviewers held doctorate degrees in PE and sport pedagogy with associate and full professorship, respectively. Criteria for recruiting participants included their teaching experience, which had to be at least 2 years, and the

numbers of professional development activities they partook in, in which they were the most frequent participators. By having these criteria, it would allow rich information to be provided from the interviews. Gender variation was also considered during recruitment. All interviews (513 min) were digitally recorded and verbatim transcribed for further analysis. A protocol for data collection had been approved by the ethical committee of Universitas Negeri Yogyakarta with reference number T/44/UN34.9/KP.06.07/2023.

2.3. Data Analysis

Analysis of the collected data followed the procedures of thematic analysis proposed by Braun and Clarke (2006) through which reflexivity had been emphasized during the analysis process (Braun & Clarke, 2019; Clarke & Braun, 2018). The first stage of the analysis included familiarization with the data by reading and rereading the written reflections and interview transcripts. Next, we coded meaning units within the data to develop a coding system. Much of the coding process was inductive, where we attempted to code segments of the data as closely as possible to what had empirically been stated by the participants. In the third stage of the analysis, we worked with a list of codes and categorized codes being considered under the larger family codes. In other words, these categorizations produced potential themes. The fourth stage involved reviewing potential themes by examining inter-relations among the data entities such as potential themes, categories, codes, and data segments. A solid thematic map had been developed at the end of this stage. The last stage was to name the constructed themes and write the results of the analysis. The whole process of analysis was assisted by software for qualitative analysis called ATLAS.ti 23.

2.4. Trustworthiness Criteria

Ensuring the quality and credibility of the study was achieved through ensuring the quality of recording and transcription. We made sure that all the interviews were conducted in undisturbed indoor locations and recorded with high-quality recording devices. Despite the use of an automatic online transcription, we double-checked the transcription alongside the recorded interviews for accuracy. Other strategies included triangulation between two types of data which we implemented by checking codes that served to label similar meanings across types of data. Criteria for dependability and confirmability were established by maintaining an audit trail and memos to document all analysis steps and decisions.

3. Results

The analysis showed three overarching themes about the contents of the teachers' reflection including their beliefs, teaching practices, and professional identities. The analysis attempted to understand how these beliefs might facilitate teachers in shaping their teaching practices and identities within the context of their profession. PE policies, programs, and practices around the globe vary in terms of the subject status, content, delivery, and assessment. Given the fact that PE has long been a compulsory subject in Indonesia at all K-12 educational levels, the analysis led to a conclusive theme in which the teachers' beliefs strongly included PE as an integral part of a larger educational endeavour. However, the PE programs and practices of the teachers in this study did not seem to fully align with the national curriculum's standardized outcomes and contents. Together with the teachers' beliefs, dynamic and intersecting identities might interactively shape their practices. The following sub-headings describe the constructed themes concerning these interlinked entities.

3.1. Reflecting Beliefs: The Essence of a Subject

Participants happened to have reflected the truth of PE as a subject. Analysis revealed areas of their reflection that substantially related to their beliefs. Some participants explicitly mentioned their beliefs about teaching being grounded in the notion that moving one's body is essential in human beings. Movement is not only the starting point of life but also a sign that someone is alive. In an interview, for example, Mr. Sudarsono reflectively stated the following:

What we do in PE is about the beginning of life. For me, while we are still alive, the philosophy of movement is essential. So, living human beings have to move—it's what signifies that you're alive. So, PE is about movement and we indirectly teach students about life. Human movement has, uhm, many different things. Like, about, about what? About the bodies, about the mental states, right? About the habits in our society and so on. There are many things that make people move. That's why the future of PE should look at people's situation—right now they are reluctant to move. This is bad.

Mr. Sudarsono indicated the current trend that contemporary human beings are less physically active than those from the old days. He emphasized that this might become apparent in the near future in which many more children would become inactive. Here, he made a philosophical point that the purpose of PE is basically to help young people engage in the very nature of being human, which is to move.

Other teachers' reflections included the consideration that PE is an integral part of education. Participants believed that the subject is part of a larger effort to educate the nation's younger generations. More specifically, they tended to look at PE as a vehicle to improve the overall quality of life. For example, Mr. Andy made the following written reflection: "My teaching philosophy is that physical education is seen as part of the educational process that takes advantage of physical activity to produce change in one's quality of living whether it is physically, mentally, or emotionally". Furthermore, it could be interpreted from the data that participants tended to articulate this point of view in order to counteract popular opinions about PE as an insignificant subject matter. Through their reflections, these teachers advanced PE from being academically irrelevant to promising improvement in children's quality of life.

