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"Structuring a coach developer program

in the Brazilian Olympic Committee".

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Abstract

Coach developers are key stakeholders in the creation and implementation of coach development systems in order to promote high quality coaching and provide support to coaches in different contexts. Understanding the key indicators that contribute to an effective coach developer program in a high-performance context is essential. The purpose of this project was to analyze the factors that should be considered to structure and implement a coach developer program for the Brazil Olympic Committee. The qualitative research study involved asking 14 open-ended questions to ten experts in coach development around the world in order to identify key points related to the structuring and implementing a coach development program. The data was analyzed through thematic analysis with the main themes related to the professional development dimension; characteristics, demand and support in high-performance context; and perception of an ideal coach developer program.

Résumé

Les développeurs d'entraîneurs sont des acteurs clés dans la création et la mise en œuvre de systèmes de développement des entraîneurs afin de promouvoir un entraînement de haute qualité et de fournir un soutien aux entraîneurs dans différents contextes. Il est essentiel de comprendre les indicateurs clés qui contribuent à un programme efficace de développement des entraîneurs dans un contexte de haute performance. L'objectif de ce projet était d'analyser les facteurs à prendre en compte pour structurer et mettre en œuvre un programme de formation des entraîneurs au sein du Comité olympique brésilien. L'étude qualitative a consisté à appliquer un questionnaire ouvert à dix experts en développement des entraîneurs dans le monde entier afin d'identifier les points clés liés à la structuration et à la mise en œuvre d'un programme de développement des entraîneurs. Les données ont été analysées par le biais d'une analyse thématique, les principaux thèmes étant liés à la dimension du développement professionnel, aux caractéristiques, à la demande et au soutien dans un contexte de haute performance, ainsi qu'à la perception d'un programme idéal de développement des entraîneurs.

Summary

1. Introduction

Sports coaches are the primary mediators of the athlete development process because they hold a strategic position in the sports system and are widely recognized as critical components for achieving international sports success (BOC, 2022). They are in charge of developing and directing athletic practice, adjusting and individualizing workouts while keeping athletes' holistic development in mind, an aspect that is amplified by athletic practice's interpersonal relationships. Despite research demonstrating that professional development of coaches is critical to improving the quality of practice provided, professional development models in elite sports, in general, do not address the complexity of the demands generated in this context (Lyle, 2002).

In general, historically, the process of preparing coaches has been based on formal programs aimed at comprehensive certification of professionals, with the goal of replicating traditional knowledge and contexts (Milistetd et al., 2016). The characteristics present in formal education programs limit the learning process of coach developer and mentored coaches. Usually, coach education programs aim to certify multiple professionals at the same time. On the one hand, such certifications appear to be appropriate for beginning coaches, but on the other hand, they do not take into account the legitimate needs of more experienced coaches, for example in the High-performance sport (Mallet et al., 2013). Often, the teaching strategies used in formative courses are prescriptive, resulting in less time for practice and interaction among learners.

As a result of these characteristics, there is a limitation to the ability of coaches to build their own knowledge based on prior practice experiences (Morgan et al., 2012). Furthermore, the contents of these educational programs are primarily focused on technical knowledge, while ignoring other knowledge and skills essential to the role of coaches in high performance context, such as decision making, communication, and management (Mesquita et al., 2012); Finally, despite the need for coaches to be constantly learning in their daily lives, few courses develop strategies that encourage them to deliberately reflect

in order to reorganize and expand their knowledge (Trudel et al., 2013).

Considering the inherent characteristics of the environment in which elite sports are developed, such as dynamicity and high levels of demand placed on athletes and coaches, there is a growing need to qualify the process of developing elite coaches in order to improve international sporting results (Trudel et al., 2020). Coaches must continually develop their abilities due to the specific characteristics of high-performance sports. As a result, unique abilities for this environment, such as creativity and invention, become crucial, reflecting the need for master coaches and coaches to be capable of developing their own knowledge based on their own demands (Rodrigue et al., 2016).

Therefore, it is critical that the professional development models used by high-performing coaches are grounded in real-world practice, that is, that they address the specific needs of these professionals' day-to-day work, take into account adult learning theories, opportunities for practice, reflection and research (Trudel, et al., 2010). Despite much work being done to investigate the process of coach development, little has been done to date to investigate how coach developers (CD) are developed, as well as the most effective methods for use (ICCE, 2013). More recently, as a result of the movement in several nations aimed at enhancing the training process, there has been an increase in interest in researching coach development (Ciampolini, 2020).

The role of the coach has become increasingly complex given their responsibility over athletes' development. For this reason, it is imperative that coach development programs be strategically implemented in order for effective coach learning to occur. Coach developers have a vital role in facilitating effective behavioral change and motivating coaches to take ownership over their continued learning (ICCE, 2014, p. 10).

Coach developers are not simply experienced coaches or transmitters of coaching knowledge but rather are trained to develop, support and challenge coaches to improve their skills. To provide high quality learning experiences for coaches, CD have multiple roles and responsibilities (Wright, Trudel & Culver 2007). The CD is a broad term highlighted by the International Council for Coaching Excellence (ICCE), and according to the context, these professionals can play different positions, for example: (a) Leader; (b) Facilitator; (c) Mentor; (d) Assessor and e) Course Designer and Evaluator. These professionals teach not only technical aspects of the sport, but also the skills and abilities

required to develop coaches, such as planning and organization, interpersonal relationships, contextual analysis, and feedback provision, among other things. The ICCE developed a best practice guide to assist countries, sports organizations, and educational institutions in establishing systems for identifying, training, and providing support to those responsible for the education and development of coaches at all levels and contexts (ICCE, 2014). Coach Developers are an essential part in the creation and implementation of an efficient coach development system (ICCE, 2014).

Despite the relevance of a CD's role in the coach development system, in the Brazilian context this kind of initiative is still scarce. Based on that and the need to improve high quality coaching, specifically in high-performance sport, the study seeks to address the following problem: how the Brazil Olympic Committee can structure a Coach Developer program in the High-Performance context?

1.1 The Aims

1.1.1 The general aim

Identify key elements for structuring a coach developer program at the Brazil Olympic Committee

1.1.2 The specific aims

- Identify key points related to professional development dimension associated to Coach developer role.

- Understand characteristics, demands and support related to Coach Developer program in high-performance context.

- Identify key elements associated to an ideal coach developer program in high-performance context.

2. Literature Review

2.1 Coach Development in Brazil

In Brazil, Higher Education Institutions (HEI) have been responsible for formal preparation of sports coaches since the implementation of Law N.9696/1998 that requires completion of a bachelor's degree in physical education (except in football, which has its own legislation) and registration with the Federal and Regional Councils of Physical Education (BOC, 2022). According to the National Curriculum Guidelines (DCNs), which regulate the process of structuring graduate courses in Physical Education, a set of knowledge and skills is established over the course of four years of training. In general, the contents are related to various areas of knowledge in sports sciences (Physiology, Pedagogy, Psychologies, Biomechanical, among others), as well as competitions related to training, evaluation, critical analysis, and reflection, which are essential elements in the work of trainers (BOC, 2022).

However, the regulatory frameworks that govern initial physical education training define the use of strategies that ensure the development of a generalist professional capable of integrating a variety of activities and sports in a variety of contexts: fitness, leisure, and performance (BRASIL, 2004). Despite having a strong foundation of professional knowledge, initial education appears to be limited to preparing coaches in the context of sports participation, with only a few opportunities for experiential learning (Milistetd et al., 2014). Another way to complement the process of continuous coach development, particularly in performance sports, is through National Federations and the National Olympic Committee (BOC, 2022).

