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## Typical activities performed by expert rhythmic gymnastics coaches

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### Abstract:

Numerous literature reviews highlight a considerable volume of quantitative publications in the field of sports coach behavior. While qualitative approaches on real-life experiences of coaches are less common, they help to comprehend the intricacies of high-performance sports. Examining coaches' experiences in a professional setting through the 'enactive phenomenology framework' proves particularly intriguing, because this approach aims to elucidate behaviors within dual practical and meaningful dimensions. This case study aimed to provide insight into the practices of experienced rhythmic gymnastics coaches by observing their typical activities during training sessions in competitive periods. The objective is to elucidate their interactions with both the environment and gymnasts, shedding light on how they shape their roles within a specific context: the domain of gymnastics and artistic sports, predominantly featuring female participants. Such access should help to better understand how rhythmic gymnastics coaches act and interact with gymnasts during training in order to improve learning and coaching. Four coaches participated in this study. The theoretical framework used was enactive phenomenology. Data sources included observations and audiovisual recordings of the coaches' behaviour and communication, and enactive interviews conducted a posteriori with the coaches. Our findings highlight four typical rhythmic gymnastics coaches' actions (guiding, checking, encouraging and pacing) which are closely linked to the time and space invested over the course of training. This case study demonstrates the existence of recurring features in the way rhythmic gymnastics coaches interact with gymnasts. The strategies identified carry a meaning for the coaches that is anchored in the desire to both help and control the gymnasts. All of these actions are continuously adjusted during the training session, depending on the coach's perceptions of the gymnasts and the choreography, as well as her own feelings. This study offers a reflection on the practices of rhythmic gymnastics coaches in order to understand their intrinsic logical sequences, which would allow a modernisation of professional practices and questioning of training approaches, with a focus on the real experience of the actors.

**Key Words:** Artistic and gymnastic sport, female coach, real-life experience, significance

### Introduction

Various literature reviews have revealed a considerable number of publications in the field of sport coaching and coach behaviour (Griffo et al., 2019; Lyle & Cushion, 2016; Vors et al., 2020). These studies have defined the characteristics of coaches who are considered effective. These explicit coaching actions are based on personal experience and the expertise of coaches who have specific and integrated skills (Durand et al., 2005). Coaching appears to be a highly complex activity (Bowes & Jones, 2006; Jones et al., 2016). It's a dynamic activity with interactive aspects, linked to the values of the coaches and the sport culture. The contributions themselves are characterised by flexibility in response to the changing and unpredictable characteristics of the situation (Saury & Durand, 1998). According to Duffy et al. (2011), the proliferation of this research is linked to the process of professionalisation. It is a matter of legitimising intervention practices and refining training programmes, starting from a body of knowledge that is applied and clarified through research. Thus, our study analyses the activities of coaches in situ to understand their real experiences and the usual organisation of their actions (Jones et al., 2016; Light et al., 2014).

### Analysing intervention: starting with experience

Analysing coaches' experiences in a work situation (Alin, 2008; Cizeron & Gal-Petitfaux, 2010) is a heuristic for studying the hidden and tacit aspects of their actions in the field (Bolter et al., 2018; Corsby & Jones 2020). As highlighted by Alin (2008), "every profession has its actions and values [...] that form a professional identity anchored in the history of a profession. Every profession has its inventory, its archives of techniques, expertise, knowledge, its range of gestures that bear the mark of its practice. These latter are the labelled representations of a semiotic history, of a recognised expertise and an asserted professionalism". Turning to the notion of experience is based on the hypothesis that all professional actions constitute a complex and dynamic

system of meaning-bearing actions (Gal-Petitfaux, 2010). The action includes an intentional dimension with meanings that become apparent when the actor uses them (De Jaeger & Di Paolo, 2007). It is unique in the sense that it shows an expertise acquired by the particular person in the sequences and specific contexts, and generic in the sense that it reflects the typical characteristics that recur for the same person or group of actors. This study aims to discuss and describe the typical actions in their dual practical and meaningful dimension, while seeking to identify the characteristics of consistency beyond their singularity (Cizeron & Gal-Petitfaux, 2010).

