Brazilian coaches’ role in facilitating positive development through university sport

El papel de los entrenadores brasileños para facilitar el desarrollo positivo a través del deporte universitario

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Abstract. In recent years, the role of coaches in fostering Positive Development (PD) has been explored within the context of university sport. However, research in non-English speaking countries such as Brazil, which is highly representative of university sport in Latin America, is still scarce. The purpose of this study was to analyze Brazilian coaches’ perceptions of their role in facilitating PD within university sport. In total, 16 university coaches from all regions of Brazil were interviewed (14 male and 2 female). Data were collected through semi-structured interviews. Findings showed that coaches perceived university sport as a conducive platform for fostering both performance and PD outcomes. However, the coaches found it difficult to articulate PD strategies and identified challenges such as lack of time and organizational support. The present study suggests that PD is not well integrated within the current model of university sport in Brazil and highlights a potential need for PD-focused coach education programs.

Keywords: life skills, positive development, university sport, coach education, emerging adulthood

Introduction

Physical education and sport are considered valuable platforms for fostering psychosocial development in various settings such as competitive and recreational sport (Holt, 2016; O'nofre, 2017; Camiré, 2015; Santos, Neves, & Parker, 2020). Positive development (PD) has been used as a framework to guide coaches and other stakeholders (e.g., parents, teachers) on how to intentionally teach athletes the life skills necessary for success in and outside sport such as leadership, emotional control, goal-setting and perseverance (Lerner et al., 2005; Pierce, Gould, & Camiré, 2017). PD is an asset-based approach that focuses on individuals’ strengths and building assets in order to minimize possible difficulties in overcoming social challenges inherent to adult life (Lerner, Almerigi, Theokas, & Lerner, 2005). These social challenges include establishing relationships with others, developing empathy and respect, and exploring one’s identity (Arnett, 2014).

A PD approach acknowledges the need for stakeholders to intentionally foster the life skills necessary for individuals to succeed in and outside sport and become socially responsible (Lerner et al., 2005). Most PD-based interventions have targeted youth, and more specifically, underserved youth (e.g., Gould, Flett, & Lauer, 2012; Holt et al., 2017; Whitley, Forneris, & Barker, 2015), with only a number of researcher examining PD later in life. For instance, in recent years, PD has been identified as a relevant approach for emerging adult athletes and Masters athletes (Dionigi,
Within this stage, individuals deal with many of the social challenges and roles associated to adult life, but are not yet fully ready to meet the demanding nature of adulthood (Arnett, 2004). According to Arnett (2000), emerging adulthood is characterized by «(...) having left the dependency of childhood and adolescence, and having not yet entered the enduring responsibilities that are normative in adulthood, emerging adults often explore a variety of possible life directions in love, work, and worldviews» (p. 469). Since emerging adulthood represents the final developmental period before entering adulthood, the personal and psychosocial skills developed during this time period are essential to individuals' ability to contribute in a meaningful way to society. Thus, emerging adulthood represents a viable time period for assessing PD, and may relate to unique developmental outcomes from youth and adolescence.

To date, the bulk of PD research in emerging adulthood has been conducted in the Canadian university setting (Deal, & Camiré, 2016; Rathwell & Young, 2016, 2017, 2018). In the Canadian system, the governing body of university sport has an explicit focus on PD, which likely facilitates coaches' ability to foster personal and psychosocial growth (Rathwell & Young, 2016). Additionally, Canadian coaches are encouraged or even required to participate in coaching certification programs which have been recognized as valuable learning opportunities that may help university sport coaches improve their ability to foster PD (Vella, Crowe, & O'Ades, 2013). It is important to note we were not able to find studies conducted in the United States, Europe and Latin America that explicitly aimed to understand how university sport facilitates PD outcomes in emerging adulthood, especially with regard to life skills development and transfer. Indeed, many studies conducted in the United States have investigated the impact of university sport on outcomes that may allow one to infer PD such as graduate employment (Griffiths, Bullough, Shibli, & Wilson, 2017) and social belonging (Miller, 2011), and have reported mixed results. Thus, it is important to gather information about coaches' perceptions about fostering PD and the challenges faced in other countries that also value university sport, but may not systematically address PD.