Many participants' reflections were also expressed through defining the purpose of the subject matter. It can be inferred from the data that teachers in this study seemed to agree about the purpose of PE, but two different emphases existed. These emphases included education through physically fostering the holistic personal/social development and education regarding physically building the skills and knowledge necessary for proficient and confident physical activity.

The first emphasis focused on education through the physical. The analysis showed how teachers articulated the purpose of PE as essential education for children. An example was the following written account of a teacher's reflection by Mr. Andy:

The main purpose of physical education is the whole development of the child through physical activity. It is not only to develop their physical aspects, but it is also to develop their mental, social, emotional, intellectual, and overall health and well-being. Physical education as a subject is taught in school at all levels, from elementary to high school levels. This compulsory subject has distinct features in contrast to other subjects, such as math, physics, history, or other subjects that place emphasis on the cognitive domain.

Mr. Andy and some other teachers claimed that PE was a unique subject that could potentially offer educational value beyond physicality. More specifically, it was apparent in

the data that what went beyond physicality was more about character building through teaching positive attitudes. Mr. Danny stated, "In my opinion, PE is not only about fitness or muscle. I want my kids to learn values from PE that they could apply in their daily lives and to have a positive attitude, like cooperation, honesty, empathy, sportsmanship, and respect for others".

The second emphasis included the notion that the purpose of PE was simply just physical education. Some other teachers argued that PE could have several dimensions to its purpose. However, the fundamental purpose of the subject was to help students learn motor skills. For example, Mr. Anung stated the following:

The main purpose of PE learning, for me, is to facilitate children practicing motor skills. PE is more about the psychomotor aspects instead of the cognitive and affective ones. Yeah, it's because we do more motor skills and physical skills. You know, though, all aspects should be assessed.

The beliefs about the subject matter, encompassed as education both *through* and *of* the physical, appeared consistent between male and female teachers participating in this study. These two dimensions of purpose were also evident among all participants, regardless of the educational level they taught.

3.2. Considering Teaching Practices

Another aspect of teachers' reflections included participants' teaching practices. The analysis revealed different tones between the beliefs and the actual practices of teaching PE. While the majority of the participants believed the purpose of PE was to teach the whole child, comprising multiple learning domains and aspects, the reflection of their practices represented a narrowed focus on motor learning and skill development. The data predominantly showed that sport skills were the primary content that participants of both sexes delivered to their students across all educational levels.

Mr. Greats provided an example of the typical content he usually teaches: "When teaching the basic skills of soccer, I demonstrate how to pass a ball by using the inside of my foot. After they have gotten it, I will then give them time to practice the skill. They will keep on repeating it as I give them feedback". In addition to the predominantly psychomotor contents, participants of the current study also tended to support pedagogical methods falling under a direct teaching approach. More specifically, the most favourable method was teacher demonstration. In PE, this means that the teacher would demonstrate particular skills to be imitated by the students. This could be done by the teachers themselves if they were competent enough or by being mediated with electronic media. An example was described by Ms. Alvie in her reflective writing, as follows:

My reason to use the demonstration method is because the students will learn what they are supposed to learn and then practice it. With this method, the students do certain movement tasks. Then, after being observed, we discuss. For example, in a volleyball unit, students learn the contents by watching videos of the teacher's demonstration. Then, they will try out some basic techniques that they learn from the video or demonstration. When learning becomes difficult, I will discuss it with them to figure out the ways to practice the skills correctly. I find that this method is useful and applicable because it helps students to interact with the contents before being actually practiced.

In addition, some participants also advocated other direct teaching methods, such as lecturing, the command style of teaching, and practicing. They typically employed a lecturing method when reviewing past content the students had previously learned and informing them of new tasks that they were about to perform. Furthermore, the teachers

in this study explicitly directed student learning by commanding students on what to do regarding the contents. This was especially apparent for those teaching elementary school students with class management issues. Mr. Eddie mentioned, “The role became central in my teaching. I use the command style very often. I think it’s relevant, effective, and efficient concerning little children who need straightforward guidance and frequent instructions”. In order for skill acquisition and development to happen, practicing these skills became a pedagogical choice that major participants adopted in their teaching.

Despite it being a minor theme within the collected data, there existed information about participants who advocated teaching methods that allow students to take control over their own learning. For example, Mr. Dammon reflected on how he applied a scientific approach to learning and cooperative learning. He described his pedagogy in his written reflection as follows:

The teaching model I use is the scientific approach. This is a student-centered learning approach in order to help students learn to formulate a problem. The learning process is expected to allow them to be critical and analytic, so they are able to observe, ask questions, collect information, analyse it, and finally communicate their findings.

