

PEDAGOGY

How to Promote Positive Youth Development in Physical Education? The Experiences of a Physical Educator and Students Through the Delivery of Project SCORE!

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Abstract

Confidence, character, competence, and connection (i.e., the 4 Cs) have been acknowledged as desired characteristics of positive youth development (PYD)-based programs. Based on the 4 Cs framework, an online tool called Project SCORE! has been designed to help coaches, parents, or other stakeholders facilitate PYD through a specific set of strategies, objectives, and activities. However, research on PYD-focused teacher education programs, specifically using Project SCORE!, is still scarce. This case study analyzed the influence of a PYD-focused intervention based on Project SCORE! on a physical education (PE) teacher's PYD behaviors and the PYD behaviors of his students. The participants were a PE teacher with extensive teaching and coaching experience and seven students involved in the teacher's PE class. Data were collected through

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semistructured interviews, nonparticipant observations, reflexive journaling, and focus group interviews. Findings show how the PE teacher was able to transition from an unintentional approach toward PYD to an intentional one that resulted in more PYD outcomes reported by his students after the PYD-focused intervention. In addition, his coaching experience gave him a unique outlook on how to develop a PYD mandate in PE. Future research should focus on implementing Project SCORE! in a broad array of contexts and understand how parents may be involved in this online platform.

Positive youth development (PYD) is a strength-based approach that has been widely used within physical education (PE) and sport settings to help youth flourish and attain positive developmental outcomes such as confidence, respect for others, and leadership skills (Damon, 2004; Lerner et al., 2014). For an operational definition of PYD, two main components must be considered. First, PYD-based programs should integrate an empowering and caring climate that should be structured to facilitate PYD outcomes through a coherent set of objectives, activities, and strategies (Fraser-Thomas, Côté, & Deakin, 2005; Holt, 2016). Second, these programs should also define specific PYD-related skills and outcomes that should be targeted throughout PYD-based interventions (Hemphill, 2014). Several outcomes, more specifically confidence, character, competence, and connection (titled the 4 Cs), have been acknowledged as desired characteristics of PYD-based programs (Côté, Turnnidge, & Evans, 2015; Geldhof et al., 2014; Vierimaa, Erickson, Côté, & Gilbert, 2012). According to Lerner, Almerigi, Theokas, and Lerner (2005), competence relates to having a positive view of one's own actions in a broad range of areas (e.g., social, cognitive), confidence is associated to a sense of self-worth, character represents respect for others and for cultural rules and roles, and connection has been linked to positive relationships with others. These 4 Cs should be viewed as paramount in the assessment of PYD interventions and may provide a more comprehensive understanding of the effectiveness of a program (MacDonald & McIsaac, 2016).

Research (Holt et al., 2017) has acknowledged the need to further reflect on how PYD-based programs should be structured and opportunities for PYD maximized. Most effective intervention programs (Blanco, Delgado-Noguera, & Escartí-Carbonell, 2013)

have used an intentional approach toward PYD outcomes and explicitly developed efforts to attain these type of outcomes. Although this approach may be considered more time consuming and demanding for PE teachers, it has proven to be useful (Chinkov & Holt, 2015; Turnnidge, Côté, & Hancock, 2014). Holt et al. (2017), despite recognizing that an unintentional approach might be conducive to PYD outcomes, mentioned that an intentional approach could enable more PYD outcomes than a PYD climate alone. On this notion, two questions need to be raised: How may PE teachers increase youth's opportunities to attain PYD outcomes? How may PE teachers learn to implement an intentional approach? Research in the field of PYD is still attempting to provide explanations for these questions and add insight that might shed light on how to improve teachers' interventions toward PYD (Coakley, 2016; Holt, 2016). It has been argued that it is important “. . . to realize that personal assets such as confidence, connection, and character should be included as part of the sport experience of youth rather than being offered as a separate component of the sport program” (Strachan, MacDonald, & Côté, 2016, p. 114). To fulfill these premises, teacher education has been acknowledged as a valuable context to help PE teachers learn to foster PYD. However, research on PYD-focused teacher education programs is still scarce.