Figure 1- Coaches' means of development in Brazil
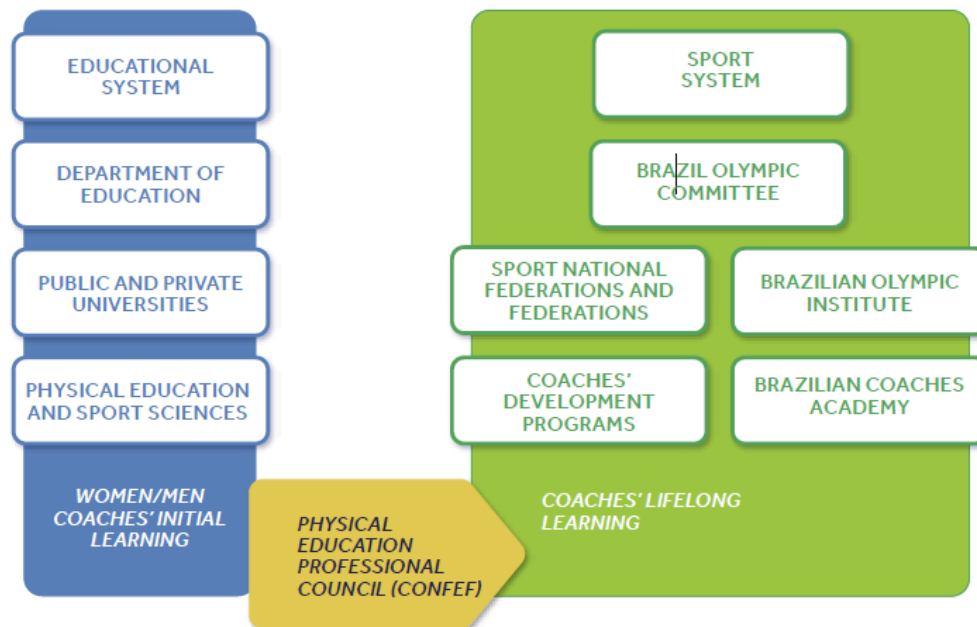
Source: Brazilian Olympic Committee (2022), adapted from Milistetd et al., (2016)

The role of Brazilian Federations and Olympic Committee is critical in preparing coaches who want to work in the context of high-performance sports. As a result, the education programs offered through the sport system in general contain specific content from specific sports modes at various levels of play. On the other hand, there are few sports federations that have systematized programs based on certification and development of coaches aimed to prepare professionals to work at various levels and context (Ciampolini at al., 2014).

This structure is regarded as ideal for the continuous development of high-performance coaches (ICCE, 2013). On the other hand, the strategies used in national programs continue to focus on traditional teaching perspectives oriented by technical skills and are based on abstracted content, in which memory is the primary mode of learning (Milistetd et al., 2017). Similarly, studies have investigated and revealed a low impact of formal preparation programs on the learning and behavior of athletic coaches (Stoedter; Cushion 2019), particularly in experienced coaches who work in high-performance environments (Mallet et al., 2013).

Apart from the factors mentioned above that have an impact on the development of

coaches through training programs, elite coaches, due to the context in which they work, have specific demands that training programs cannot meet. As a result, the development of various strategies for the development of professionals in high-performing environments is required (Rodrigue; He; Trudel, 2016).

2.2 High Performance Coaches Education

It is well understood that an initial education in Physical Education cannot encompass and account for all of the opportunities for participation and situations that exist in the context of high-performance sports. In this way, ongoing education can serve as a forum for discussion and reflection on these issues. Cunha (2006, p. 354) defines continuous development as "education initiatives carried out during the course of the subject's professional career". It has a different format and duration, reflecting the process of formation. Education programs for coaches promote a variety of skills and abilities for a safe and effective practice for athletes and coaches. Despite the fact that they are essential in all sports, professional development should not end with certifications in a specific sport. National Federations and other sports organizations must constantly develop specialized professional development initiatives to meet the needs of coaches during their careers (BOC, 2022).

High-performance coaches are responsible for leading adult athletes, professional teams, or national teams at the junior and senior levels, while operating in an environment of athletic excellence. In this environment, the pursuit of better results presupposes specific knowledge and skills regarding the factors that influence high competition in sports, which, in turn, requires that coaches remain in constant learning mode, implementing new methods of work and innovating their own practices. These professionals must master skills related to planning, decision making, monitoring, and communication to properly guide their athletes in training and competition (Lyle, 2022). Learning different technologies is also considered an important aspect for coaches in this context, whether in supporting training and competitions, or in accessing content aimed at their own development. (Nash and Sproule, 2012).

Aside from the tasks directly related to the intervention of high-performance coaches in the sport, elite training suffers from the usual influence of sponsors, the media and the

pressure that the coaches face as a result of their performance. It is worth noting that the involvement of coaches in technical committees, directors, and other specialists shapes their professional activity as highly dynamic. Jones et al. (2013) define a sports coach as a "guide" due to the complexity of their work.

Because conventional programs are incapable of meeting the specific needs of elite coaches it is critical that customized programs should be developed with the goal of providing support to these professionals, taking into account the identification of prior knowledge, skills, and experiences of coaches as well as contextual requirements and environmental conditions for product development.

Based on this assumption, the learning process will unfold from a map of coaches' learning requirements. With the goal of ensuring the success of the training proposal, the participation of experienced coaches becomes critical (BOC, 2022). Coach developers foster conditions for high-performance coaches´ individual development. According to the Sport Development Framework from Brazil Olympic Committee coach developer must have the following characteristics: (a) knowledge of the sport in question; (b) expertise in the mentoring process, create materials to support coaches; (c) compatibility with tools for mapping knowledge; (d) competencies for developing and implementing learning plans. As a result, coach developers, in collaboration with mentored coaches, establish a collaborative and knowledge-creation relationship.

2.3 Coach Developer

Around the world, there is an increasing focus on enhancing coach development programs to provide coaches the knowledge and abilities they require to foster players with high-quality sporting experiences (Clements & Morgan, 2015; International Council for Coaching Excellence [ICCE], Association of Summer Olympic International Federations & Leeds Beckett University, 2014). Different aspects of the coach development systems in multiple countries have an impact on how coach education programs (CEPs) are developed and delivered, as well as how coach developers support coach learning (ICCE, 2014). Coach developers are key stakeholders in the creation of efficient coach development systems as they provide direct support to coaches by enabling them to learn course material, develop a

vast array of coaching skills, and ultimately apply course material in their coaching practice (North, 2010).

Based on that, CD can play different roles depending on their context, for example, a workshop instructor, development course facilitator, mentor in practical environment, learning programs coordinators in sport clubs, lecturer, among others (BOC, 2022). In Canada, NCCP (National Coaching Certification Program) includes different roles, as Master, Advanced and Learning facilitators; Master, Advanced Coach evaluators (NCCP, 2023). In the words of Australian Institute of Sports (AIS, 2023) the role of the coach developer is a combination of preparing the coaches and mentoring, with a focus on supporting them on the job. According to this characteristics, three main roles can be used in Australia: presenter, assessor and mentor. These professionals teach not only technical aspects of the sport, but also the skills and abilities required to develop coaches, such as planning and organization, interpersonal relationships, contextual analysis, and feedback provision, among other things (AIS, 2023).

To promote coaches' learning in several contexts, the coach developers must master different competences, which are organized in three areas: 1) Learning Environment Structure and Planning; 2) Supporting the Coaches' Professional Development; 3) Evaluative Process Implementation (ICCE, 2014).

Table 1 - Description of the coach developers' professional competencies.