#### **The specific context of an almost exclusively female sport**

Few studies focus on female coaches (Cloes et al., 2009). Rhythmic gymnastics (RG) is an interesting field of study because the majority of coaches are women working with women. RG has both a gymnastic aspect, where the ability to create body shapes using apparatus is essential, and an artistic aspect, through the search for expression and communication. The reference study (Ministry of Health and Sports, 2009) for the French rhythmic gymnastics diploma shows that the skills to be developed by coaches are influenced by a prescriptive approach to coaching. Understanding the different domains (physical, mental, technical and artistic) seems to be a prerequisite for effective coaching. From this point of view, the creative dimension linked to the unpredictable and dynamic circumstances of coaching situations is neglected and the real intervention practices with gymnasts are not taken into account. However, some authors, such as Sève (2004), show that there is a gap between the knowledge that expert coaches use effectively in a situation and the official models given in coaching textbooks that are recognised for their training purposes. Rouzic (2015) follows the same path, showing that among the logical sequences of professionalisation of coaches, starting with established training seems to be the most controversial. He suggests that "the training of coaches can begin with situations that arise in the field, serve to open up questions about them and then use the sciences to analyse them and help find solutions, with the sole aim of better reinvesting in the field itself". A literature review (Bobo-Arce & Mendez-Rial, 2013) shows that the majority of studies on RG focus on the analysis of performance and not on the activities of an RG coach. A recent study (Sterkowicz-Przybycień & Purenović-Ivanović, 2021) is interested in defining the essential professional activities for RG coaches, but this study uses a quantitative approach with questionnaires. Only one study has focused on characterising the interventions of coaches in real situations in RG (Loquet, 2011) and has examined relevant and intelligent information that is often not accessible to those who practice the sport.

#### **The enactive phenomenological framework for analysing typical actions in rhythmic gymnastics**

The originality of our study lies in its qualitative approach, based on an enactive phenomenological framework (Poizat, Flandin & Theureau, 2022, Poizat & San Martin, 2020; Theureau, 2015; Vors et al., 2018, 2019), in order to closely examine the experiences of coaches. Qualitative research is particularly helpful in describing and understanding behaviours and experiences in a specific context (Keegan et al., 2014). The qualitative four-E approach (Rochat et al., 2017; Theureau, 2015; Vors et al., 2018) of an enactive phenomenological framework is useful for this study mainly because it allows us to access the significant experience of the actors. Significant experience is the meaning that the actor assigns to his actions in the situation, according to the semiotic approach to cognition and action inspired by Peirce (1931-1935) (Rochat et al., 2017; Seifert et al., 2017; Theureau, 2015; Vors & Gal-Petitfaux, 2015). This semiotic approach considers that human experience is composed of meaningful units such as intention and perception, as used in this study. Thus, significant experience corresponds to the meaningful units that can be described, commented on, and displayed by the participant. We can access participants' experiences through their meaningful dynamics (Varela et al., 1992). This enactive phenomenological framework, presented by Rochat et al. (2017) as the four-E approach, investigates human activity, following Theureau's approach (Theureau, 2006, 2015):

1. Embedded in the dynamics of the changing situation, i.e. considering the flow of action inseparable from its context (McGann et al., 2013). This perspective is related to situated learning and cognition, which sees cognition as interdependent with the context of mobilisation.
2. Extended by artefacts, i.e. considering the action supported by objects or things of the environment (Norman, 1993). This perspective makes it possible to understand the link between artefact and situated cognition.
3. Embodied as recurrent sensorimotor patterns of perception and action, i.e. considering action and sensation as an inseparable whole (Varela et al., 1992). This perspective allows us to access situated cognition during the participant's action.
4. Enacted by bringing the world of a cognitive being into an actor/environment coupling, i.e. considering that action and cognition emerge in the situation (Varela et al., 1992). This perspective allows us to analyse what kind of action and cognition emerge during the action in situ.