Based on previous notions, teacher education programs should provide opportunities for teachers to learn to intentionally facilitate PYD outcomes (Newton, Poon, Nunes, & Stone, 2013; Woods & Conderman, 2006). However, there is still the need for further analysis of how teacher education programs promote an increase in PYD behaviors. Research (Camiré, Rocchi, & Kendellen, 2017; Woods & Conderman, 2006) has demonstrated that teacher education initiatives may influence PE teachers' ability to develop a sound PYD philosophy and coherent strategies. In fact, teachers should be exposed to different sources of knowledge acquisition such as teacher education programs, online tools, or books (Wilson, Bloom, & Harvey, 2010; Winchester, Culver, & Camiré, 2013). Informal and formal learning opportunities might provide the foundation for hybrid approaches to PYD-focused teacher education programs based on teachers' preferred sources of knowledge acquisition (Curtner-Smith, 1999). Such hybrid approaches are still scarce within this line of inquiry.

With this in mind, online tools could be used to expose PE teachers to PYD material combined with other formal and informal sources. Project SCORE! (Strachan et al. 2016) has been used as an online tool designed to help coaches autonomously promote PYD. Project SCORE! differs from typical online PYD-focused education programs in that it is not delivered by a course facilitator and relies on a self-directed use of the strategies and activities included in this online platform. This online platform includes sample activities (i.e., SCORE plays), strategies, and objectives based on the 4 Cs framework. Such tools may enable PE teachers to devote more time to these types of programs, as information is easily accessible. Although studies have tried to develop intervention programs targeting PE teachers, there is the need for a longitudinal analysis of the effect of PYD-focused teacher education programs tailored to fit teachers' skills and experiences to help them foster PYD behaviors (Newton et al., 2013). In fact, little research has used a multiple-methods approach that encompasses observational data combined with self-report data to monitor behavioral change throughout a PYD-focused intervention (Erickson & Côté, 2016; Falcão, Bloom, & Gilbert, 2012; Maleté & Feltz, 2000). This type of PYD-focused intervention has been mostly conducted with youth sport coaches rather than PE teachers, and this should be addressed by researchers (MacDonald, Côté, & Deakin, 2010; Vella, Crowe, & Oades, 2013).

This study used a qualitative approach to assess a teacher's and students' PYD behaviors throughout a PYD-focused intervention based on Project SCORE! that combined informal and formal learning opportunities. It used a phenomenological case study design (Yin, 2011) to understand the real-life experiences lived by a teacher learning to facilitate PYD in a PE setting. Researchers have commented that

Case studies offer a mechanism through which practitioners can have a voice and contribute to knowledge transfer so that research and practice can become better linked, and those working in sport and exercise psychology field can better understand various realities and critical issues requiring solutions. (Keegan, Schinke, Chirban, Durand-Bush, & Cotterill, 2017, p. 88)

Therefore, this case study analyzed the effect of a PYD-focused intervention based on Project SCORE! on the behaviors of a PE teacher and his students.

Method

Participants

The teacher-coach involved in the study was 41 years old and had been teaching PE for 17 years and coaching for approximately 10 years. While the study was being conducted, the participant was teaching a ninth-grade class and coaching the swimming team at a public school located in the north of Portugal. For a larger sense of the context, the school housed more than 600 students ranging from 11 to 18 years of age and employed 15 teachers. The PE teacher had a master's degree in sport for children and youth and was teaching approximately 20 students between 15 and 16 years old. Seven students (i.e., four males and three females) involved in this participant's class were also included in this study. These students were involved in one 45-min PE session and one 90-min PE session per week.

Procedure

Ethical approval was attained through the first author's research center as a part of a larger project that aimed to implement Project SCORE! in the Portuguese context. This study also received approval by the school board of the school where this research took place. Thus, a formal letter was sent to the school's dean, who presented the study to the school board, and then permission to conduct the study was given. The PE teacher was also debriefed about the objectives and data collection protocol of the study, and an informed consent was attained. This participant was used as a key informant to select seven students who could be included in the study. The parents of the students were then contacted and an informed consent attained. All the participants accepted to participate in this study. The Project SCORE! workshops, focus group interviews, and semistructured interviews were scheduled at a mutually convenient time and place.