Learning Environment Structure and Planning	
Identify and analyze knowledge demands	• Identify the current coaches' development status, analyzing the learning pathway, their challenges and learning opportunities. • Understand the context that the coaches are operating, identifying the needs knowledge and competences to their professional activity.
Production of learning material	• Prepare supportive material adopting different tools and strategies. • Promote scientific knowledge aligned with the coaches' professional activity.
Plan learning environments	• Plan learning sessions and environments based on Learner Centered Teaching principles. • Promote different learning situations possible to answer to this process of multifactorial characteristics.
Set up professional	• Potentialize the coaches support networks, in different areas in order to optimize the learning process.

support network	• Promote experience sharing moments between the women coaches, so they can think about the challenges faced day by day and strengthen themselves regarding their professional competences.
Supporting the coaches' professional development	
Facilitate courses and workshops	• Intermediate the learner centered process considering the participants experiences and real need. • Encourage the coaches to think about the application of the knowledge in their context.
Manage Social Learning Space	• Create a positive learning environment based on confidence and safety, stimulating the coaches to share their experiences. • Balance the power relationship, establishing a horizontal alignment for the coaches, enabling the co-creation of knowledge, competences, and values.
Promote coaches mentoring	• Use strategies that strengthen the learning process through mentoring, promoting discussion of real problems and thinking about the coaches' practical experiences. • Support female coaches in identifying the main barriers on their professional development, considering the specificities of their work context.
Establish an effective communication in the different learning contexts.	• Practice active listening, empathy and positive nonverbal communications and learning process. • Ask assertive questions to promote reflection about the coaches' professional activity. • Give regular constructive feedback to engage coaches in a continuous improvement search.
Evaluate Processes Implementation	
Master different evaluation strategies	• Implement different strategies for collecting and analyzing the results, involving the quantitative, qualitative, and mixed methods. • Develop tools that enable to evaluate the knowledge and competences domain.
Implement evaluation process in formal learning environments	• Create evaluation process according to the level and context of the professionals. • Establish parameters according to the professional's knowledge and competences. • Promote assessment of the teaching process.
Create an assessment process in practical environment	• Design and use quantitative, qualitative, and mixed tools to evaluate the competencies domain in a real-life context. • Observe coaches in the sessions to analyze and evaluate their knowledge abilities and competencies domain.

Source: Brazilian Olympic Committee (2022)

As previously stated, CDs have a variety of skills and qualities that enable them to work in a variety of positions, including mentoring, that among other thing, is responsible for connecting theory and practice, and supporting practice in the field.

Due to the need to prepare professionals capable of playing different roles in CD, some initiatives aimed at this objective have been created. The Nippon Coach Developer Academy (NCDA) is one example (NSSU, 2019). This academy was part of the 'Sport for Tomorrow' program of the Japan Sports Agency (JSA) for the 2020 Tokyo Olympic and Paralympic Games and began in 2014. In partnership with the International Council for Coaching Excellence (ICCE), NCDA promoted training programs with blended learning opportunities for the future coach developers around the world, divided in two broad parts: the on-campus residential component and the remote one. The first one consists of two weeks residentials at NSSU in Tokyo, including a mixture of workshops, seminars, discussion groups and practical work accounting approximately 100h of content during all the weeks. The e-module consists pre-course tasks (approximately 5 hours) and in online support aimed helping the participants with real coaches in their organizations.

In parallel, some countries have developed their own coach developer program as for example National Coaching Certification Program (NCCP) from Canada, Coach Development Model from Australia (AIS) and UK Coaching from United Kingdom. In Canada the CD program is divided into three levels: NCCP learning facilitator, coach evaluator, and master coach developer. The program is carried out in modules (online and in person) separated into four main themes: core training, content-specific training, co-delivery and evaluation. The duration varies according to the level and context, from 3-5 hours per module to a intensive week coach practice in person format. In Australia the CD program is also divided into levels: presenter, assessor and mentor. Each of the coach developer programs are offered in a hybrid format with different duration and levels (AIS, 2023; NCCP 2023; Sports Coach UK, 2023).

Although national academies and associations have created formal initiatives to educate coach developers, much of the knowledge and skills of coach developers come from their experience spending many years themselves as coaches (USCCE, 2019).

2.3.1 Mentoring

Given that the most valuable learning takes place in the coaching environment, significant personal development can happen spontaneously within the coaching environment. This apprenticeship is referred to as informal learning in which coaches learn through on-going interactions, observations, listening and reflecting on their own coaching practice (Nash & Sproule, 2011). During the informal learning process, coaches are challenged to find solutions to a real-life issue.

In principle, this approach of connecting theory to practice is applicable to any coach who is open and receptive to learning from practical experience, has sufficiently developed independent learning skills and the motivation to do this, or who is appropriately supported in the field. On their own, many coaches, however, find it difficult to understand the complexity of coaching (Werthner & Trudel, 2006). In this sense, mentoring might be viewed as an efficient and practical way to assist professional activity. It was originated in Greek mythology and since the first documented relationship, mentoring has existed in formal and informal guises, based on affection and trust (Gutierrez, 2012).

According to the research in coach education, mentoring has been suggested as a coach development strategy. In order to improve possibilities for professional development, coach education providers are pushed to move learning from the classroom to the real world (Mallett, Trudel, Lyle, & Rynne, 2009). Based on that, many coach-mentoring programs have been established by national sport federations, and by lead agencies such as UK Sport and the Coaching Association of Canada.

As is well known, mentoring is one of the approaches to professional development that can be used by coach developers transforming it into a strategy for developing coaches in the sense that it encourages the connection between theory and practice, thereby increasing the opportunities for professional learning that result from professional experiences (Mcquade et al.,2015). In general, mentoring is a professional development strategy in which two people with different knowledge and experiences enter into a relationship with the goal of personal and professional development through information

exchange and shared knowledge creation (Jones et al., 2009).

This approach implies that professional development occurs through participatory and contextualized opportunities linked to active knowledge construction through social interaction (Phelan & Griffiths, 2018). The mentor's role is to facilitate learning (Lyle, 2017). As a result, coach developers play a central role in this process and have a significant impact on the negotiation and legitimacy of coaching practice, with their skills critical to the efficacy of pedagogies and the promotion of learning (Blackett, Evans & Piggot, 2015). In this sense, mentors of coaches must encourage them to reflect on their values, beliefs, and ideas, as well as engage them in the process of developing their own knowledge and experiences (Cushion, 2016).

One of the approaches that has influenced and sustained the development of coaches through mentoring is the humanist approach, which is centered on learner. As a result, the mentored coach is self-motivated and self-directed, exercising his or her capacity for self-development and self-realization (Cushion, 2018). The mentoring process helps with the development of autonomy and identity in this type of approach.

On a broad level, the process of developing coaches through mentoring can be broadly classified into two types: informal and formal (Mcquade et al., 2015). The informal mentoring process occurs through unstructured organic relationships. On the other hand, sports institutions are establishing formal mentoring programs to oversee the development of mentor and mentored coaches. Other characteristics unique to education programs are the performance indicators established and evaluated by the institution (Leeder & Cushon 2020).

Mentoring continues to be cited as an enriching practice for personal and professional development. The benefits of mentoring are frequently associated with the authenticity of the experiences provided from the context of practice of mentored when guided in their work environment (Cushion 2015). Nonetheless, while there are suggestions in the literature, there is limited evidence of successful mentoring programs (Lyle & Cushion 2017). Another important point is that the majority of studies do not focus on the people who design and implement programs, because the process of investigation is focused on the mentee (Kolic et al., 2016).

3. Characterization of the Research

The study consists of a naturalistic applied study of qualitative data in relation to the survey applied. According to Malhotta (2006), qualitative research is defined as a "non-structured and exploratory research methodology" based on small samples that provide more comprehensive perceptions and understanding of the problem context. Minayo (2014) defines qualitative research as concerned with the level of reality that cannot be quantified. In other words, it works with the universe of meanings, motivations, aspirations, beliefs, values, and attitudes. Instead of statistics, rules, and other broad generalizations, qualitative research focuses on descriptions, comparisons, and interpretations.

In this sense, the phrase "qualitative research" has many meanings in the field of social sciences. Comprises a collection of several interpretive techniques aimed at describing and decoding the components of a complex symbolic system. The goal is to translate and convey the meaning of social phenomena; the goal is to reduce the distance between indicator and indicator, theory and data, context and action (Tumelero, 2019).

The majority of qualitative studies are conducted in the location of the data's origin; this does not preclude the researcher from employing scientific empirism logic (which is appropriate for clearly defined phenomena), but it does contribute to the hypothesis that it is more appropriate to employ a psychological analytic perspective when dealing with singular phenomena with a certain degree of ambiguity (Gil, 2008). On the other hand, the same author recognizes that this type of research has limitations, and he draws attention to the challenges associated with the use of language in the expression of ideas, as well as the fact that they must be decoded in order for a qualitative analysis to be performed.

According to the nature of project and the research aims related to improving the relationship between the coach developers, participants and their realities, as well as understanding the factors that influence them, the present study will be conducted in exploratory characteristics. Gil (2008) says that exploratory studies are intended to develop, clarify, and modify concepts and ideas and this kind of methodology might be used in the first stage of larger research project.