In some cases, this approach was combined with cooperative learning through which teachers asked their students to work in smaller groups to do research activities. These teachers considered that the use of cooperative learning would enable them to teach PE in a way that addresses domains other than psychomotor. Mr. Danny articulated the benefits of cooperative learning: “With the cooperative approach to learning, students learn how to work together as a team, to communicate thoughts and ideas, to be empathetic, to help each other, and to be sociable. Additionally, students will learn to become critical thinkers”. The development of these qualities through physical activity expands PE learning to include both affective and cognitive aspects.

3.3. The Self: Multiple Identities Within the Professional Context

Analysis of the data revealed that the teachers’ reflections focused on their professional identity, including their self-image as role models for their students as well as friends to the students. Participants perceived that becoming a role model would situate themselves in a position of potentially being emulated by their students. This ranged from subtle aspects of their persona to their physical appearance. A more subtle identity as a role model was transmitted through displaying self-confidence and self-image. They reflected that by maintaining this soft identity, it would positively impact student learning, in particular their motivation and enthusiasm for learning. Ms. Diane wrote the following in her reflection journal:

To me, the most important thing is self-confidence and self-image. That’s like sharing energy with the students so they get interested in the learning content. Based on what I have been practicing, it was when we feel lazy, the students will notice it. And it also makes them unenthusiastic to do the activity.

In addition to subtle identity, explicit identity was reflected by how they exhibited their physical appearance. The reflections from all the teachers in this study seemed to agree that they had to look sporty in order to be modelled as sportsmen or sportswomen. For example, Mr. Vincent said, “in each teaching session, I always pay attention to my appearance. When on the field, I always dress up, sportswear, like common PE teachers, like sport apparels, polo shirt, watches, running shoes, and don’t forget the whistle, I think it’s the most important attribute”. In this example, Mr. Vincent gave an additional trait as a sportsman who took up the leadership role indicated by his whistle. In major sport settings,

whistles are mainly the apparatus used by the coach. This role necessitates a significant leadership quality. When it comes to sport, the whistle belongs to the judge/referee whose job includes closely watching the game and rule enforcement.

In some cases, teachers in this study were also assumed to play an important role in watching their students' behaviours and enforcing rules. PE teachers were often presumed to bear a teacher-as-police identity. When unruly behaviour proceeded to happen, it was the PE teacher's job to take care of it. This was especially true among male participants. Those who taught at the elementary level would be informally assigned to ensure the students' safety, health, and well-being. In high schools, the participants assumed the authority to enforce rules and regulations as well as to prevent disorder within the school community. Mr. Sudarsono described his teacher-as-police identity by saying what he had to do: "Take care of kids having behaviour issues, like fighting, misbehaving. Some kids bring knives, alcohol to the school, you know, something like that. That's our job to take care of them".

Although the participants might become the enemy of students with serious behaviour issues, they otherwise defined themselves as friends of the students. They all acted in any way possible to get to know their students. It was prominent in the data that they reflected on how they would try to get acquainted with new students who joined their class. For example, Mr. Handy mentioned, "My main action prior to teaching is to observe and detail children's characteristics so I can be their friend or buddy". The identity as friends of the students would enable them to form friendly relationships that take place in settings that are rarely found in other school subjects. This identity, along with its significance, would allow them to deliver moral education in unique and authentic ways. Mr. Sudarsono continued to share the following:

Yeah, though there are teachers for specific subjects like religion teachers, civic education, you know, about religion and morals. But students feel more open with PE teachers. Because we're on the field all the time. And our interaction is more fun, friendly, fluid—like that. So, sometimes they consult with us whenever they're in trouble.

At this point, the PE teachers' reflections on their selves revealed multiple identities and, in some cases, these identities were in contrast to one other. While policing students' misbehaviours, they defined themselves as friends of the students.

4. Discussion

This study was aimed at exploring how novice PE teachers reflect on their beliefs and how they these beliefs are manifested in their teaching practices and in the formation of their professional identities. Three research questions were formulated, including (1) in what ways do novice PE teachers' beliefs shape their teaching practices? (2) What are their pedagogical practices and how do they align with their expressed beliefs? (3) How do they reflect on and manage the process of forming their professional identities within their teaching environment?