PYD Intervention Plan and Delivery

A 4-hr workshop (see Table 1 for a detailed description of the PYD-focused intervention) focused on Project SCORE! was delivered

Table 1*Structure of the PYD-Focused Intervention*

Session	Contents
1	<ul style="list-style-type: none">• Defining PYD• 4 Cs framework• Project SCORE! and recommended strategies
2	<ul style="list-style-type: none">• Implementing recommended SCORE activities (i.e., 1 per C)<ul style="list-style-type: none">• Character• Confidence• Competence• Connections
3–10	<ul style="list-style-type: none">• Debrief of Session 1 and 2 contents• Designing a PYD-based program for PE• Setting PYD objectives• Using recommended SCORE activities• Defining PYD strategies
10–15	<ul style="list-style-type: none">• Debrief of outcomes, challenges, and future PYD objectives• Analysis of support needed to better implement Project SCORE!
15–20	<ul style="list-style-type: none">• Debrief of outcomes, challenges, and future PYD objectives• Assessing the PYD-based program• Analysis of support needed to continue implementing the program• Final considerations

in May 2017 and included a 2-hr online component and a 2-hr practical component. The workshop was conducted in both English (i.e., online component) and Portuguese (i.e., in-person component), as the PE teacher was fluent in both languages. The workshops were delivered by the first and second authors; the second author was an expert on PYD and on this online tool (Strachan et al., 2016). The first component focused on (a) the conceptual approach to PYD, (b) the 4 Cs as desired outcomes of PYD-based programs, and (c) strategies to develop the 4 Cs in PE. The course facilitators provided insight on how the principles behind Project SCORE! could be

used to fit PE. They used a reflexive approach (Boutet, Vandette, & Valiquette-Tessier, 2017) to engage the participants in reflexive writing and enable discussions and joint reflections with the research team. Further, they provided several Project SCORE! handouts and other didactic materials to stimulate reflection between sessions. In the first component of the workshop, an open discussion about how the contents would fit the participant's coaching and teaching philosophy and practices was promoted. The main aim was to align his approach to teaching with a PYD mandate. In the second component of the workshop, the first author assisted the participant during a PE session and developed collaborative work to create a lesson plan and a set of objectives coherent with the 4 Cs. As the PE session unfolded, the PE teacher regularly presented situational problems based on his lived experiences and asked for advice. As such, this PYD-focused intervention also involved regular in-person and online meetings ($n = 20$) that took place at least once a week for on average 35 min. These meetings served the purpose of discussion of changes in philosophy, challenges experienced throughout PE lessons, and possible PYD strategies that could be used to increase program quality. In case of divergent perspectives, the participant's perspective prevailed. This type of situation occurred occasionally and represented context-specific decisions.

Semistructured Interviews

Two semistructured interviews were conducted with the PE teacher. Both interview guides were tested through pilot interviews that resulted in no major changes. Before the PYD-focused intervention, an initial semistructured interview was conducted about the participant's teaching philosophy (e.g., How would you define your teaching and coaching philosophy?), teaching practice (e.g., What importance do you give to confidence in your class?), the main challenges experienced while facilitating PYD (e.g., How do you find PYD challenging?), perspectives on online tools that may help facilitate PYD (e.g., Would you consider using an online tool to help you foster PYD outcomes?). This interview lasted 50 min. At the postintervention stage, a second semistructured interview was conducted about the effect of the PYD-focused intervention on the participant's teaching philosophy (e.g., Did you change your teaching philosophy throughout the workshop?), teaching practice (e.g., What changed

in terms of the importance you give to confidence in your class?), challenges experienced throughout the intervention (e.g., Did you find it challenging to apply what you have learned?), and overall ability to facilitate PYD. This interview lasted 66 min.

Focus Group Interviews

Two focus group interviews were conducted with seven students of their perceptions throughout the PYD-focused intervention. Guided by Sparkes and Smith (2016), the focus group interviews were conducted with more than six participants who were selected based on their gender and attendance rate in PE classes (i.e., students who had attended more than 95% of classes conducted throughout the intervention). Both focus group interviews involved a stimulated recall technique (Lyle, 2003) whereby video segments from the participants' classes were selected to prompt discussion (i.e., videos of critical PYD behaviors). On this notion, critical PYD events were used to prompt students on their experiences developing one of 4 Cs, strategies used by their teacher, and challenges faced to attain PYD outcomes. The initial focus group interview focused on students' developmental experiences in PE classes (e.g., How would you describe your experience in PE classes?) and perspectives on their teacher's profile (e.g., What life lessons have you learned with your teacher?). The last section included the stimulated recall component. This focus group interview lasted 40 min. The second focus group interview focused on students' perceived changes in their developmental experiences (e.g., Did your experience in PE classes change?) and the teacher's intervention (e.g., How would you describe your teacher's intervention toward confidence now?). Similarly, the last section also consisted of a stimulated recall component. This focus group interview lasted 45 min.