With regard to the PD outcomes and processes when working with emerging adult populations, researchers have typically focused on identifying a range of life skills that athletes develop (Rathwell & Young, 2016), and the role that coaches play in fostering PD and life skill outcomes (e.g., Banwell & Kerr, 2016; Rathwell & Young, 2017, 2018). For example, Rathwell and Young (2016) surveyed 1016 Canadian university athletes and found athletes developed important life skills related to initiative, teamwork, and social skills, through participation in university sport. Moreover, the student athletes fostered lasting interpersonal relationships and formed mutually beneficial connections to their communities. Regarding coaches' role in fostering PD, Banwell and Kerr (2016) found through qualitative interviews with eight university coaches that coaches valued PD. These coaches struggled to articulate how they attempted to foster life skills. Nonetheless, coaches mentioned a few strategies such as modeling and mentoring, building positive coach-athlete relationships, and by prompting athletes to reflect on live experiences.

Rathwell and Young (2018) also found coaches valued PD, and provided detail on how they purposefully created team cultures and identities that prioritized PD. Specifically, the coaches used the following strategies: (a) built a strong support network for their athletes that was composed of themselves, their support staff, and their senior athletes, (b) emphasized and reinforced acceptance, effort, accountability, and respect, (c) provided increased responsibility to their athletes, and (d) allowed them to learn from their failures. Taken together, university coaches use a range of implicit/explicit and direct/indirect strategies to foster PD in previous studies as information about the most effective strategies is still scarce.

Although the abovementioned research within Canadian contexts has shed light on a less explored sport setting (i.e., university sport) related to PD, it is important to recognize that the results may not be applicable to university sport contexts in other countries. In Brazil, the Brazilian Sports Confederation (2018) organizes competitions associated with university sport, and is the institution responsible for the development of their student athletes. With more than 5000 athletes attending the ‘Brazilian University Games’ each year, this competition represents the largest university event in Latin America. Notably, the Brazilian Sports Confederation (2018) has recognized the importance of fostering positive sport experiences to a larger audience of athletes across the country. Nevertheless, several challenges still exist in Brazil that may hinder
coaches’ ability to foster PD.

Within the Brazilian context, national certification programs are not as readily available to coaches as they are in Canada and in Europe (Gaion et al., 2020; Resende, Sequeira, & Sarmento, 2016), which may hinder coaches’ ability to promote PD. Moreover, mainstream coach education programs are not compulsory as coaches are not formally obliged to attend specific workshops that include PD content. Instead, all coaches need to have at least a degree in physical education and workshops are only offered in some sports. For instance, Gaion et al. (2020) alluded to the fact PD is considered an important objective across sport contexts in Brazil, however policy makers and sport leaders still struggle in supporting coaches so they can pursue PD outcomes (Gaion et al., 2020). In Brazil, coach education is more flexible in nature and opportunities are provided for coaches based on sport associations’ priorities which may vary depending on the sport and context. Similarly to other contexts, there are also no specific courses for university sport coaches (Brazilian Sports Confederation, 2018). Thus, it is critical to understand if there are global challenges for coaches concerned with emerging adulthood and PD that appear to transcend culture and context such as difficulties in developing a PD mandate, more specifically articulating PD goals and strategies within university sport (Coakley, 2016).

Taken together, it is important to gather information about coaches’ perceptions in countries such as Brazil as most research on university sport has been carried in English-speaking countries, especially Canada. Further, to our knowledge no study to date has been conducted to understand Brazilian coaches’ perceptions on their role in facilitating PD within university sport. The present study may shed light on aspects that are unique to the Brazilian context and may have implications for policy and practice, especially concerning the mission and purpose of university sport, as well as coach education programs. In other words, this study may prompt reflection on how sport organizations and the Brazilian sport system as a whole are supporting coaches to develop PD outcomes in their athletes. Then, the purpose of the current paper was to analyze Brazilian coaches’ perceptions on their role in facilitating PD within university sport.

**Method**

The researchers approached this study using qualitative interpretive description methodology which enabled a more global understanding of patterns within coaches’ perceptions on PD within university sport by (a) considering individual personal and social experiences and (b) integrating different individuals’ experiences to generate knowledge (Hunt, 2009). The epistemological foundation of this approach implies that researchers’ develop comprehensive descriptions about participants’ responses through shared interpretations (i.e., multiple perceptions that may create patterns) concerning a phenomenon. As such, «The foundation of interpretive description is the smaller scale qualitative investigation of a phenomenon of interest to the discipline for the purpose of capturing themes and patterns within subjective perceptions and generating an interpretive description» (Thorne, Kirkham, & O’Flynn-Magee, 2004). Consistent with interpretive description methodology, we adopted a relativist approach in order to explore participants’ views and beliefs considering the interdependence between experience and behaviors. We used this perspective to make sense of coaching for PD and acknowledge the social nature of this process. Relativists focus on making situational judgments based on context and conditions whereas reality is constructed through shared interpretations between object and subject. Findings should be viewed as valuable for coaches who are inserted in similar contexts under common conditions (Sparkes & Smith, 2009).