3.1 The Research and Collection Procedures

The choice of research technique is intimately linked to the type of the research being developed. According to Marconi and Lakatos (2000), "methods and techniques must be tailored to the research problem, to the hypotheses raised and confirmed, and to the type of informants with whom it will be in contact". It is necessary to select not just one method, but also the primary technique to be used, because more than one technique will be required in the course of the work to be developed.

Based on this, research procedures for this study involved designing an open-ended survey consisting of 14 questions, aimed to identify the key knowledge and competences required for a coach developer in high performance and also the important topics related to the structure of a coach developer program.

In this regard, Aekir (2011) suggests five steps for developing a survey: a) plan what will be assessed; b) elaborate the questions; c) analyze the questions and categorize them according to the topics; d) test the survey using a small sample; and e) repair any problems found on the test and reapply. For this research, more steps were used, as it is possible to analyze below:

Table 2 - Summary of researche procedures
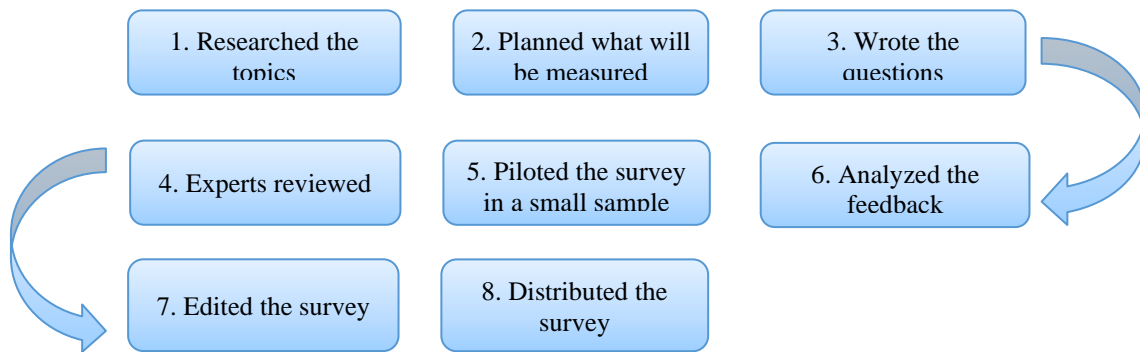
During the three first stages, it was realized that the Value Creation Framework (VCF) of Wenger and Stenger (2011), as discussed in the review of literature, could be used to elaborate the current questionnaire. The questionnaire (Appendix C) was created to address three main topics, as reported in the table (2) below:

The professional development dimension

1- Do you work as a coach developer or professional activity in related duties?
2- In yes, in which context (participation sport or high performance) do you work as a coach developer?
3- Do you have any certification that enables you to work as a coach developer or designing coach education program?
4- Considering the question above, what year did you go through the program? What was the length of the program?
5- How did you become a coach developer?
6- How many coaches have you developed and at what level are the coaches working?

Characteristics, demands and support in high-performance environment

7- In your country and/or sport organization is there any program aimed for preparing coach developer?
8- If yes, please summarize the program, highlighting the main characteristics including any requirements to take the program, how often, format.
9- According to your expertise, what are the current challenges facing high-performance coaches?
10- How can the CD provide support for high performance coaches in order to face the challenges identified in the previous question?

Perceptions of an ideal coach developer program

11- What does an environment that is committed to a coach developer look like?
12- According to your experience, what are the most determining characteristics of an ideal coach developer program for a high-performance context, according to:
   a) Professional characteristics
   b) Knowledge and competencies
13- What would be an ideal program to prepare Coach developer in High-performance context, according to:
   a) Recruitment and process selection
   b) Contextual demand analysis
   c) Teaching-learning strategies
   d) Program content, format, and duration
   e) Evaluation strategies
14- What is the future direction for a coach development program in High-performance context?

Once the questionnaire was created in google forms, it was shared with two coach development experts (both Brazilians with Ph.D. degrees, certified by the NCDA, and working as coach developers). After the experts review and approval of the questionnaire, the next step was to pilot it in a small sample of two additional Brazilian coaches' developers that provided additional feedback.

Following that, a few adjustments were made, and the questionnaire was sent for a data base via email to the target group of 70 professionals who work as coach developers. The email was sent on June 2nd with the participation sheet (Appendix B) and the link to the questionnaire requesting completion by June 15th, 2023. To participate, the people had to sign electronically a consent form (Appendix D) and they had until June 25th to withdraw from the project.

Based on the thematic analysis proposed by Braun, Clarke (2006) and Braun, Clarke, Weate (2016), after receiving all the responses the data analysis was conducted in the following steps:

a) Downloading responses from the google platform.

b) Inserting all the responses in an excel table

c) Reading the responses and noting the first ideas about the key concepts generated by the answers.

d) Coding of data characteristics based on the three main themes of questionnaire while grouping relevant results.

e) Interpreting the data based on the group of themes and number of answers.

4. Results

Ten of the 70 professionals contacted responded to the survey, a 14% response rate. Two were female and eight male and they represented five different nations – Australia, Brazil, Canada, Singapore, and the United States. The average age was 43.3 years with 21.2 years of experience in the field of coach development. Each participant in the sample (100%) had a degree, either a master's or a PhD. Six of the participants (60%) also have a specific certification in coach development (NCDA (#5) or NCCP (#1)) which enables them to work as coach developers. Seventy percent of the experts work as professors at universities in addition to their positions as coach developers, with three (30%) working exclusively in the sport environment. In terms of sport context, sixty percent of the experts reported working not only in high performance, but also in the participation sport (PS) context, while three (30%) of the experts work exclusively in high-performance and one (10%) reported working only in the participation sport context. Refer to Table 3.

4.1 Professional Development Dimension

Table 3 – Professional Development

GENDER	AGE	POSITION / ROLE	SPORT ORGANIZATION	COUNTRY	CONTEXT	CERTIFICATION
Male Exp 1	49	Director of Sport Science	US Rowing	USA	Both	NCDA PhD.
Male Exp 2	45	High Performance Manager	Singapore Badminton Association	Singapore	HP	NCDA PhD.
Male Exp 3	67	Director	Pierre Trudel Consultant	Canada	Both	PhD
Male Exp 4	43	Program Convenor	The University of Queensland	Australia	Both	PhD.
Male Exp 5	34	Coaching Performance Advisor	University of Ottawa	Canadá	HP	NCCP PhD.
Female Exp 6	42	Associate Professor	University of Campinas	Brazil	Both	NCDA PhD.
Male Exp 7	39	Professor and researcher	State University of Santa Catarina	Brazil	PS	PhD.
Male Exp 8	39	Coach Development Department Advisor	National Tennis Federatiion	Brazil	Both	PhD.
Female Exp 9	36	Athletic Department Assistant Professor	Nipponn Sport Science University	Japan	HP	NCDA Master's degree
Male Exp 10	39	Professor	Federal University of Goias	Brazil	Both	NCDA PhD.

* NCDA – Nippon Coach Developer Academy

* NCCP – National Coaching Certification Program

*PS – Participation Sport context.

In terms of how respondents became Coach Developers, the three factors related to professional development included: a) Academic graduation b) Specific formative course and c) demand context added to previous experience as a coach.

All 10 of the respondents reported working as a coach developer with 3 working in the high-performance (HP) context exclusively, one working in participation sports (PS) only, and six working in both HP and PS, as indicated in Figure 1.