Reflexive Journaling and Nonparticipant Observations

The teacher involved in the PYD-focused intervention used a reflexive journal to report his experiences prior, during, and after the PYD-focused intervention. He also included didactic material (e.g., lesson plans, curricular programs, Project SCORE! handouts) that helped shape his teaching practice. The first author also registered entries on the reflexive journal and commented on specific issues and/or themes raised by the participant (e.g., the participant

asked advice while planning certain PYD strategies). The reflexive journal included several questions to facilitate reflection (e.g., What did you work on today? What were the main challenges that you faced? How did Project SCORE! help you?). Nonparticipant observations were used in the analysis of the PYD behaviors of the participant and his students over time. Several direct observations of PE classes were conducted before ($n = 3$), during ($n = 4$), and after ($n = 3$) the PYD-focused intervention with field notes taken of PYD behaviors, descriptions of the participant's teaching practice, and students' PYD outcomes. All PE sessions were audio and video recorded.

Data Analysis

All the materials were transcribed and analyzed on multiple occasions, which enabled the first author to become familiar with the data set. Data derived from the nonparticipant observations and field notes, alongside the PE teacher's data (i.e., through semistructured interviews and reflexive journaling) and his students' perceptions (i.e., through focus group interviews), provided a rich portrait of the effect of Project SCORE! on their PYD behaviors. A thematic content analysis was used (Silverman, 2000) and several analytical decisions made. First, raw data derived from the semistructured interviews, focus group interviews, reflexive journal, and field notes were inserted into NVivo 11 and coded into subthemes that were then grouped into themes. These themes and subthemes were constantly reviewed as three themes (e.g., before the PYD-focused intervention, during the PYD-focused intervention, after the PYD-focused intervention), and 11 subthemes (e.g., teaching philosophy) emerged and were deemed representative of the data set. These themes were clustered in a hierarchical manner that represented both the teacher's and students' experiences in this PYD-focused teacher education program. An inductive analysis coherent with the nature of this case study generated theory within the data (e.g., recommendations for future Project SCORE! interventions) and added to the literature base.

Qualitative Rigor

To increase the quality of the research, several procedures were used: transparency, internal coherency, and external coherency (Smith & McGannon, 2017; Sparkes & Smith, 2009). A rela-

tivist approach (Smith & McGannon, 2017) that acknowledges the need of selecting a specific set of procedures aligned with the nature of a study was used in this case. In the present study, transparency was obtained by reporting all the decisions made throughout this research and procedures utilized (e.g., detailed description of the PYD-focused intervention and interview guides). In addition, internal and external coherency were attained. Several meetings took place with the coauthors to review the interview guides and discuss the data analysis. The second and third authors served as external consultants (i.e., critical friends) that provided insight and alternative explanations to the coding process and helped to write the manuscript. Several online meetings took place with the second author, who served as an external consultant, to discuss all the decisions made in this research. Finally, the quotes deemed representative of the data set that were included in the findings were translated to English with the help of the third author, as all the interviews and focus groups were conducted in Portuguese.

Results

The results derived from data analysis fall into three main themes: (a) before the PYD-focused intervention, (b) during the PYD-focused intervention, and (c) after the PYD-focused intervention. This section explores each theme and describes the participant's teaching philosophy, PYD outcomes, PYD strategies, challenges experienced while facilitating PYD, and recommendations for future interventions. A pseudonym was given to the PE teacher (i.e., Nuno) and his students to present their stories.

Before the PYD-Focused Intervention

Teaching philosophy. Prior to the Project SCORE! intervention, Nuno alluded to the fact that PYD was a piece of his teaching and coaching philosophy. However, PYD was more explicitly embedded in his coaching philosophy: "I had a lot of positive influences as a coach. I was motivated to consider youth's development as an holistic approach that encompasses technical, tactical, physical, and psychological outcomes. PYD has been a big part of my coaching approach" (Interview 1). Moving forward, Nuno started to focus on a PYD mandate through PE and changed his teaching philosophy from teacher centered to youth centered:

When I started to pay attention to how teaching styles influenced students, I took some of my coaching principles to PE classes. Previously I was very autocratic and did not share decisions with students. Nowadays, I share decisions with them and I feel students have fun and feel comfortable to speak with me. (Interview 1)

On this notion, Nuno also added,

I shaped by teaching philosophy through coaching, reflection, and practice. We have more kids now that are completely alone in life than a few years back. I had to create this idea in PE of ‘you do not need to be the best athlete in the world, but you have to be a good person’” (Interview 1).