From this point of view, the actor's meaning is constructed during the action and can be revealed following a rigorous phenomenological method using a self-confrontation interview, known as the enactive interview (Theureau, 2015). This qualitative approach provides a different perspective on the activity of coaches, as we can analyse the type of action that emerges during the intervention, the signification of the action, the objects or tools that support the action, and the temporal dynamics of the experience. Some recent studies have demonstrated the fruitfulness of this qualitative approach using this enactive phenomenological framework in the

fields of sport (Mascret et al., 2022; Seifert et al., 2017) or education (Girard et al., 2022; Vors & Gal-Petitfaux 2015).

### **Objective of the study**

This case study, using a qualitative approach based on an enactive phenomenological framework to examine the coaches' experiences in detail, investigates the interactions of RG coaches with their environment and gymnasts; and explains how they construct themselves in a specific context (gymnastic and artistic sport that is almost exclusively female). The aim is to formalise the characteristics of the typical actions of RG coaches that make it possible to involve the gymnasts in the activity. In particular, we wanted to analyse only the visible behaviours in order to study the underlying meaning of their behaviour. It is a case of studying the way in which coaches perceive, interpret, feel and choose to interact with their gymnasts.

### **Material & Methods**

#### ***Study context and participants***

Four female coaches, aged between 33 and 50, with experience in RG (more than 10 years of experience - diploma from the French Gymnastics Federation) and in the practice of the sport, took part in this study. They are professionals working in national clubs with gymnasts aged between 12 and 22.

#### ***Data collection***

For each coach, three training sessions during a competition period were used to support our observations. The aim was to prepare the gymnasts to perform at their best during two competitions. These were sessions based on RG-specific group work, relating to the training of a group of five to seven gymnasts in the same age group: "minimes" (11-12 years), "cadettes" (13-14 years) and "juniors" (15-16 years) at national level. The data collected were derived from :

- (1) observations and audiovisual recordings of the coach's behaviour and communication. The data were recorded using a video camera placed in a corner of the gym and a dictaphone carried by the coach. In total, 12 training sessions were filmed and recorded (36 hours).
- (2) enactive interviews (Theureau, 2006) conducted a posteriori with the coaches. Twelve interviews were conducted. Faced with the audiovisual recordings of their interventions, the coaches were invited to explain their actions by being asked questions about their actions and communications and about the meanings created in the action on the spot. The coaches were asked to give a precise description of their actions (What did you do?), their intentions (What are you trying to do at this moment?) and their perceptions (What are you paying attention to? What did you find?) at each moment of their activity.

#### ***Data processing***

The data were analysed in several stages:

- (a) transcribing the materials and building a database from the audiovisual data and the enactive interviews.
- (b) The sequence of actions and the verbatim account of the enactive interview. This stage consisted of presenting the recordings and interviews in a usable overview. The sequence of the coach's activities (actions, communication and movements) was reconstructed by synchronising the times of the transcriptions of the communication data, the descriptions of the filmed actions and the enactive interview data.
- (c) Reconstruction of individual action sequences. In order to reconstruct the action sequences of each coach, the processing consisted of a joint analysis of the observation data of their activity and the enactive interview data. This analysis was carried out with the help of categories for the analysis of experience, derived from the enactive phenomenological theory (Theureau, 2006). The analysis of the interviews consists in identifying the intentions (what does the coach want to do at a given moment?) and perceptions (what elements does the coach take into account in the situation?) that structure the actions, communications and movements seen in the video.
- (d) Identification of the typical actions of the coach. This step made it possible to use the repetition of actions and the types of spatial and temporal structure to identify the typical elements in the way the coaches acted, communicated and gave meaning to their actions and those of the gymnasts. Typicality corresponds to four aspects (Durand, 2014): descriptive (the typical occurrence presents the highest number of characteristics of the experience analysed in the sample of participants and situations studied), statistical (the typical occurrence is the one most frequently observed in the sample studied), generative (the typical occurrence has a tendency to recur when conditions similar to those observed are reproduced) and significant (actors express a sense of typicality when asked about it during the interview).
- (e) the analysis of the expression of different typical actions in relation to the spatio-temporal structure.

### **Results**

Our results highlight four typical actions (guiding, checking, encouraging and pacing) of RG coaches that follow a logical sequence in a spatial and temporal structure.