**Procedure**

The study was approved by the ethics committee at the host university (university’s name) of the last author. Coaches were selected using a purposeful sampling technique and were required to meet the following criterion: (a) were a university coach and (b) were actively coaching athletes involved in university sport within the Brazilian context. In order to identify coaches, athletic directors from different sport associations from all Brazilian districts were contacted to indicate a coach to participate in an interview on PD and university sport during the Brazilian University Sport Games. In total, 20 coaches were recommended and 16 coaches agreed to participate in this study. The four coaches who did not participate declined because they were not available at the time the interviews took place. Interviews were conducted at the Brazilian University Sport Games and were conducted in-person at a time and place that was convenient for both parties based on availability.
Participants
The participants (M_age = 42.20, SD = 10.88) included 16 Brazilian university sport coaches (14 male and 2 female). The coaches had between 1 and 30 years of coaching experience (M_years = 14, SD = 11.37) and were coaching athletes ranging between 18 and 35 years of age. None of the participants had completed any sort of compulsory mainstream coach certification program as all of them had a degree in physical education. Coaches were involved in competitive sport and coached a variety of sports that included athletics (n = 2), badminton (n = 1), basketball (n = 5), handball (n = 1), judo (n = 2), taekwondo (n = 1), volleyball (n = 2), chess (n = 1), swimming (n = 1). The participants coached their athletes a minimum of two and a maximum of six days per week. Coaches also spent between one to four hours a day with their athletes.

Data Gathering
Interview Guide. The interview guide was created and revised by the research team through multiple online discussions to make sure the questions aligned with the purpose of the study and were framed appropriately due to cultural differences. As a result of this process, the final interview guide was organized into four sections (see Appendix A for full interview guide). First, a set of demographics queries were posed (age, coaching experience, coaching certification, academic background, sport). This section included a set of questions that aimed to build rapport and introduce the topic of interest (e.g., What does university sport mean to you?). A brief definition of PD was provided to engage the participants in the interview protocol since PD is still a novel concept within Portuguese speaking-countries (Santos et al., 2017; Santos, Camiré, & Campos, 2018). The second section focused on the participants’ coaching philosophy (e.g., How would you describe your aims and purpose when working with university athletes? What PD outcomes should be integrated in university sport?). The third section focused on the participants’ coaching practice, specifically on the strategies used (e.g., As a coach, do you intentionally try to facilitate your university athletes’ PD? If so, how?), and challenges experienced while facilitating PD (e.g., Are there challenges associated with promoting PD? If so, what challenges do you face? How do you try to overcome these challenges?). The last section considered the influence of coaches’ academic and personal background on their approach to PD (e.g., Does your academic background influence how you think or approach PD in university sport? Is there a link between your education and how you approach PD in your coaching practice?). Considering that certification programs are scarce in the Brazilian context, we thought it was noteworthy to explore whether other forms of formal education impacted how coaches thought about and approached PD.

Semi-Structured interviews. Two pilot interviews were conducted to train the interviewer and assess the interview guide for coherency (i.e., connections between questions and the participants’ responses) and clarity (i.e., how the questions were posed and the language used). These two coaches had the same profile as the ones included in the main sample. These coaches were identified by a technical director who served as a key informant. The pilot interviews did not generate any substantial changes as the initial format of the interview guide was deemed appropriate to the study’s objectives. The interviews conducted with the participants in this study lasted on average 65 minutes.