Figure 1 Sport Context Activity of the Participants.
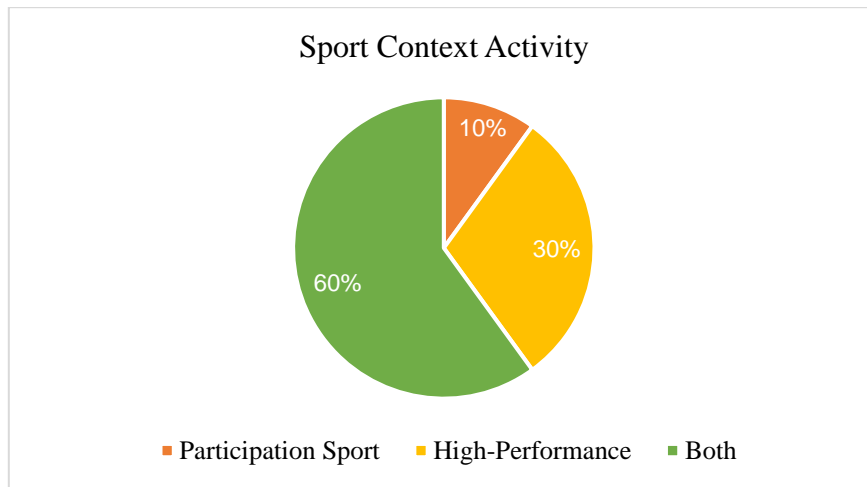
When asked about their educational paths as coach developers (How did you become a Coach Developer?), it was possible to identify three significant factors that influenced this process. All 10 completed both undergraduate and graduate degrees with 10 % earning a Master and 90% PhDs. According to these results, reaching the higher level of education may mark the beginning of the path taken by coach developer in various contexts, not only in the Brazilian scenario, where obtaining a degree in physical education is a requirement for holding the position of sport coach, but also in other countries where this requirement is not mandatory, as for example Canada.

Figure 2 - Participants' educational level
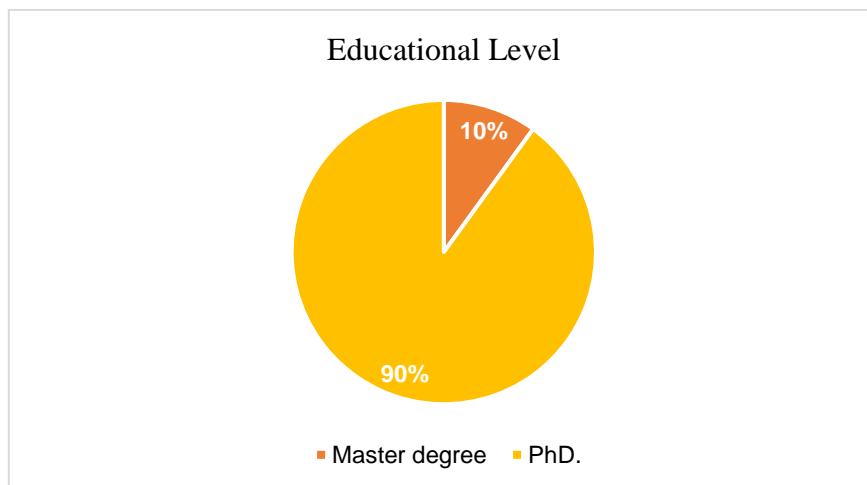
Another aspect that deserves attention relates previous experience as a coach added to the need emerged from the field of practice. In this sense, five participants (50%) reported that they started acting as a developer due to the demand of the field of practice while they were serving as a coach. On the other hand, while formal education and previous experience as a coach are regarded as necessary for working in the position of CD, it does not appear to be enough to meet all the demands associated with CD position. As a result, 60% of the participants also received specialized preparation to serve as coach developers. In this regard, five professionals were certified by NCDA (Nippon Coach Developer Academy) in Japan, while just one was certified by NCCP (National Coaching Certification Program) in Canada.

Figure 3 - Certification course for Coach Developer
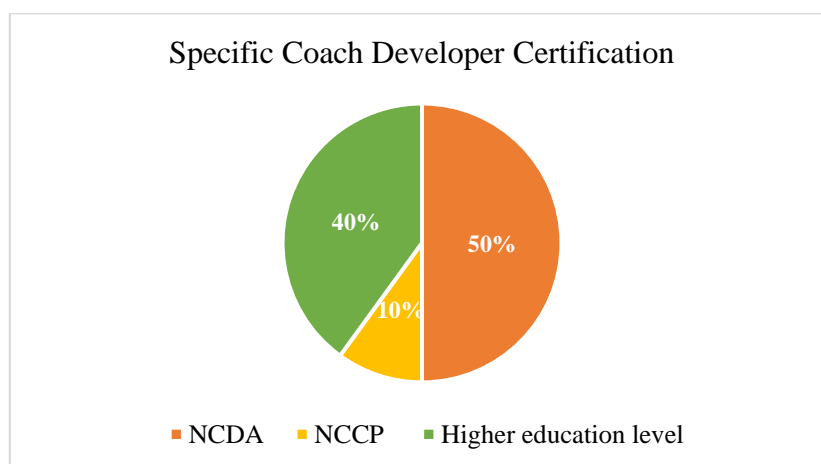
When asked the number of coaches they have developed, the experts were not precise in their answers, four (40%) of them estimated a number ranging between 250 and 1000. The others could not define a number. However, they provided some information that reinforces their experiences with one stating that she works in a global training program with participants from 43 countries.

4.2 High-Performance environment: characteristics, demand and support

In terms of country or sport organization specific coach developer programs 6 (60%) participants responded affirmatively while 4 (40%) reported no such programs. Those with

programs represent five countries: Australia, Canada, Japan, Singapore, and United States of America.

Figure 4 - Existence of Coach Developer Program

Program Aimed for Coach Developer

■ Yes ■ No
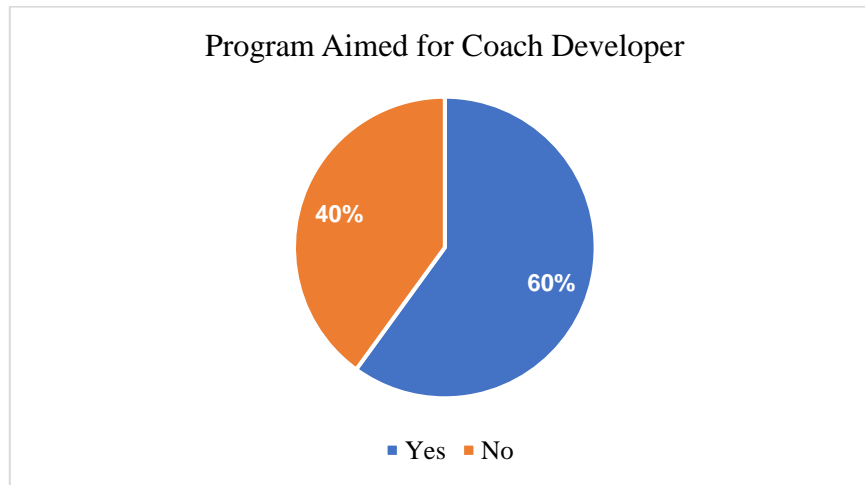
When asked about the format of existing programs in the respondents' respective sport organizations or countries, the answers were diverse. Regarding the format, not all answers were precise with three (30%) reporting a hybrid format and only one reported being exclusively face-to-face. The others four did not answer clearly or did not know the right answer. Only three (30%) answered that the programs are carried out in levels, from initiation to high performance. The other (70%) did not mention any levels. Follow-up e-mails were sent, but unsuccessful in receiving clarification.

In terms of the main challenges faced by high performance coaches, four were identified by the respondents. One third (33%) mentioned interpersonal skills and the ability to deal with multiple stakeholders. Another 33% of responses reported concerns of keeping motivated for promoting continuous development. The development of know-how (expertise) and the understanding the complexity of the landscape each accounted for 17% of the responses. Finally, answers related to innovation, self-knowledge, and decision-making were also reported at least once, representing less than 1% of the responses.