#### ***Spatial and temporal structure of the coach's activity***

From a temporal point of view, the session is made up of three sequences that can occur at any time:

- a period of work, defined as a moment of choreographic creation (gymnasts carry out choreographic suggestions), technical precision (gymnasts perform technical movements) or repetition of technical elements

(gymnasts repeat the same element of the routine several times). As competitions approach, work on precision and repetition is prioritised.

- A presentation period during which the gymnasts perform the entire routine in front of the coach.
- A break period, which includes an assessment by the coach of what needs to be done, a rest period linked to the need for the gymnasts to recover physically and time to explain the work to be done.

From a spatial point of view, we have highlighted three areas:

- The whole of the training area, where the coach is in contact with the gymnasts.
- The boundary line in front of the training area, the coach moving along this line or standing in a specific place.
- The location of the sound system, the coach sitting in a chair, at a table or nearby.

By positioning himself in these different zones during the session, the coach alternates between moments of immersion in the group and moments of being outside the group. During an enactive interview, coach 1 explains: "At the beginning of the session I position myself opposite them, that's important for me. During the working and presentation phases I am closer to them, I want to be next to the activity, then I go back to evaluate the result, to be an observer". These remarks are emblematic of the spatial organisation of the coaches and demonstrate moments of immersion within the group as well as moments of being outside the group. The space used is linked to the context of RG, which is practised on a 13mx13m surface and is accompanied by music.

### ***Typical and circumstantial organisation of actions***

Coaches focus on four typical actions: guiding, checking, encouraging and pacing. Each action seems to be linked to specific intentions and perceptions depending on the time of the session.

#### *Guiding*

Guiding enables coaches to improve the performance of gymnasts by giving them instructions for training purposes and helping them to progress. The coach is focused on success and feels useful: "there is a need for precise instructions, I need to feel as much as possible that they have understood and that I can be useful" (coach 1). However, depending on the period, this action is not linked to the same intentions and perceptions.

During the work period, the coach wants to train the gymnasts by explaining and correcting their movements: "I repeat the exchange to give them a technique with which the exchange works" (coach 2). Her main intention is to improve the movements performed and also to reassure the gymnasts by giving them the keys to success: "I demonstrate, I explain, I reassure them, it helps" (coach 3). The coach focuses on what she sees the gymnasts doing and on their mistakes: "If I see one, I tell them to try harder, because it is still a bit too low" (coach 3). This guidance is also linked to the gymnasts' reactions: "I pay special attention to this gymnast because I need to see her face, her lack of concentration irritates me because I know that if she doesn't concentrate, I'll have to repeat myself" (coach 1) and her own emotion at the moment (negative emotion): "I get annoyed with a gymnast because I start to get desperate because I don't understand why I can't get her on the right track" (coach 2).

During the presentation period, she focused on the gymnasts' memorisation of the corrections previously given: "I repeat a clarification of the correction of the expression that they forget every time" (coach 3). This example conveys her desire to be there as a guide to enable the gymnasts to succeed at a particular moment. This implies knowledge of the choreography being observed and the desire to see certain elements succeed. The guidance takes place during an "accumulation of little things" (coach 2), which leads to the routine being different from what the coach wants.

During the break, her focus comes back to the gymnasts and what they need to do, and she gives them notes to solve the problems observed and help them progress: "I'm in the process of going through things that I've committed to memory to go back to them. I give them notes to learn from" (coach 1). The perception of the differences between what the gymnasts do during the presentation or work routine and what the coach wants is a crucial element when this action takes place: "I tell them about this move because it was not nice" (coach 3). Differences can also be found in the movements that the group performs incorrectly, in the choreographic effects that the coach does not notice, and in the lack of investment on the part of the gymnasts. When this discrepancy does not exist, we find the coach in an encouraging action.

#### *Checking*

During the work and presentation periods, checking is a method of approving choreography and technical decisions by analysing the gymnasts' performances: "I watch, I see if there are mistakes. I look to see if everything that has been corrected has been applied" (coach 4). This action differs from guiding. The coach does not contribute and does not speak. This focus is linked to the characteristics of RG, which is evaluated by a jury and is subject to the code of points: "I always sit down when there is a presentation. I judge to see imperfections. I take a step back" (coach 1). This judging activity sometimes involves taking notes in order to have a written record of their actions: "I take notes so that I don't forget that these are the corrections I have to give them" (coach 3).