Nevertheless, Nuno presented a narrow vision of PYD and considered PYD a by-product of an unintentional approach to teaching PE: “When I hear you speaking about PYD, I think it is to provide them with more tools for their lives. I’m concerned about this, but this has always been something that just happens” (Interview 1).

PYD outcomes and strategies. A set of PYD outcomes coherent with the 4 Cs framework was facilitated through PE. Confidence was prioritized throughout all the PE sessions at preintervention: “Taking advantage of the contents associated to gymnastics, today I tried to develop students’ confidence in each motor task. I also let two students plan the warm-up” (Reflexive Journal, Lesson 1). Nuno also added in his initial interview, “I try to help them overcome challenges with confidence when they do not believe in themselves and focus on every accomplishment.” Few PYD strategies were used to foster confidence, as positive feedback was the main strategy implemented: “I try to help them work on confidence and tell them ‘you are capable!’ I always try to give them a positive feedback, from little things to more complex skills” (Interview 1). Additionally, Nuno presented a narrow understanding of confidence: “Confidence is to challenge them to become better. I usually tell them ‘if you work, you can attain results’” (Interview 1). These applications were observed in PE classes and Nuno did not set clear expectations regarding confidence and occasionally provided opportunities for students to have choices and voices: “In today’s session, Nuno focused on reinforcing positive attitudes and behaviors saying ‘well done! You can do it!’

However, there were no PYD objectives set at the beginning of the session and few opportunities for students to have choices” (Field Notes, Lesson 3).

Throughout the initial interview, nonparticipant observations, and reflexive journaling, it was clear that Nuno also prioritized character, specifically respect for others: “Respect is a big thing with me. Sometimes high skilled students do not respect others that struggle. I try to provide activities in which everyone can succeed and respect each other” (Interview 1).

In his reflections, Nuno added, “I gave them freedom . . . some students took this opportunity to be off task and/or [show] challenging behaviors. Other students fulfilled the tasks given” (Lesson 2). These applications were confirmed through the observations. However, Nuno used a deficit-based approach to solve challenging behaviors presented by students: “Nuno focused on rules, but does not set clear expectations for students and/or PYD objectives. Rules are created and remembered as students show challenging behaviors” (Field Notes, Lesson 2). Regarding competence, Nuno focused on students’ needs and attempted to provide developmentally appropriate learning situations: “I try to create groups that implicitly foster teamwork and inclusiveness. This is something I have been doing more recently. I mix high skilled students with less skilled ones so everyone can succeed” (Interview 1). These applications were corroborated by nonparticipant observations.

Challenges and recommendations. During preintervention, Nuno used an unintentional approach toward PYD: “I use common sense. I do not use an intentionally designed plan. I just decide on the spot what should be developed and how” and “I would like to become capable of promote behaviors instead of eliminating them. This is my concern and huge challenge now” (Interview 1). The lesson plans included in his reflexive journal showed an intentional focus on PYD. Additionally, Nuno reported struggling to foster connections among students: “The biggest challenge I have is to promote connections. They are more and more connected with cell phones, but less and less with people” (Interview 1). Throughout preintervention, This application was confirmed through observations: “Nuno is having a hard time managing this activity as students’ are all speaking at the same time and negotiation is providing to be a difficult endeavor”

(Field Notes, Lesson 2). On this notion, Nuno mentioned the need to use an intentional approach toward PYD moving forward and recognized that an online tool could prove useful:

I need a plan to foster PYD. If I do this, the probability of not doing something critical for my students' decreases. I do not use any program and/or tool, but I'm open to it. I would be very open to an online tool that makes it easier to learn how to foster PYD systematically. (Interview 1)

During the PYD-Focused Intervention

Teaching philosophy. Nuno in one of his reflections recognized his teaching philosophy changed throughout the PYD-focused intervention: “All the knowledge I had about SCORE strategies helped me to predict some of my actions and above all act in a impactful and meaningful way towards students” (Reflexive Journal, Lesson 6) and “This was the first time I had the chance to prepare the contents I was exposed to in the SCORE workshop. My intervention was designed to stress the need for these values [4Cs]” (Reflexive Journal, Lesson 5). Although Nuno started to prioritize an intentional approach toward PYD, some components of his current teaching philosophy still needed to be refined: “There is an autonomy climate, although there is still the need to further foster PYD. . . .[helping] students through questioning and supporting [them]” (Field Notes, Lesson 7).