Figure 5 - Challenges faced by High-Performance Coaches
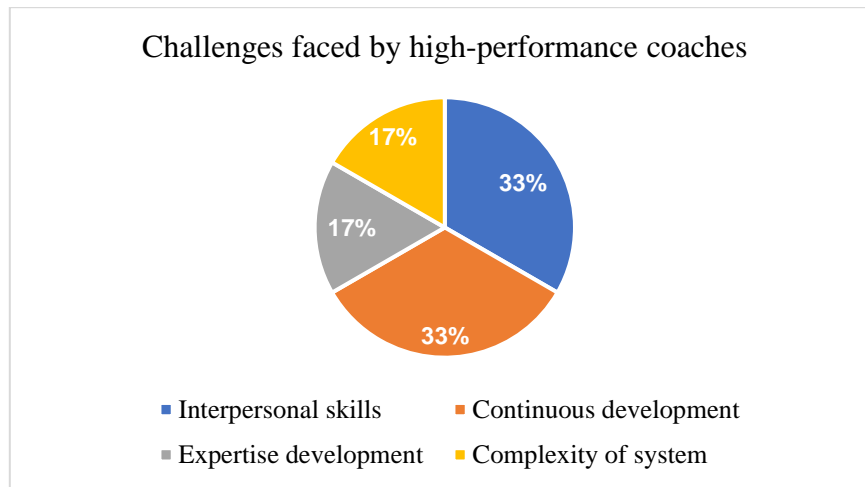
When asked about how the coach developer can provide support for high performance coaches to face the challenges reported in the previous question, the most frequent answers were associated with social learning space. In this sense, promoting an individualized approach, as mentorship and sharing knowledge with peers represented 26% of the responses. Intrapersonal knowledge including self-reflection and continuous learning represented 46% of the responses. Terms like emotional intelligence (10%) and gap of knowledge represented (18%)

4.3 Perceptions of an ideal coach developer program

There were three main characteristics identified when respondents were asked what was necessary to build an environment committed to a coach developer. The first was safe environment reported by four (40%) of the respondents. This was followed by a motivating environment to maintain interest in continuous learning and maintaining a balance of power both receiving two mentions, representing 20% each. Other responses were associated with professionalization of CD role, autonomy for learning, adult learning pedagogy, formative assessment and new approach were cited at least once, representing 5% each.

In terms of professional and personal characteristics, a combination of various characteristics was reported and divided into four main groups: Interpersonal Competences, Analytical skills, Listening skills, Humbleness, and Previous experience.

Figure 6 - Perception of relevant characteristic to be a coach developer

Personal and Professional Characteistics

- Interpersonal competences
- Previous Experience
- Analytical Skills
- Humble
- Good listener
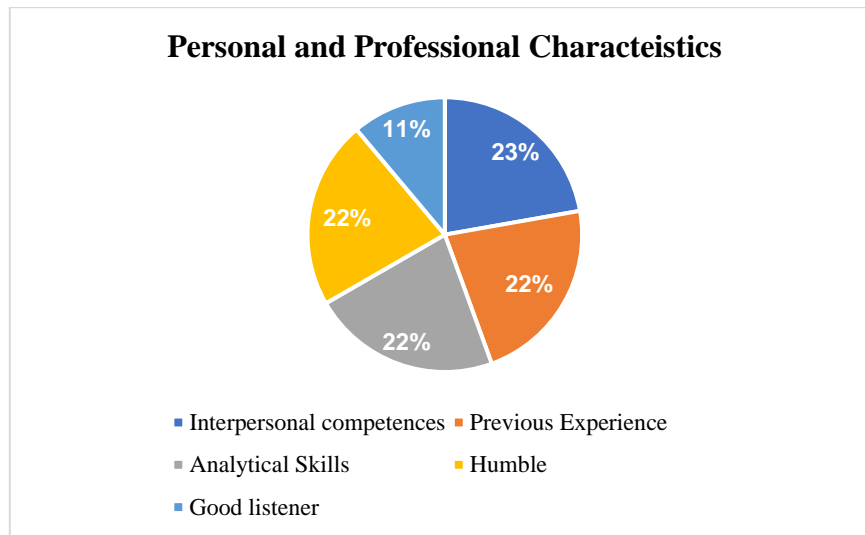
In this research, interpersonal competences were reported as the most relevant characteristic, representing 23% of the findings. Previous experience, analytical skills and humility were also important, each accounting for 22%. Finally, characteristics related to being a good listener represented 11% of all responses. In terms of knowledge and competencies, three aspects most cited by the respondents included: professional knowledge related to sports science (60%); knowledge about learning theory (20%), and formative assessment (20%).

For a clearer perception of an ideal coach developer program, three categories were established conceptually in the following order: a) recruitment and selection procedures; b) program design; and c) assessment processes.

a) Recruitment and selection process: Based on a total of 8 responses, a variety of factors should be taken into account when recruiting and selecting participants including the genuine interest in working in this environment was listed by two experts (25%), professional experience and specific knowledge of the sport was reported by other two experts (25%), the establishment of selection criteria was mentioned by two experts (25%), one expert listed the learner profile (12.5%) and another suggested that the selection process include surveys and interviews to identify the background of the participant (12.5%).

b) Program design: It is clear from all the responses how important context is in

determining learning strategies, program structure, duration and content. In terms of teaching-learning strategies, the findings supported a learner-centered approach. Five (50%) of respondents reported the importance of promoting strategies focused on the coaches need, putting them in the center of the learning process. For two experts (20%), learning from peer collaboration is also a relevant strategy. Co-construction of knowledge and mentoring were also cited at least once representing 10% each.

In relation to format and duration, the responses were diverse and not so clear. Expert #3 emphasized that this information cannot be completely prescribed because it is dependent on context and resourcing. Even though more information about the characteristics of the context is required to have a more comprehensive response, a hybrid format was recommended by two experts, #7 and #8. In this sense expert #6 emphasizes the greater flexibility and adaptation in relation to the sporting schedule. In terms of duration only two experts responded: one suggested a program based in 400 hours during the year and other one reported that the program should be realized during multiple weekends and an immersion for two weeks.

c) Assessment process: Of the seven responses, all suggested that the primary character of the learner (the coach developer) - must be at the center of the evaluation process. Based on that, four experts (45%) reported the importance of including a formative assessment. Another relevant topic was the evaluation of the impact on practice, accounting for 33% of the responses. Self-evaluation was also reported as a significant aspect of the assessment process, representing 22% of the responses.

In general, when examining the responses, there is an indication for a tendency to evaluate how the knowledge impacted in the professional activity, considering the context-specific requirements.

5. Limitations of the study

In regard to the limitations of this study, some factors can be listed, among them the method employed for data collection, given the surveys do not allow assistance when the respondents do not understand the questions, considering the question related to the format of the program was not answered correctly. Another point was the lack of follow-up to solicit additional responses or clarify it. The short period of data collection, which is

influenced by the change in strategy used in the project is also a limitation. It is believed that this factor influenced the number of responses obtained, which may have been greater.

Despite the fact that the current study had representatives from five different countries and from four continents (North America, Oceania, Asia and South America), it is believed that other Latin American countries (with the exception of Brazil) may have strengthened the study. Therefore, it is necessary to promote additional studies related to the topic, as well as use other data collection methods, e.g., interviews, sending follow-up reminders to the achieve more respondents, and explore other countries in South America, considering there is no other southern American country (except Brazil) in NCDA group.

6. Discussion

Based on the results and review of literature, the following elements are recommended as a part of a Coach Developer Program in Brazil. In terms of the **Professional Development Dimension**, formal education appeared as a key path for Coach Developer in the context of high performance, corroborating with the results found by McCullick et al.; (2007) and Wilson et al.; (2010). In this sense, to be part of the Brazil CD program at least a bachelor's degree in physical education or Sport should be required, which is already required to be a coach in Brazil.

ICCE (2013) recognizes the academic environment as a key space for the development of coach development programs due to its ability to mobilize various knowledge bases. However, expert #6 believed that formal education in higher educational institution (HEI) seems insufficient to ensure that these professionals are being adequately prepared to perform as Coach Developers, considering university education does not exclusively focus on the development of coaches (Brazil, 2004).

Additionally, high-performance sports environment demands professionals with specific skills, knowledge, and competencies (planning, decision making, innovation, communication and etc) for the role of Coach Developer (Gilbert and Coté 2013). This justifies the results of this study in which 60% of participants received additional education which they looked for from organizations like NCDA (Nippon Coaching Development Academy - Japan) and NCCP (National Coaching Certification). Based on this, Brazil

Olympic Committee would offer a CD program, aimed to complement the formal education, and address the needs of the high-performance environment.