Data analysis
The data analysis followed procedures described by Braun, Clarke, and Weate (2016) concerning thematic data analysis, and also recent recommendations made by Braun and Clarke (2020). First, the interviews were transcribed verbatim which generated a total of 270 pages of single-spaced text that was inserted into the software NVivo11. Transcripts were reviewed in multiple occasions to enable the researcher (i.e., first author), who lead the analysis, to get familiar with the dataset and develop initial interpretations and reflexive notes. Second, all the raw data was coded in order to attain a set of initial subthemes. These subthemes represented initial efforts made by the research team to «... make sense of patterns of meaning across a dataset» (Braun & Clarke, 2020, p. 4). Third, the first author read the interviews again, on multiple occasions, to reflect on how these subthemes captured the essence of participants’ responses through an inductive approach. In other words, a data-driven approach was also used to understand novel meanings, interpretations from participants’ perceptions. Fourth, the research team refined and named the subthemes (e.g., decisions allowed the researchers to merge redundant themes). Fifth, these subthemes were grouped into four overarching themes (e.g., coaching philosophy, coaching practice, challenges) that were identified deductively from previous research in the area of PD and university...
sport (e.g., Rathwell & Young, 2017). Finally, once the final themes were attained (see Table 1 for final themes and subthemes), a comprehensive report of the findings was prepared. The most salient quotes were then translated from Brazilian to English by one of authors who was fluent in both languages.

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<thead>
<tr>
<th>Themes</th>
<th>Subthemes</th>
</tr>
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<tbody>
<tr>
<td>Purpose, mission and value of university sport</td>
<td>PD outcomes prioritized by coaches</td>
</tr>
<tr>
<td>Coaching practice</td>
<td>Performance focus</td>
</tr>
<tr>
<td></td>
<td>Importance of academic and personal background</td>
</tr>
<tr>
<td>Challenges</td>
<td>Strides used to foster PD</td>
</tr>
<tr>
<td></td>
<td>Lack of time</td>
</tr>
<tr>
<td></td>
<td>Barriers created by the university sport system</td>
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</tbody>
</table>

### Qualitative Rigour

Based on a relativist approach (Smith & McGannon, 2017), several procedures were utilized, specifically: (a) transparency; and (b) internal and external coherency. To maintain transparency, all the procedures associated with this research were explained in detail (e.g., contextual nature of university sport in Brazil, recruitment, data gathering) in order to allow the reader to interpret the study. To increase internal and external coherency, the second and third author, who were experts on PD and university sport, served as ‘critical friends’ and challenged the first author with alternative explanations and insight regarding the decisions made throughout the process. The interview transcripts were also sent to the participants to provide them with the opportunity to revise the material and add information. To avoid a desirability effect, coaches were encouraged to voice their opinions in writing and freely express their perspectives even if they were negative. No concerns were raised by the participants.

### Results

The results are organized in three main themes: coaching philosophy, coaching practice, challenges. A comprehensive description of each theme and their subthemes is provided below. Quotes from coaches are provided and anonymous labels ranging from C1 to C16 were assigned.

**Purpose, mission and value of university sport**

This theme reflects coaches’ views on the purpose of university sport and PD outcomes considered crucial in this context.

**Coaching philosophy**

PD and sport skill development as priorities

The participants’ descriptions of the purpose and mission of university sport aligned with the core principles of PD. University sport was considered a valuable platform for social and sport skill development. Some coaches discussed how they integrated both objectives in their approach to coaching. Further, coaches considered university sport facilitated social outcomes such as social ascension in and through sport that could broaden their objectives and ambitions in other life domains:

We have a very interesting team from a performance standpoint, and if it all works well, there will be positive results on the field. But we also work on the social component. You know, I think university sport can help many people from different contexts... I have athletes that come from low income families... and I believe it can help them envision a job... (C6) and

While discussing the aim of university sport, C3 alluded to the need of providing athletes with a different perspective on life and helping them envision objectives beyond sport. This life perspective was considered particularly important for emerging adults: «I always tell them... people should look to sport’s real objective, provide a life perspective... ».

Most coaches believed they needed to ignores the 'performance at all cost' mindset because they felt it was counterintuitive to a PD approach. Coaches highlighted the importance of valuing the process and using sport as a platform to change athletes’ lives. Conversely, performance was seen as detrimental and a potential source of negative outcomes. For instance, one coach believed education through sport should be a main priority in university sport instead of overvaluing a successful transition to high performance sport.

«Of course my objective in university sport is to win medals and have positive results. However, my main objective... is to give athletes an education and then also educate them on sport» (C7).

**PD outcomes prioritized by coaches**

Coaches believed university sport could be used as a tool to develop teamwork and perseverance in athletes, as well as to attain other PD outcomes such as tolerance, dealing with diversity and caring for others. Coaches deemed these skills as critical for sport performance, as well as performance in other life domains (e.g., at university, interactions with peers). For example, some coaches noted how athletes developed teamwork by learning to accept differences. Further, using sport to ensure social justice and foster gender equity was considered by the participants as an important PD
outcome:

[PD] has to be intentional... We focus on teamwork. This is a very cool thing we can work on. We live in a society where we deal with a lot with cultural diversity... So, for instance, can a male athlete work with a female athlete? Yes (C6).