What the coaches focus on in their observations is the link between the gymnast's behaviour and investment, critical moments and key instances in the routine, and their own perceptions: "I concentrate on the effect on the eye and on what I'd like to see" (coach 1). The coach remains in a checking activity if she does not

see any discrepancy or negative emotion. The checking activity turns into guiding when the coach sees an error or is disappointed by a movement that is being performed: "I watch, I tell myself that I tried to be calm during the presentation, but in the end I have to correct every time" (coach 4). This example illustrates the dual role of the judge, who evaluates a routine at a given moment, and the coach, who wants to improve the routine by giving guidance to her gymnasts.

*Encouraging*

During the three periods of the session, encouragement allows the coach to reassure the gymnasts by creating a sense of success and well-being when they fail to perform an element correctly: "I told them it was good to calm them down because they didn't get it right several times. They need it" (coach 3). A second intention is to give them self-confidence by encouraging them in their moments of success: "When they succeed, it is important to tell them that it was good because they take the hints" (coach 1). Success or failure are two triggers for encouragement, but they are linked to different expectations: encouragement after success makes it possible to highlight the gymnast's ability, and after failure it makes it possible to motivate them to continue working. However, when faced with failure, the coach is not always in a position to provide encouragement, especially if the failure is repeated. When this happens, the coach tends not to focus on the error, in order to avoid the gymnast putting too much emphasis on this element, and it becomes a moment of control or guidance.

*Pacing*

During the work and presentation periods, pacing is used to energise the session by keeping the gymnasts' attention and allowing them to work together, which is essential in group work: "For me it's important to pace out loud to give them momentum in this work. It brings them together, in unison. For me, it's the advantage of extra attention" (coach 1). Using specific language, the coach keeps time and paces the routine, alternating with periods of checking, guiding and encouraging the gymnasts: "Ready and 1 and 2 and 3 and 4 and 5, 6, 7, 8. That was really good. And ... and from the top. Right, when you wait, turn to the right. And again. Ready and. Okay, good. Think about your expression, more of it" (coach 3). Throughout these routines, significant modulations in the voice are noted, allowing the coaches to re-energise with higher intonations and maintain strong involvement and dynamism in the gymnasts' work. What this means for the coach is a view of both the group as a whole and the individual behaviour of the gymnasts as they participate in the action. At all times, the coach is looking to get the whole group to work, while at the same time being aware of individual behaviour.

*Expression of typical actions in relation to the spatio-temporal structure*

Figure 1 explains how the coach's action is expressed in time and space by identifying how she adjusts her actions over the course of the session.

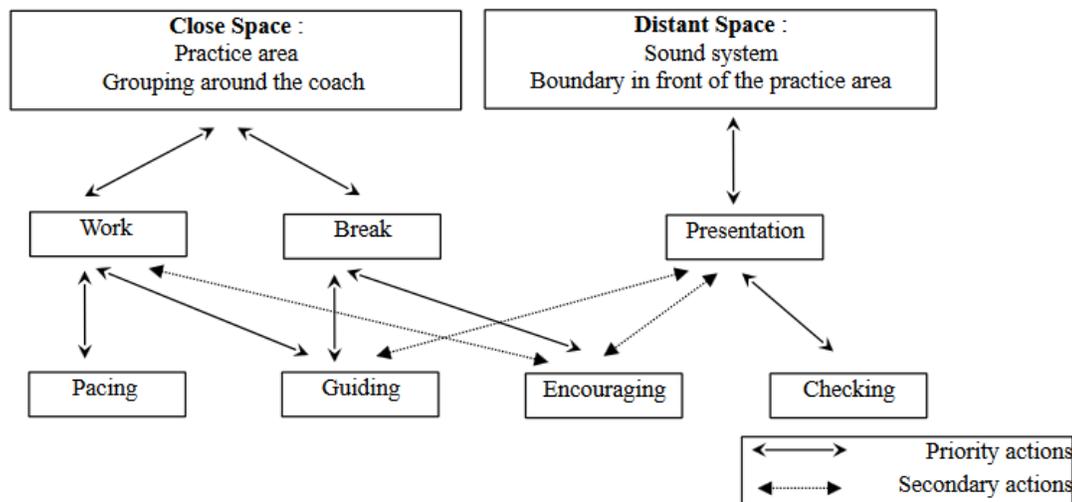


Figure 1 : Typical actions of rhythmic gymnastics coaches relating to the spatio-temporal structure of the practice.