Another important factor that needs to be highlighted is previous experience as a coach, that combined with the opportunity and need emerged from the field of practice was pointed out for 50% of participants. As a result, it is possible to conclude that formal education combined with specialized complementary training and experience as a coach are shown to be essential factors in the development of Coach Developer in this HP context, Crickard et al (2020).

In this regard, it is essential to understand that the developmental process can take place through a variety of routes that vary depending on the context e.g., through university, NFs, NOCs, International Federations and other. While some countries as Brazil needs initial training through formal education, other countries, such as New Zealand, Norway, and France, do not require formal education. In this case, it is necessary to offer a specific formative course (Callary et al., 2014).

Regarding the **characteristics, demand, and support in a high-performance environment**, the continuous search for better results requires specific knowledge and skills regarding the factors that influence high competitiveness in high-performance sport. This requirement necessitates that coaches have a continuous learning mindset to improve their practices (BOC, 2022).

According to Côté and Gilbert (2009), the coaching effectiveness is correlated with their constant integration of professional, interpersonal, and intrapersonal knowledge. Interpersonal knowledge is related to one's ability to communicate effectively, establishing social connections with other actors, such as athletes, staff members, and the media, among others. Based on this, interpersonal skills will be part of the Brazil CD program and it will be present in all modules of the program.

At the same time interpersonal skills is considered relevant, it is also highlighted by the present study as the most common challenges faced by the coaches. In this sense, 33% of the responses were associated to deal with multiple stakeholders; keeping motivated for

promoting continuous development represented 33% of the answers obtained. Developing expertise and understand the complexity of the landscape accounted 17% of the responses.

In this regard and according to results, the findings showed the importance of considering multiple domains, skills, and competencies, not limiting it to the sports domain. Experts #5, #6 and #9 suggest content related to self-reflection, evaluation process, and communication skills. Nevertheless, expert #4 reinforced the importance of sport science knowledge corroborating the findings of Irwin et al (2004). The Brazil program will also spend time on self-reflection, sport science and evaluation process as identified as important in this study as well as Irwin (2004) as is possible to see in table 4.

It is clear that the high-performance environment presents a variety of challenges that call for the development of specialized skills and competencies in order to meet realistic demands. Therefore, in terms of strategies, five (50%) experts highlighted the importance of focusing on the coaches need, putting them in the center of the learning process. In agreement with Gilbert & Coté (2013), the same experts reinforce that traditional programs are unable to meet the needs of coaches in high-performance environment. Based on that, the promotion of an individualized approach such as mentoring suggested by 40% of the experts in the current study. According to this, the Brazil CD program will provide an individualized approach including mentoring during the module 3, from October to December.

The results affirm that sharing experiences with peers is also relevant as a teaching strategy at the high-performance level as indicated by 26% of respondents. This idea is reinforced by Bayley et al. (2019) affirming the benefits are linked to contextual and genuine emergent experiences from the work environment. In this sense, CD plays a crucial role in creating an environment that is conducive to learning by providing the necessary support for their professional development. In this sense, a strategy that will be used in the Brazil CD program will be to separate the participant into small groups to share their experience and learn from each other.

Considering the **perception of an ideal coach developer program in a high-performance context**, specifically related to recruitment and selection process, results indicate that various factors should be taken into consideration, among them giving special consideration to personal characteristics, professional experience, and specialized

competencies. As pointed out by the experts, in agreement with ICCE (2023), the careful recruitment of a coach developer is crucial for the success of the program. In this regard, the job description of a coach developer should be based on two items: extensive coaching experience and specialist knowledge in areas related to adult and coaching learning, management of social learning spaces, and other. Based on this, to take part in the Brazil CD program, previous experience with coach education as well as working as a coach will be requirements in the recruitment process. Submission of a resume detailing academic and coaching background will be included in the recruitment process.

In addition, previous experience in coach development, interest in and willingness to work with coaches, and authority should be taken into account during the recruitment and selection of coach developers (BOC, 2022; ICCE, 2023). In this regard, during the subscription process, the participant should respond to a questionnaire to determine their related interest and willingness. Furthermore, the candidates will go through an interview.

In agreement with NCCP (2023), the findings suggest characteristics related to communication skills, critical thinking, active listening, and positive attitudes were also mentioned as significant factors to be taken into account when recruiting a coach developer. These characteristics will be accessed in the interviews.

The results show that the content should be directed at the three main pillars of the CD's work: the establishment of learning environments, support with the development of coaches, and the implementation of an evaluation processes (ICCE, 2014). In this regard, the Brazil CD program will provide content related to these pillars and based on its unique environment. In this sense, experts #6 and #8 value various learning opportunities, with regard to the program's organizational structure, in which teaching strategies, content, and duration is context dependent. Considering this feedback, a focus group of the selected participants will be included with the purpose to know their journey, to understand their need and expectations. Adjustments to the proposed curriculum in Appendix A may be adjusted based on the results of the focus group.

Expert #7 also emphasized the experiences in informal contexts, such as actual practice and interaction between partners, as the primary sources of knowledge for coach developers which was also mentioned by Ericskon et al. (2008), Mesquita et al. (2010) and

Nash& Sproule, 2012). The results are also associated with reflection to understand how to teach and grow their identity and incorporating coach development programs into learning environments focused on learner centered approach (Blumberg, 2009; Weimer, 2013). In this sense, as reported by expert #7 and #8, the balance of power should be considered to promote co-creation of knowledge and engagement in their own development. The Brazil CD program should provide safe environments encouraging coaches to reflect on their practices and remain engaged throughout their educational journey.

As outlined by ICCE (2014), the program should aim to develop abilities and competencies related to three key areas: a) the structuring and planning of learning environments that includes analysis and diagnosis of knowledge needs, the creation of learning materials, the planning of learning environments, and the establishment of support networks; b) supporting the coach professional development through courses and workshops facilitation, managing social learning spaces, coach mentoring, and establishing effective communication; and c) implementing evaluation processes in formal and informal learning environments. Of the four modules of the Brazil CD program, two and three focus on structuring and planning learning environments as well as supporting the coach professional development. Module four will focus on the implementation of evaluation processes.

The process of evaluation should not be in the content, but on the learning process to evaluate the impact on the practice. Based on this, the formative assessment is highlighted in 45% of all answers associated to evaluation process in this study. The results also suggest qualitative tools to diagnosis and evaluate the program as reported by 33% in the responses. In general, the assessment process can be compounded by a variety of strategies e.g., self-reflection, individual and group debriefings during the sessions (NCCP, 2023). Each participant will be evaluated via formative assessment and self-reflection strategies. The overall program will be evaluated by Value Creation Framework (Wenger-Trayner 2020). It will be measured during the 4th module, after finishing the program, as well as three and six months later.

In summary, the Brazil CD program should: a) create a clear criteria of selection, considering formal education, previous experience as a coach and also with coach education; b) promote a safe environment for encouraging sharing experiences between peers; c)

diversify the learning strategies, adopting individualized approach to consider the coaches' need; d) develop interpersonal knowledge contents as communication skills and also intrapersonal knowledge related to self-reflection; e) prepare CD to establish learning environments, support with the development of coaches, and to implement evaluation processes.

Table 3 - Brazil coach developer program proposal

Recruitment and selection process
- The recruitment process based on clear criteria   - Bachelor in physical education or sport   - Previous experience as coach or coach developer   - At least 5 female participants   - Employment relationship with a NF.   - Survey, Curriculum Vitae (Resume), and interview
Format and program design
- Hybrid format   4 modules - 88h.   - Provide individualized approach as mentoring   - Group discussion aimed to share experience and learning from peers
Curricula purpose   - The curriculum proposal is supported by the learner-centered learning strategy. Based on this, the program is divided into 4 modules.   **Module 1 – August and September (Online - 22h)**   - Concepts related to learning of coaches   - Learning and coach development journey   - The coach developer role   - Coach development special initiatives   **Module 2 – October (In person - 20h)**   - Planning, execution, and evaluation of coach development programs   **Module 3 – October to December (Online - 36h)**   - Monitoring period related to the formative initiative carried out by each participant   - Creating a personalized delivery for the participants, related to address their need.   **Module 4 – January (In person - 10h)**   - Formative evaluation   - Self-reflection evaluation   - Conclusion of the CD program

Table 4 Proposed Budget for BOC Coach Developer Program

Budget based on 15 participants in the program and 3 of master coaches.