C11 described how teamwork, becoming responsible for others and caring were developed through university sport: «I try to make them become responsible for each other. I tell them to help one another in practice, not just in games.»

Several PD outcomes such as belonging, empowerment, and positive relationships involving friendship, care, and compassion were mentioned by the participants. Many coaches believed it was critical to create a positive climate in which athletes felt included, happy and were able to learn important life lessons. Among these life lessons was the need to deal with conflicts and establish positive relationships with others:

My goal is to make athletes feel good [in university sport], feel good about life...without any animosity between each other. Everything in harmony and peace... Pleasure [of playing], doing what you like the most. (C8).

Performance focus

Not all coaches prioritize PD and performance equally, and some university coaches focused more on high performance outcomes. Nonetheless, coaches recognized that athletes could indirectly become more educated, open-minded and value cultural diversity. As one said:

«University sport is a very important for athletes. They will face athletes from around the country and coaches who work on renowned teams. Being seen by them may facilitate a transition from university to professional sport» (C11). Another noted: «Nowadays I have high performance running in my veins... It is important to participate, it is interesting to travel and visit places, but I believe that we need something result-related» (C5).

Coaching practice

This theme highlights (a) the importance of coaches’ academic and personal background when fostering PD, and (c) strategies used to foster PD.

Importance of academic and personal background

Coaches recognized the importance of their academic and personal background on facilitating PD outcomes and discussed how it was key to enhancing their understanding of coaching. For example, one coach recalled the influence of his sport sciences bachelor degree:

Sure! It was very important what I have learned in my academic background. It was there I got all my theoretical basis about education and coaching. Some things I confirmed others I did not. But yes, it was important. (C2)

Two coaches believed their academic and personal background helped them become more deliberate in his coaching and improved his coaching practice: «You cannot just use anecdotal knowledge all the time. You need scientific knowledge to consolidate and provide rationale for your own convictions.. We cannot go by the ‘I think’ paradigm. (C4) and «... I learned to work with athletes and establish positive coach-athlete relationships not just in the university, but from my family... » (C3).

Strategies used to foster PD

Despite recognizing learning sources that were critical to improving their ability to foster PD such as undergraduate education and scientific knowledge, the coaches mentioned few strategies aimed at promoting life skills. Of the coaches who deliberately attempted to foster these outcomes, the most common implicit strategies used were providing appropriate support and positive feedback, as well as caring about athletes. However, coaches were not able to acknowledge the limitations of these strategies and indicated no explicit strategies. For example, one coach said: «I try to understand how to provide constant support to athletes... If we can treat athletes well and make them feel important it is very good» (C1).

Another coach echoed these sentiments and described the importance of supportive relationships:

I have to tell you that I will give a hug and a kiss to 95 percent of the athletes I have worked with if I meet them on the street... These are the relationships I have with them.... With this educational process, you can give them life perspective, help them become friends and care for each other. (C3)

In contrast, other coaches believed that university sport fostered PD, but did not feel they needed to deliberately target positive developmental outcomes. One coach said: «During practice we usually do not focus on anything related to PD... Now, there are situations that athletes can use for their personal or professional
life. You know, the training by itself helps» (C16). Thus, some coaches believed PD was a natural by-product of sport participation and were not aware about life skill development. For example, one coach described life skills were learned organically through experiences over time: «I have an athlete that was always getting into arguments with his brother... With taekwondo in his life he was able to control himself and stop fighting with his brother» (C8).

Challenges

This theme presents the challenges faced by the participants when fostering PD related to (a) a strict performance focus, (b) lack of time and (c) barriers created by the university sport system.

Strict performance focus

Some coaches felt that the main barriers to facilitating positive developmental outcomes were having a strictly performance-based focus. One coach reported how other coaches sometimes humiliated their athletes and only used sport to win at all costs:

In sport, it is very common to feel pressure to win, especially after a defeat. So, some coaches just humiliate athletes [in these situations] and I do not agree with this... This is something I will not do... put my athletes down. There is no point in coaching an athlete like this. (C1).

C12 also mentioned: «We are recognized many times by our results [in sport events] ... which is important for marketing [the university]».