**Discussion**

Our results show the existence of recurring features in the way coaches interact with gymnasts. These are four typical actions: guiding, checking, encouraging and pacing, which are both generic and individual to each training activity. It also appears that the coach has a dynamic activity that is linked to the spatio-temporal structure of the session. We cannot generalise the results of this study to all RG coaches, but it allows us to reflect on the way in which coaches act.

*The case of rhythmic gymnastics coaches: between generic and individual*

Our results allow us to identify four typical actions that reflect a generic character and are consistent with the results of different studies (Lewis et al., 2014).

In our study, the action of guiding, which makes it possible to support and optimise the ability of gymnasts to learn technical physical and artistic skills, is related to training (Granger & Rhindt, 2014). This action is particularly useful in gymnastic activities where the movements are technically complex, performed quickly and in different spaces. The coach intervenes in unusual and unpredictable situations. This complexity and uncertainty requires some interpretation and constant adjustment (Arripe-Longueville et al., 1998) and leads the coach to give meaning to the movement seen in order to define the problem and make it understandable. The coach sees the difference between her expectations and what she sees in the body and apparatus. As defined by Rolland & Cizeron (2015) for expert gymnastics coaches, we could refer to an activity of form-shaping that consists of measuring 'the degree of dissimilarity and distance that separates gymnastics performance from copying the model'. The coach is not limited to reproducing a pre-established model, but is also in a "process of reincarnating the model in a human interaction between gymnast and coach". The coach interacts with the gymnast by emphasising both the technical aspect of her work and encouraging her to take responsibility for her work: she incorporates the particular rules rather than consciously following them. (Loquet, 2011). Our findings reveal this process, highlighting the relationship with the individual as the trigger for their coaching activity. However, RG is practised as a group and so the analysis of the training session shows that the guidance changes between the phases of focusing on an individual gymnast and focusing on the group. It shows the interaction between the environmental conditions and the characteristics of the different actors there. The contribution of the coach seems to depend on finding a balance between monitoring the dynamics of the group and extending the individual intervention.

Encouragement also seems to be a very common behaviour among coaches (Granger & Rhindt, 2014). RG coaches encourage their gymnasts in order to reassure them and build their confidence. Gymnastic activities create stress due to the obligation to successfully perform elements at a given moment, and it appears that positive relationships with coaches support gymnasts through these challenges and encourage them to overcome failure (White & Bennie, 2015). Coaches who are perceived to rely on an autonomy-supportive motivational style (acknowledging young people's concerns or allowing young people to make choices without putting pressure on them) are likely to improve young people's motivation and well-being (Haerens et al., 2017).

The third typical action defined is checking to approve choreography and technical choices that improve performance. This checking is carried out by observation, a behaviour that is very common among coaches (Cushion & Jones, 2001) and that appears to be necessary for athletes. Periods of checking without guidance allow athletes to concentrate on their individual skills and not feel pressure from the coach. Guidance should only be given when necessary (Potrac et al., 2007). Observation appears to be multimodal in nature, combining 'seeing' and 'feeling', as demonstrated by an expert participant in contemporary dance (Brun & Gal-Petitfaux 2014). This raises the need to be fully aware of what the students are doing, in other words, to observe them while taking note of perceptions during the activity. These elements are similar to our study, where the coach focuses on approving the choices by observing the gymnasts' performances, but also by taking stock of the emotions they feel. What is important for them is the absence or appearance of discrepancies between the performance and their expectations. As Corsby & Jones (2019) put it, 'seeing' is not only what the coach observes, but is also created through particular and negotiated exchanges; 'seeing' is a process of attempting to make contextual information coherent.