PYD outcomes and strategies. At this stage, there was a focus on confidence. Nuno provided students with choices and voices more consistently than before the PYD-focused intervention. In his reflexive journal, Nuno stated,

Students were supposed to work autonomously based on my proposals [documents I gave them], on the opinions of the members of the group and techniques I had worked with them . . . Today, at the end I focused on all the aspects I had [developed in] class. (Lesson 4)

During the first focus group interview, students were prompted to comment on this situation, and Maria mentioned, “I felt better when I had the chance to choose. Before, that did not happen so often. It

is more fun like this as professor Nuno is more open to us and our thoughts and feelings.” These applications were confirmed through observations: “Nuno is assigning roles and tasks for a set of students. This happened in the warm-up, during the activities and at the end of the session. It is an autonomous-based climate that generates fun and enjoyment” (Field Notes, Lesson 4). During the PYD-focused intervention, Nuno also focused on character by taking advantage of teachable moments and promoting awareness about desired behaviors and PYD objectives:

In today’s PE class, there was a physical altercation between students. I spoke with them about the need to respect others for everyone to feel welcome in class. At the end of the session, I reflected with students about their behaviors today and about what needs to improve moving forward in and outside PE. (Field Notes, Lesson 6)

During the first focus group interview, Antonio mentioned, “We have become better at respecting rules and apologizing. We feel professor Nuno helps us and gives us support to improve our behaviors. Before, we just did not paid attention.” These applications were confirmed through observations. Regarding connections, in one of his reflections, Nuno attempted to focus on some of the SCORE plays provided in the PYD-focused intervention:

My involvement in Project SCORE allowed me to carefully prepare the lesson and be more concrete in my intervention . . . [I focused on] Connections and had students working in pairs in order to take full advantage of [the value of] having them work together. (Reflexive Journal, Lesson 7)

During the first initial focus group, two students added, “I feel more connected to everyone here. Before they were all fighting and had more problems” (João) and “I feel we work better with others than before. Before they just started a fight for no reason” (Joana). These applications were confirmed through observations: “Students are engaging with each other in a fun climate as the need to work with each other and Nuno’s guidance helps them have positive relationships in PE” (Field Notes, Lesson 6).

Challenges and recommendations. Throughout the PYD-focused intervention, Nuno identified a few challenges. First, Nuno mentioned the need to have more time to integrate PYD objectives with the remaining curricular objectives: “Considering there was an evaluation moment coming soon and students’ age and characteristics, this lesson enabled me to partially develop an autonomy [climate]” (Field Notes, Lesson 5). Second, Nuno indicated the need to spend more time planning PE sessions and creating materials than in his other teaching duties: “I’m pressured by the fact the end of the school year is getting close and because evaluation moments are coming soon . . .” (Reflexive Journal, Lesson 6).

After the PYD-Focused Intervention

Teaching philosophy. After the PYD-focused intervention, Nuno viewed PYD as a broad, intentional, and asset-based approach: “PYD implies you to have a perspective that students can learn character, respect, and so on. It is an intentionally designed approach and not just something occasional” (Interview 2). Nuno also added, “My students felt special with my teaching approach. I had less skilled athletes come out of their shell and flourish” (Interview 2). In his reflexive journal, Nuno acknowledged that an intentional approach may generate more PYD outcomes: “Project SCORE! enabled me to integrate each of the 4Cs while I was planning and reflecting on tasks for students, and facilitated my intervention in this domain” (Lesson 8).

PYD outcomes and strategies. Throughout the PYD-focused intervention, Nuno used the same strategies and recommended SCORE plays implemented during the intervention phase to foster the 4Cs: “Similarly to the last sessions, Nuno provided moments for decision-making . . . [and] there was an autonomy-based climate despite the focus on evaluation-related tasks” (Field Notes, Lesson 8). In the second focus group interview, two students mentioned, “We have gotten more chances to work on the skills we have discussed and I have improved because of that” (André) and “I have been able to work alone and become more responsible without constant supervision from professor Nuno. As I been able to work on this regularly” (João). These applications were confirmed through the observations.