Lack of time

Altogether, PD applications were viewed as a complex endeavor that required coaches and athletes to learn, reflect, and apply PD outcomes. However, the participants reported that it was very difficult to find the time to promote PD outcomes because of the various life demands placed on themselves and their athletes. Indeed, coaches valued non-formal education which posed challenges for them to learn PD content because they lacked time to research and reflect. Two coaches mentioned: «Outside of coaching I am a teacher, and sometimes I just don’t have time to be a teacher, coach, and have the time to research how to promote PD on my own time» (C9) and «No one is going to make a living by being an university coach... so no one cares... In the last two months I have not been able to have one practice with everyone... » (C10).

Barriers created by the university sport system

The participants acknowledged the need to rethink Brazilian university sport, with several wanting to include coach education forums that could help them foster PD more effectively:

Specialists in the area of sport psychology could speak with coaches... to help us intervene in a more positive way... We could attend a big seminar or a congress focused on what is being done to foster interpersonal relationships... or something related [to this issue]. (C6)

Moreover, most coaches noted the need for organizational changes for them to focus on prioritizing both PD and performance based outcomes, and wanted more structured opportunities to coach effectively: «In the USA they try to focus on performance in all stages of life... and nurture the potential in every person... In Brazil we need to have this in mind» (C5).

Discussion

The purpose of this study was to understand coaches’ role in fostering university athletes’ PD within the Brazilian context. Several sport contexts have been analyzed in the past to understand coaches’ role in facilitating PD, with most research on competitive (Erickson, Côté, Hollenstein, & Deakin, 2011; Strachan, Côté, & Deakin, 2009) and recreational (Falcão, Bloom, & Gilbert, 2012; Vierimaa, Turnnidge, Bruner, & Côté, 2017) youth sport programs. This study adds to the emergent body of research that has attempted to investigate how university sport may be utilized to generate PD outcomes, and represents one of the first attempts to study PD in Brazil. Moreover, the results from this study provides novel insight into potential differences and similarities regarding coaching athletes within emerging adulthood for PD outcomes and how they may transcend culture and context.

Within the Canadian context, researchers have found a plethora of PD outcomes (e.g., time management, goal setting, social awareness, social capital, and experimenting within different roles) that were developed through participation in university sport (Rathwell & Young, 2016, 2017, 2018). While describing their coaching philosophy, the current coaches considered PD and performance as paramount outcomes of university sport. Moreover, coaches identified a set of PD outcomes that could be developed through university sport, specifically teamwork and perseverance, which are common PD outcomes in past studies on younger athletes (Chinkov & Holt, 2015; Gould & Carson, 2008).
Some coaches also alluded to the fact that university sport can promote a sense of belonging, empowerment, positive relationships involving friendship, care, and compassion. Finally, university sport coaches appeared to use sport as a way for social ascension and to help athletes envision life outside sport. The outcomes found in this study expand our understanding of PD in university sport. Moreover, they suggest that all experiences that (a) involve the coach and athletes, (b) link university sport to life in general, and (c) lead to the development and transfer of a skill the short or long-term are important indicators of PD in the Brazilian university context.

In addition to speaking about which PD outcomes were fostered through university sport, the current coaches also discussed how they fostered PD within their sport programs. Of interest, many coaches viewed PD as a natural by-product of sport participation and used few strategies to foster this type of outcomes. The current results contrast those found in youth sport settings (Holt et al., 2017; Turnnidge, Côté, & Hancock, 2014), but are more consistent with research on PD in university sport (Rathwell & Young, 2018). In the youth context, researchers have suggested that in order to foster PD outcomes coaches should take a deliberate approach that includes concrete objectives and activities and strategies designed to systematically pursue PD outcomes (Bean & Forneris, 2016). In the university context, Rathwell and Young (2018) have suggested that coaches may require a less hands-on approach. Specifically, they found coaches shifted their efforts from deliberate teaching of skills to creating relationships and developmental experiences that foster PD and opportunities for experiential learning.

Holt et al. (2017) provided a set of evidence-based hypothesis that might help further explain the processes behind PD through sport. These authors discussed how coaches can either take an explicit or implicit approach to fostering PD. An explicit approach requires that coaches target specific PD outcomes through concrete objectives, activities and strategies. On the other hand, an implicit approach implies that coaches create a positive climate, provide unconditional support and positive feedback in order to facilitate PD outcomes without deliberately teaching skills. The participants in this study highlighted the importance of unconditional support and positive feedback, which suggests an implicit approach may be effective in university sport due to the athlete's age and developmental stage (i.e., need for independence and self-sustainable PD behaviors).