The three constructed themes might not explicitly manifest in the inter-relations of the participants' reflections. Participants' reflections on their beliefs, for example, tended to favour teaching PE in a way that addresses the whole child, covering multiple dimensions of human beings. This appears ambitious if actually implemented in their teaching practices. In fact, their practices mostly represented sport-based contents with mostly direct teaching methods. This narrow focus on skill acquisition and development might cost them the opportunity for teaching other domains in the whole-child approach (Kreider, 2018). These parts of their reflections about their beliefs and practices are seemingly incompatible. However, it could be interpreted that larger discourses exist concerning educational claims

about the benefits of PE (Bailey et al., 2009) that might influence their beliefs. The literature has suggested that teachers have been surrounded by educational discourses with discrepancies when compared with actual teaching practices (Janemalm et al., 2020).

When discourses are so prevalent and effective in the formation of teachers' beliefs, the lack of actual attainment in real practices might also result from the absence of professional development programs suitable for PE teachers. This is especially true for novice teachers within the context of Indonesia. School leaderships tended to prioritise experienced teachers to attend professional development programs. Certainly, professional development programs have existed in Indonesia, but rarely are such programs specifically tailored for PE teachers (Ward et al., 2021). While there is still a lack of supportive evidence that student learning is significantly affected by teachers' engagement in continuous professional development (Parker et al., 2022), ineffective programs for PE teachers have created an apparent discrepancy between teachers' beliefs about their professional values and the operationalization of those values in actual teaching practices.

Researchers have long paid attention to the practices of teaching PE utilizing sport-based activities. For example, Ferry and McCoughy found that many physical educators share deep personal connections to sports, which greatly shape their curriculum choices. This emotional attachment can be compared to a "love affair", as teachers often prioritize sports based on their own experiences and passions. In other words, these sport-based practices might be inter-related to the participants' identities alongside their beliefs (Ferry & McCaughy, 2013). Another factor is teachers' professional socialization, which significantly influences their adoption of sport-based practices (Vasquez & Wallhead, 2023). This could potentially lead to a tendency to prioritize competitive elements over student-centred approaches.

Pedagogically speaking, a teacher's beliefs about education might help that teacher decide the implementation of direct instruction. While current educational discourses encourage a more student-centred approach to learning, it may demand a change in the beliefs of teachers toward a more change-oriented disposition (Kern et al., 2023). Studies have also shown that professional identities, as they relate to teaching practices, are shaped by experiences in initial teacher education (Amaral-da-Cunha et al., 2020; Amorim & Ribeiro-Silva, 2024). PETE programs would need to consider the fact that the experiences they provide to their students should account for the fact that PE practices, which ensure student engagement, may also be influenced by teachers' identities.

Furthermore, the analysis shows that teachers' reflections on the self have revealed that identity is interlinked between multiple entities within the participants' identities themselves and as they were situated in institutional, social, and cultural contexts. The personal identity being identified from defining oneself according to unique qualities (Burke & Stets, 2009; Deschamps & Devos, 1998) was demonstrated from the construction of the self in terms of being a role model for their students. In particular, the participants focused on self-definitions of being energetic and dressing up sporty. This analysis aligned with notable information in the literature that PE teachers developed their identity in and around their physicality and body (González-Calvo et al., 2019; Virta et al., 2019).

The teachers' identities were also fluid and ever-changing. In some cases, they were inconsistent. For example, cultural expectations of PE teachers to have masculine traits helped facilitate participants to develop teacher-as-police identities. In contrast, they also established themselves as presenting feminine tones by being friends with their students. This supports identity theory, which posits that identity is flexible, momentary, and socially constructed (Parker et al., 2022).

Although analysis of the participants' reflections revealed the indirect connection between beliefs and teaching practices, the teachers' beliefs about the essence and purpose

of the school subject were obviously linked to identity. This might be because many of their beliefs were influenced by discourses, while the systems in which their practices were carried out were not always well suited. This indicates the social and cultural complexity and contextual nature of identity formation that may play out in their belief systems. In fact, [Barker et al. \(2021\)](#) have shown that PE teachers adopted larger discourses (i.e., obesity discourse) as discursive resources in forming their professional identities.

The implications of the study are potentially invaluable to teacher education and professional development programs. Despite the participants' reflections suggesting the alignment of their beliefs with modern education which emphasizes holistic student development, their actual teaching practices appear to be inconsistent. In other words, their practices tend to narrow down into skill acquisition and motor learning. This apparent gap accentuates the demands for PETE programs and CPD facilitators to better integrate reflective practices that connect beliefs and actionable pedagogies. Additionally, as the analysis places dual emphasis on education through and of the physical, PE curriculum development may consider Arnoldian perspectives. These include education in, through, and about movement that promises approaches that foster socio-emotional, cognitive, and physical development in a more unified ways ([Brown, 2013](#); [SueSee et al., 2023](#)).