Challenges and recommendations. Several challenges were recognized at postintervention. Developing a PYD mandate was con-

sidered time consuming and demanding for any PE teacher: “It was complicated to manage time, travelling back home for more than two hours, attending the workshops, and being a parent. It is hard!” (Interview 2). However, Nuno gave the utmost importance to the Project SCORE! workshops and the reflections with the research team to becoming a better PYD-focused PE teacher: “This was great and what I was looking for. I was anxious to learn more and that was what happened” (Interview 2). On the other hand, Nuno struggled to implement the parents’ piece in Project SCORE! as few parents showed any interest: “Only two [parents] wanted to know more and tried to understand how things [SCORE implementation] were going, just two. For the others . . . it was not important, it was just more information” (Interview 2). Finally, a ‘reflexive area’ could be incorporated in Project SCORE!: “One suggestion that would be important is to include an area where students could log in and create a diary between teachers, students and parents” (Interview 2).

Discussion

The purpose of this case study was to analyze the influence of a PYD-focused intervention based on Project SCORE! on a PE teacher’s and his students’ PYD behaviors. This study provides insight on how a PYD-focused teacher education based on Project SCORE! may enhance a PE teacher’s ability to foster PYD and students’ outcomes. Hence, teacher education has proved to be an important context that might influence teachers’ behaviors and increase students’ positive outcomes (Pill, Penney, & Swabey, 2012; Woods & Conderman, 2006). Several studies (e.g., Curtner-Smith, 1999; Escartí, Gutiérrez, Pascual, & Wright, 2013) have attempted to understand the effect of teacher education on PE teachers and have paid attention to how PYD-focused teacher education programs could be designed and delivered to increase the outcomes and experiences within PE settings. As such, the present study corroborates the idea that if PYD is to become a tangible reality in PE, it is necessary to develop PYD-focused teacher education programs that encompass formal and informal learning sources that provide solid grounds for PE teachers to integrate an intentional approach toward PYD.

In this study, Nuno was motivated to foster PYD and prioritized this approach in his teaching philosophy. It was possible to understand how this PYD-focused teacher education program provided

him with a more accurate understanding of teaching for PYD outcomes. Before the PYD-focused intervention, the participant had a narrow vision of PYD that led him to implement an unintentional approach toward PYD focused on creating a PYD climate. Research has suggested the need for a clear definition of PYD within teacher education and coach education programs for the facilitation of learning and avoidance of misconceptions that might lead to an unintentional approach to PYD (e.g., Woods & Conderman, 2006). Project SCORE! may only be used to its full potential as an autonomous learning tool if PE teachers understand what it means to teach for PYD and foster the 4 Cs (Strachan et al., 2016). Otherwise, PE teachers might not be able to foster PYD. This autonomous learning tool proved useful in helping this PE teacher adapt the 4 Cs framework to his teaching practice (i.e., principles, recommended SCORE plays, and objectives). Future research could focus on understanding how a less motivated PE teacher would benefit from a similar PYD-focused teacher education program. An analysis of the challenges experienced by such a PE teacher would offer insight and add into this line of inquiry.

Project SCORE! facilitated a transition between an unintentional approach toward PYD to an intentional one that generated more students' PYD outcomes. The 4 Cs framework entails a systematic and intentional focus on particular setting features that might provide positive experiences and skills for youth to strive in school and other life domains (Geldhof et al., 2014). The PYD strategies shared with the participant were continuously implemented throughout the PYD-focused teacher education program and the 4 Cs embedded in his teaching practice. Research has supported this notion and claimed that a deliberate PYD focus might generate more PYD outcomes (Goudas, Dermitzaki, Leondari, & Danish, 2006; Hellison, 2011). Theory-driven models (Holt et al., 2017; Pierce, Gould, & Camiré, 2017) have stated that an intentional approach to PYD should guide PE teachers and coaches, which could increase youth's chances of attaining PYD outcomes. Nuno was able to bridge the gap between his teaching philosophy and practice and become more deliberate while defining PYD objectives and strategies. Additionally, Bean, Kramers, Forneris and Camiré (2018) proposed an implicit/explicit continuum of life skills development and transfer, mentioned that

PE teachers might progress from an implicit to an explicit approach, and highlighted this process should be viewed as a dynamic process. Within this approach, PE teachers could benefit more from certain learning sources (e.g., interactive workshops, Project SCORE!) at different stages of this continuum. The present study showcased how a PE teacher with a sound PYD philosophy was able to take advantage of Project SCORE! Future research could analyze which learning sources can prove useful with PE teachers who use an implicit and explicit approach to PYD.