Consistent with our findings, Rathwell and Young (2018) also found that establishing a caring and supportive environment helped athletes learn from their mistakes and/or failures, and interpret them as teachable moments that may help them strive in life.

Although implicit approaches may be successful in university sport contexts, university athletes have been shown to benefit from explicit strategies as well (Rathwell & Young, 2018). One venue where coaches may learn a broader set of skills for fostering PD is through formal, informal and non-formal sources of learning (Camiré, Trudel, & Forneris, 2014; Nelson, Cushion, & Potrac, 2006; Vella et al., 2013). Coaches in the current study described how formal (e.g., graduate programs) and non-formal learning situations (e.g., self-reflection) helped learn PD content which may be used to structure future coach education courses. The makeup of undergraduate and graduate courses, despite not having any explicit focus on PD, was deemed relevant to providing the knowledge for creating positive experiences in university sport. However, the participants still wanted formal coach education programs focused on university sport. Coach education programs have been recognized as a resource that may help coaches improve their ability to foster PD (Vella, Crowe, & Oades, 2013), although, most PD based coach education programs across the globe have focused on youth sport (Kendellen, Camiré, Bean, Forneris, & Thompson, 2017; Portuguese Hockey Federation, 2015). The current results suggest that university coaches want exposure to the same PD learning opportunities. Moreover, it is possible that courses that have a heavier PD focus will help coaches overcome some of the challenges associated with fostering PD in university sport.

Besides a lack of coach education, coaches alluded to additional challenges that impacted their efforts towards fostering PD such as the lack of time and organizational support. Coakley (2016) has acknowledged that the lack of time may have to do with misconceptions about PD. Coaches should progressively embed PD into their coaching practice and use coachable moments to help athletes learn and internalize a broad range of PD outcomes. However, university sport coaches in Brazil are often simultaneously athletes or university teachers, which may influence the time spent with players and their efforts towards PD.

The present study conducted within the Brazilian context suggest a need to reflect on how PD could be integrated in this setting as part of a holistic university
sport program that values a vast array of performance and PD outcomes. Previous research has indicated that PD is clearly a part of the university sport program, where expectations around PD are made clear for coaches and other stakeholders (Rathwell & Young, 2018). Thus, in Brazil, a mission statement that acknowledges PD as an important outcome may go a long way to enhance coaches’ ability to similarly articulate PD as a part of their coaching philosophy and practice. Such initiatives conducted by local and national university sport associations and other sport organizations could help coaches receive a new perspective on the role of university sport in fostering PD, and may create more positive sport experiences for thousands of athletes across the country. This unified approach towards university sport would be pivotal in the progressive introduction of a PD curriculum within this context. Finally, initial and continuous coach education could help university sport coaches understand the importance of PD, what life skills could be taught and which PD strategies could be infused into their coaching practice.

**Practical Implications**

This study has numerous implications for coach educators and university sport systems that may find better ways of improving coaches’ ability to promote high quality sport experiences for their athletes (Vella, Crowe, & O’ades, 2013). There is the need to create PD-focused coach education programs targeting university sport coaches that (a) provide an overview of the ramifications of emerging adulthood to their coaching practice, (b) prompt reflection about the purpose of university sport, (c) provide PD strategies for coaches to embed within their philosophies, and highlight specific strategies for fostering PD. Finally, PD should be included as a priority for university and other sport coaches as a hybrid model could be implemented in the Brazilian context in order to highlight the value of PD alongside performance outcomes and clarify what is expected by organizational bodies for university sport.