NOC funding	
Salary + tax	USD 12.200
Airfare	USD 4,800
Accommodation	USD 2,250
Food and drink	USD 2,400
Olympic Solidarity Funding	
Salary + tax	USD 700
Airfare	USD 15,900
Accommodation	USD 1,560
Food	USD 1,630
Total	**USD 41,440**

7. Recommendation

Based on the results and discussion above, following recommendation to structure and implement a coach developer program should be taken.

Priority	Recomendation	Action	Lead	Resource	Timescale	Critical success
1.	Finalize the Coach Developer Program	Incorporate the data obtained in the MEMOS study	Manager of the project in BOC and the master coaches	Time; Financial resource related to the payment of the master coaches	June to July, 2023	The structuring of the program
2.	Send out the application form and interview	Start the subscription process,	Manager of the project in	Time Internet Computer	June to July, 2023	Number of subscriptions

	the participants	select the participants and interview a focus group to identify gap analysis	BOC			
3.	Adapt the content based on the surveys and interviews applied to the focus group.	Analyze the results obtained and adapt it to Brazilian context.	Manager of the project in BOC and the master coaches	Time; Financial resource related to the payment of the master coaches;	July and Aug, 2023	100% engagement of the participants
4	Implement the Coach Development program	Put the knowledge into practice; Create the indicators that enable the assessment of the project	Manager of the project and the master coaches	Time; Financial resource related to the payment of the master coaches;	Aug to Jan, 2023	Start the program; Establishment of indicators related to the evaluation of the program;
5	Evaluate the program	Evaluate the program based on practice through interviews based on (VCF) during and after the in-person modules in order to analyze recommendations for the future.	Manager of the project and the master coaches	Time; Financial resource related to the payment of the master coaches; Food and accommodation for in person module;	Oct,2023; Jan, Mar and Jul 2024.	Changing behavior of the coach developers Incorporation of new approaches in coach development Positive impact on practice

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Appendix

Appendix A

Dear Researcher,

We have identified your expertise in the area of Coach Development and are inviting you to participate in a Delphi study on the indicators of structuring and implementing a coach developer program in a high performance context. So, the study will seek to gather expert and practitioner opinions and gain some consensus on the indicators of coach developer program.

Your participation will involve responding to a survey. The expected time burden is approximately 40 minutes. For more information, please access the Participant Information Sheet and Consent Form at this link https://forms.gle/G73yh33CjCkgQ8Ma7, where you can also accept the invitation to participate in the study: The link will be available from June 5th to 15th.

You are invited to contact a member of the research team whose details can be found on the Participant Information Sheet if you have any questions about the research.

Kind regards,

Jesse Medeiros

PARTICIPANT INFORMATION SHEET – Appendix B

Structuring and implementing a coach developer program at Brazil Olympic Committee

PURPOSE OF THE RESEARCH

This is an invitation to participate in a study that is part of a research project of the MEMOS Program (Executive Masters in Sport Organizations Management), which is conducted in partnership with Olympic Solidarity and the International Olympic Committee. The project aims to structure and implement a coach developer program in the context of high performance at the Brazilian Olympic Committee. It is important to highlight that coach developer have the role of helping coaches to engage in their learning process in order to become increasingly better at their professional activity. In this sense, among the different roles that the Coach developer can play are, lecturers, facilitators, mentors and promoters of social learning spaces Based on that, we seek to have expert contribution to identify the indicators needed to structure a coach developer program in a high performance context in order to stablish a role model for others NOCs.

LEAD INVESTIGATORS

Jesse Medeiros, MEMOS alumni and Sport Development Department - Brazil Olympic Committee

Email: jessevmedeiros@gmail.com

METHOD AND DEMAND OF PARTICIPATION

This study will employ a Delphi method. Specifically, if you choose to participate, you will be invited to answer a survey that is aimed to identify the key knowledge and competences needed for a coach developer in high performance context. The survey will be accessed through this link https://forms.gle/G73yh33CjCkgQ8Ma7 and is predicted to take approximately **40** minutes.

POSSIBLE RISKS, INCONVENIENCES AND DISCOMFORTS

We will need to collect identifying information, and therefore your participation will be apparent to the research team. However, we can assure that your participation is confidential. This means that your identifying information will be stored securely in accordance with the Brazil Olympic Committee Management Policy. Your participation in the study is voluntary and you may withdraw by informing the research leader of your decision to withdraw.

FUNDING AND BENEFITS OF THE RESEARCH

This study has not received any funding. This research will help formulate a set of indicators of coach developer program and can help provide benefit for different sport organizations,

specifically the NOCs. Findings from the study will be reported in a peer-reviewed journal article and may be presented at national or international conferences.

ETHICS REVIEW AND COMPLAINTS

This study has been reviewed by the Human Research Ethics Committee of the Federal University of Santa Catarina. If you have any concerns or complaints regarding the way this research has been conducted, you can contact the UFSC Ethics Officer via email (cep.propesq@contato.ufsc.br) and Quote Ethics Number: 169.330.

HOW TO PARTICIPATE

If you choose to participate, please click the link in your email and complete the Consent Form. You will then be forwarded to the survey questions.

QUESTIONNAIRE – COACH DEVELOPER – Appendix C

Demographic questions
Full Name:
Gender:
Age:
Country:
E-mail:
Company/Sport Organization:
Position:
Sport:

1) Do you work as a coach developer or professional activity in related duties?
   a) Yes
   b) No

2) In case of affirmative answer, which context do you work as coach developer?
   a) Participation Sport / Recreational Sport
   b) High-Performance Sport
   c) Both

3) Do you have any certification that enables you to work as a coach developer or designing coach education program?

4) Considering the question above, what year did you go through the program? What was the length of the program?

5) How did you become a coach developer?

6) How many coaches have you developed and at what level (e.g., Participation Sport, High Performance) are the coaches working?

7) In your country and/or Sport Organization is there any program aimed for preparing coach developer?
   a) Yes
   b) No

8) Considering the previous questions, if you answered yes, please, summarize the program, highlighting the main characteristics such as format, levels, duration as well as the organization responsible for it.

9) According to your expertise, what is the current challenges faced by the high-performance coaches?

10) How can the coach developer provide support for high performance coach in order to face these challenges?

11) What does an environment that is committed to coach developers look like?

12) According to your experience, what are the most determining characteristics of an ideal coach developer program for high performance coaches?? Answer based on the following topics:
   a) Professional characteristics:
   b) Knowledge and competencies:

13) Considering that high performance sport is a dynamic and complex environment, and it requires contextual demands, what would be an ideal program to prepare Coach Developer in this context? Answer according to the topics below:
   a) Recruitment and Selection of participants:

   b) Contextual demand analysis:

   c) Teaching-learning strategies:

   d) Program content, format, and duration:

   e) Participant evaluation strategies:

   f) Program evaluation strategy:

14) What is the future direction for Coach Development program in high-performance context?

CONSENT TERM – Appendix D

This study has been reviewed and approved by the Human Research Ethics Committee of the Federal University of Santa Catarina (cep.propesq@contato.ufsc.br / Quote Ethics Number: 169.330). We will need to collect identifying information, and therefore your participation will be apparent to the research team. However, we can ensure that your participation is confidential. So, please answer the questions below:

I have read and understood the information sheet and this consent form
*
Marque todas que se aplicam.
Yes / No

I understand that I am under no obligation to take part and I have the right to withdraw from this study until June 25th, and that I will not be required to explain my reasons for withdrawing.
*
Marque todas que se aplicam.
Yes / No

I understand that all the information I provide is true and I will be treated in strict confidence.
*
Marque todas que se aplicam.
Yes / No

Besides the need to collect the identifying information by the research team, understand that my participation is confidential
*
Marque todas que se aplicam.
Yes / No

I agree to answer the survey and participate in the research project.
*
Marque todas que se aplicam.
Yes / No