5. Conclusions

Reflection about beliefs within day-to-day practices seem to be common among practitioners, including PE teachers. Important ingredients for PE teachers' beliefs include the purpose of the school subject. While these beliefs might illuminate practices, this is not always the case. In the current study, teachers considered their action to take up contemporary discourse regarding education which is not fully aligned with professional development programs available to effectively improve the practices. As a result, teachers do not look to actually do what they believe about PE and they assume that to be the purpose of the subject.

The endeavour to analyse the interconnectivity between the three constructed themes also provides new knowledge and understanding. The teachers' reflections provide insights into the formations, maintenance, and negotiations of their professional identities in relation to their beliefs and their actual practices. This aligns with the conception of identity as being dynamic, transitional, and highly contextual. In addition, a theoretical framework is critical in a study concerning teacher's reflection. A more comprehensive approach in defining reflections has helped the design of the study, ranging from how reflections are facilitated to how data analysis is illuminated.

Despite promising a novel understanding, this study focused exclusively on novice teachers. This may potentially limit the transferability of the results to other educational and cultural contexts. Future research could involve teachers at various stages of their careers in order to enhance the transferability of these research problems. Additionally, the current study may also be limited by the methods of data collection being heavily reliant on self-reporting through written reflections and interviews. Other researchers could employ other ways of collecting data in order to conceal bias and to gain clearer insights into their practices and identities. Finally, follow-up studies using qualitative approaches will contribute to the body of knowledge through unique insights of human experiences.

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Appendix A

Instructions for Writing Teacher Reflections:

- Write your opinion on the main goals of physical education. Why are these the main goals compared to others? Provide your personal argument.
- Write your philosophy of teaching physical education. Explain why this philosophy is essential in guiding your teaching.
- Write your reflections in 9 paragraphs following the columns in the matrix below. This matrix is a Reflective Framework in Teaching Physical Education (RFTPE) developed by [Tsangaridou and O’Sullivan \(1994\)](#). There is no requirement for paragraph length. However, the longer the paragraphs, the more opportunity you have for in-depth reflection.

	Technical	Situational	Sensitive
<i>Level I: Description</i>	Paragraph 1: Reflect on instructional or classroom management aspects by writing descriptive information about your actions.	Paragraph 4: Reflect on your teaching context by writing descriptive information about your actions.	Paragraph 7: Reflect on the social, moral, ethical, and political aspects of your teaching by writing descriptive information about your actions.
<i>Level II: Justification</i>	Paragraph 2: Reflect on instructional or classroom management aspects by writing the logic/rationale behind your actions.	Paragraph 5: Reflect on your teaching context by writing the logic/rationale behind your actions.	Paragraph 8: Reflect on the social, moral, ethical, and political aspects of your teaching by writing the logic/rationale behind your actions.
<i>Level III: Critique</i>	Paragraph 3: Reflect on instructional or classroom management aspects by writing an evaluation of your actions.	Paragraph 6: Reflect on your teaching context by writing an evaluation of your actions.	Paragraph 9: Reflect on the social, moral, ethical, and political aspects of your teaching by writing an evaluation of your actions.

Appendix B

Interview Protocol

Reflecting on Teaching in Physical Education

Introduction

Thank you for joining this interview. Today, we will explore your visions of teaching, your teaching practices, and the challenges you face in your role as a physical education teacher. The goal is to deepen our understanding of the reflective components that shape your professional development.

[Explain about the nature of the research here and seek for informed consent]. Thank you for signing the consent form.

Interview Questions (Open-ended)

Now, I would like to begin with the first question.

1. What inspired you to pursue teaching, particularly in physical education?
2. Can you walk me through a typical class you teach? What are the key elements you focus on?
3. What are the biggest challenges you face in your role as a physical education teacher?
4. Looking back, how do you think your approach to teaching has evolved over time?

Examples of Probing Questions:

- What have been some pivotal moments in your teaching career that led to significant reflection or change?
- How do you currently evaluate the success of your teaching?
- What areas of your teaching practice do you feel need improvement? How do you plan to address these?

Concluding Reflections

1. What advice would you give to someone starting their career in teaching physical education?
2. I have asked all my questions to you. Are there any more questions I should ask you? But didn't? What are they? What are your answers?

Thank you for your participation.

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