**Limitations and Future Directions**

There are also several limitations that should be considered. First, the participants were Brazilian coaches working in a context where coaching certification is not mandatory to coach within university sport. In fact, coach education programs are offered occasionally and differently from other sport systems. Therefore, findings should be interpreted carefully and do not represent other sport settings and/or systems. Based on the findings of the present study, it is possible to state that the absence of certification for our sample provided a different outlook on coaches’ role towards PD when compared to previous studies that were conducted with certified coaches (Rathwell & Young, 2017, 2018). More studies are needed to understand coaches’ perceptions and practices within different sport systems to provide insight on how PD is being facilitated within university sport, and to help design evidence-based PD-focused coach education programs. Further, understanding which learning sources may help coaches learn PD content may also be a relevant line of inquiry to help design effective coach education courses. Second, coaching experience and time spent with athletes varied significantly among our sample, which could have influenced the participants’ perceptions on PD. Coaching experience has been considered a critical factor in coaches’ ability to learn, internalize and apply coaching skills (e.g., Flett, Gould, Griffes, & Lauer, 2012). Conversely, time has been considered important for athletes’ life skill development and transfer (Pierce et al., 2017). Future studies could focus on analyzing less and more experienced coaches’ behaviors and their athletes’ responses as this was not an objective of the present study. Third, female coaches (n = 2) were underrepresented in our sample. Rathwell and Young (2018) suggested that athletes’ PD may be more of a priority for female coaches, thus, the reduced emphasis on PD found in this study may have been partially due to the majority of our sample being male. Future studies should attempt to see how female coaches, or coaches of female teams promote PD within the university setting in Brazil. Nonetheless, the emphasis on PD may depend on a range of variables such as coaching experience, amount of time spent with athletes, academic qualifications, specific instruction in this area and the type of sport.

**Conclusions**

Our findings provide new insight on university sport coaches’ perceptions about how PD is embedded within university sport within the Brazilian context. Many participants acknowledged that PD was an important part of their coaching philosophy and deemed necessary to avoid a ‘performance at all cost’ mindset. However, coaches mentioned few PD strategies. Coach education
could play an important role in providing opportunities for coaches to understand how PD could be operationalized in university sport. Considering the fact that in the Brazilian context there are no formal coach education programs in place, organizational bodies responsible for university sport could create workshops and coach education initiatives focused on PD and bridge the gap between the value given to PD and coaching practices. These coach education initiatives could also help coaches overcome the challenges identified in this study, more specifically (a) lack of time, and (c) integrating PD and performance. Moving forward, we encourage researchers within Portuguese-speaking countries to further explore how PD may be infused in university sport.

References


Griffiths, K., Bullough, S., Shibli, S., & Wilson, J. (2017) The impact of engagement in sport on graduate...
Appendix A

Research questions
- What is the importance given to PD by the participants?
- Which are the PD outcomes fostered in university sport?
- What are the PD strategies used to facilitate PD outcomes?
- What are the challenges faced by the participants while facilitating PD in university sport?
- What are the variables that influence coaching PD in university sport?

Interview Guide
Prior to the interview, the participants were provided with a PD definition.

Opening questions
How would you describe your experience in university sport this season?
In your opinion, which are the main ideas and values linked to university sport?

Aims and purpose
How would you describe your coaching approach?
- Why do you coach in university sport?
- Which are your main goals as a university sport coach?
- Did your coaching approach change throughout the years? How?
- What importance do you give to PD?
- What PD outcomes should be integrated in university sport? Why?
Throughout your career, how did you develop your current coaching approach?
- What are the main events that contributed to your current coaching approach?
- What importance do you give to...
  - reflection
  - experiential learning
  - other coaches
  - results and titles
  - books, articles, etc

PD experiences and outcomes
As a coach, what PD outcomes do you prioritize?
- Do you promote experiences that allow your athletes to get to know or to think about who they are?
- Do you promote opportunities for athletes to reflect on experienced challenges or issues related to being a university athlete?
- Do you try to create experiences both intellectual and meaningful to you?
- Do you promote teamwork and foster social skills?
- Do you attempt to help athletes create meaningful relationships with peers and yourself?
- Do you try to develop social capital and help athletes form or improve relationships with important adults?
- Do you try to foster life skills transfer?
For each of these components, the participants will be asked to describe experiences they try to promote, outcomes and concrete strategies used.

Challenges
Do you consider challenging to promote PD? Why?
What are the challenges you face while promoting PD?
- universities guidelines vs practice
- focus on performance outcomes
- considering athletes’ developmental needs
- need for coach education, specific to university sport coaches
How do you try to overcome these challenges?

Academic background and PD
How do feel your academic background influences your intervention towards PD? Why?
Provide examples.
- What are the most meaningful experiences of transfer from your teaching/research experience to your coaching practice?
- Did your coaching practice at different moments of your academic career?
- Is there a link between your progress as teacher/researcher and your coaching practice?
- Do you feel you are better prepared to foster PD because you are an university teacher? Why?

Final thoughts
What needs to be improved in university sport to make PD a more tangible endeavor?
- Could you propose a plan of modifications that would help you facilitate PD (e.g., time spent coaching, coach education opportunities, policy wise)?

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