Coaches also pace the session to make it more dynamic by keeping the gymnasts' attention and allowing them to work together. Unlike the three actions mentioned above, we did not find any study in the literature describing this type of action by coaches, especially in gymnastic and artistic activities, although in our study this action plays an important role and seems to be key to the different sessions observed. We can hypothesise that this action is specifically related to RG. Rhythm through music is one of the essential elements of the activity, both in the development of an artistic project and in a technical performance (Chiat & Ying, 2012). RG has a strong connection with Dalcroze's eurhythmic methods, which are a means of translating musical rhythms into physical movements (Dalroze, 2007). These intentions are in line with studies that focus on the influence of music on behaviour in sport. Music has been shown to have an effect on performance (Elliott et al., 2004) and engagement during training (Karageorghis et al., 1999). It has also been shown that the aspect of music that had the greatest effect on physical effort was its rhythm (Priest & Karageorghis, 2008). These authors also demonstrated that the act of modulating the rhythm makes it possible to increase the engagement of athletes in the activity. By pacing and modulating her voice, the coach creates a musicality that allows her to communicate her intentions to the gymnasts.

### ***The dynamics of the actions***

All the actions identified (guiding, encouraging, checking and pacing) converge towards a common goal, which is to present an aesthetically accomplished routine that allows the gymnasts to progress individually and collectively. The coach wants to both help and control the individual and the group, and through a detailed analysis of the coaching experience we can observe that these individual actions are not used in isolation. The dynamics of the actions performed and the intentions of the coaches are based on continuous adjustments on their part, which echo the metaphor of "orchestration" in sports routines, as defined by Jones & Wallace (2006). Training is seen as the management of events, which involves continuous decision making in relation to contextual events (Jones & Wallace, 2006). Actions are coordinated to plan, organise, monitor and respond to

developing circumstances in order to improve individual and group performance. This is our view. RG coaches create a dynamic activity for the entire session by alternating between different actions, each of which is linked to specific perceptions (perceptions of the choreography, the gymnasts' behaviour and/or their own feelings). These different actions are also organised into a structured and recurrent spatio-temporal dynamic. We could ask whether this spatio-temporal organisation chosen by the coach has an impact on the occurrence of typical actions. It seems that the spatial and temporal descriptors effectively structure the activity and reinforce the typical actions. The organisation of the training session seems to be cyclical and leads to a ritualisation of the session through the implementation of a routine: 1) the alternation of definite and identical time for each training session and 2) the alternation of proximity and distance of the coach to the gymnasts. A close proximity between the coach and the gymnasts implies a guiding and encouraging action and physical involvement with the gymnasts during work or breaks. On the other hand, a greater distance implies a controlling action that is physically conveyed through spontaneous gestures and specific positions that are not necessarily directed towards the gymnasts during the presentation of routines. These elements highlight the impact of the coach's spatial positions on their behaviour, which is inherent in the spatio-temporal organisation structured by the coach's own activity. The dynamics of the actions were influenced by the space/time system determined by the coach.

### Conclusions

The aim of this study was to describe the practices of experienced RG coaches through their typical training session activities during competition periods. Our results show that the coaches' experience is composed of subjective concerns, perceptions and intentions that are constantly changing over time. The originality of our results lies in the fact that the strategies identified contain a meaning for the coaches that is anchored in the desire to both help and control the gymnasts through four typical actions: guiding, checking, encouraging and pacing. All of these actions are continuously adjusted during the training session, depending on the coach's perceptions of the gymnasts and the choreography, as well as her own feelings. The dynamics of the actions seem to be partly structured by the spatio-temporal system organised by the coach herself. Although we are aware that this study should be extended to a larger sample, it gives us insights into coaching behaviour and could be the starting point for a broader study of coaching relationships. This study offers a reflection on the practices of RG coaches. It makes it possible to understand their intrinsic logical sequences, which would allow a modernisation of professional practices and questioning of training approaches, with a focus on the real life experiences of the actors. This study is significant in that it provides an analysis of the activity of expert coaches through the enactive phenomenological theory. This theory posits that by gaining access to the temporal dynamics of meaning constructed by actors during their activity, one can account for their interactions with the environment and explain how they construct themselves in a given context. Such access should help to better understand how expert RG coaches act and interact with gymnasts during training in order to improve learning and coaching.

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