After the PYD-focused intervention, Nuno and his students maintained the same PYD behaviors as during the intervention. However, some strategies were refined and further developed through reflection. In fact, PE teachers should be trained to become increasingly more autonomous and search for formal and informal sources of learning. Project SCORE! and the PYD-focused intervention enabled Nuno to reflect and integrate a set of PYD activities and strategies in his teaching practice instead of attempting to completely change his philosophy and practices, which would have taken more time and, in this case, could have less effective. Teacher education programs could, in certain cases, based on this PE teacher's lived experiences, reflect on developing a pedagogical approach that prioritizes reflection and values teachers' strengths and practices coherent with a PYD approach to create an environment that facilitates behavioral change. Several researchers have alluded to the need of embedding reflection within teacher education programs (e.g., Boutet et al., 2017). Hence, it is necessary to implement a pedagogical approach that focuses on reflection (Alexandrache, 2014) and considers PE teachers' views, opinions, and practices (Cunliffe, 2004). Future research could further develop PYD-focused interventions and attempt to understand the lived experiences of teachers, course facilitators, and students to understand the effect of course design and delivery on specific PYD outcomes.

Nuno recognized several strengths of and also made suggestions to improve future PYD-focused interventions centered on Project SCORE! Nuno acknowledged that the online component facilitated his participation in this intervention, despite considering the lack of time as the more prominent challenge. PE teachers, who also coach, have many demands and obligations and might not be able to have

time to devote to more traditional in-person PYD-focused interventions. However, an online component might have limitations and not provide the knowledge base needed for PE teachers to use an autonomous learning tool such as Project SCORE! More evidence-based PYD-focused teacher education programs that consider using hybrid formats that combine an online and in-person component are needed for an increase in exposure to PYD material over time (Project SCORE!, 2018). Additionally, creating the necessary conditions for PE teachers to use autonomous learning tools might be useful as it could provide solid grounds for sustainable PYD behaviors, which has been corroborated by research in the field (Coakley, 2016; Strachan et al., 2016). The reflexive approach used in this PYD-focused intervention was meaningful to Nuno, who felt the need for a “reflection area” within Project SCORE! where he could share and reflect with other experts in this field and other PE teachers. Future studies could understand how PE teachers, coaches, or other stakeholders develop reflection skills and sustainable PYD behaviors through Project SCORE! A longitudinal design that involves monitoring PE teachers’ and students’ PYD behaviors over several school years could help fulfill this premise and further understanding on the effect of Project SCORE! Finally, the parents section in Project SCORE! was explored unsuccessfully by Nuno, as parents were not motivated to use this application. Future research could understand parents’ perceptions on implementing the parents section in Project SCORE!

Although Project SCORE! has been mainly designed for youth sport coaches and parents, this case provided a novel insight on how a PE teacher with extensive coaching experience was able to adapt these guidelines to PE, specifically how it influenced his philosophy and practice and his students’ PYD behaviors. Future studies should build on this first initiative and further implement Project SCORE! in various settings such as underserved communities. Project SCORE! can empower these stakeholders (e.g., parents, PE teachers) for their own learning and reflection process and provide solid grounds for positive skill building.

Conclusion

This study focused on the unique outlook of a PE teacher and his students while adapting Project SCORE! to fit the objectives and

demands of a PE setting. PYD-focused teacher education programs could use hybrid models that include an interactive in-person component and an online component (i.e., autonomous learning tool). This study enabled an in-depth understanding about how online tools may help PE teachers who are motivated to foster PYD become more effective and generate PYD outcomes. Transitioning from an unintentional approach to an intentional approach to PYD was key, in this case, to enable a more systematic use and application of the activities and strategies included in Project SCORE! This study adds insight on how PYD may be embedded in teacher education programs and how it can be used by course facilitators.

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