

Coaches' Perception of Team Cohesion in National Teams

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Abstract

The main purpose of this study was to investigate how coaches experience and describe the phenomenon of team cohesion in national teams. Eight national team coaches from individual and team sports were interviewed. The interview guide was rooted in the theory of cohesion in sports groups and reflexive thematic analysis was utilized as our methodological approach. The results of the analysis identified four main themes related to cohesion: 1) *Being part of a national team is attractive*, 2) *Quality relationships*, 3) *Formal and informal structure*, and 4) *Adaptive communication*. The findings contribute to a nuanced understanding of cohesion in national teams through the coaches' perspectives

Keywords: *Coach-athlete Relationship, Coaching, Team Structure, Bonding, Communication, Elite Sport, National Team*

Sports teams are complex entities and perhaps a key characteristic exhibited by many teams is their difference in group dynamic perspectives (e.g., objectives, structure, task, ambitions, coordination) (Carron et al., 2012; Forsythe, 2014). In elite sport the main objectives are winning and presenting a performance, and specifically in interactive sport (e.g., soccer, handball, basketball), where the essence is that the players work collectively to achieve a common goal (i.e., winning the match). Furthermore, elite teams operate in an extremely competitive context, where both the team and the individual athletes are subject to external pressure (e.g., performance pressure, expectations, and social (dis)approval). This intense nature of competition is also present for the national teams and has sparked what some researchers have referred to as a "global sporting arms race" in which governments and national sport organisations invest ever-increasing sums of money into the development of elite athletes and ultimately their national teams (De Bosscher, et al., 2008). It appears that national team success has become a priority in government sport policy (e.g., Bloyce & Smith, 2010; De Bosscher, et al., 2008; Green & Houlihan, 2011; Henry et al., 2005; Houlihan & Zheng, 2013; Houlihan, 2001) with goals directly related to the achievement of outstanding

performances (international medal count) and higher positions in international rankings.

At first glance, a national team has many similarities with elite teams in general, but there are also key features that differentiate them. A national team in sport consists of athletes who represent a nation, instead of a specific club or region in an international sporting competition (Małczyński, 2022). There are also different selection criteria for eligibility to join these national teams based on geographical criteria and the rules of the respective national federations. Usually, it is the permanent citizenship of a country that determines whether one can represent the specific nation (being a passport-holding citizen of said country), but not dependent on living / being in the country and possessing the skills and abilities to access a national team in a specific sport. Different national teams in disparate sports may, however, vary in relation to the extent of the need for cooperation and coordination during competition/matches. In interactive team sports (e.g., football and handball), the demand for cooperation and coordination is crucial and a prerequisite for high performance (Giske et al., 2022). In other sports (coactive or individual sports) the need for interaction and coordination can be less, but still important during a competition (e.g., relay, team pace in cycling, rowing).

There are examples of team competitions in individual sports where the participant's individual results in competition are combined to generate a team result (e.g., ski jumping, gymnastics, archery, figure skating), where the actual need for group coordination and cooperation during competition is absent. Even with these differences in sporting competitions, it is evident that cooperation, interaction, and coordination are key aspects of performance in competition/matches and that group dynamics (e.g., cohesion) are vitally important for all national teams irrespective of the sport and an essential prerequisite for optimal performance and ultimately success. Former Norwegian World Cup alpine ski racer Aksel Lund Svindal (Career achievements: 9 World Championship medals, 4 Olympic medals, 2 overall World Cup and 9 discipline titles in downhill, super-G, giant slalom, and combined, in addition to 36 gold medals from World Cup races) stated it in the following way: "Alpine skiing is just an individual sport in the short period from start to finish, the rest of the time it is a team sport where factors such as communication, cooperation and unity are central and crucial for me to develop and perform as best as possible" (Aksel Lund Svindal, personal communication 7th of June 2021).

Participation in the national team provides the athletes with an opportunity to participate in the world's largest and most prestigious tournaments such as the European Championships, World Cup, and the Olympics. Moreover, being an athlete in a national team increases the athlete's status, media and public attention, and for many, it is a clear indication of having succeeded in the sport. An essential part of being a member of a national team includes participation in international tournaments which is characterized by an accompanying high psychological pressure and stress, intense competition and usually in combination with a demanding match/competition schedule (Kuettel & Larsen, 2020; Schwellnus et al., 2016). Thus, the team dynamics must support and promote resilience, stress management, possibility of optimal recovery and contribute to the athlete's wellbeing (Lopez-Gajardo et al., 2023; Muñoz et al., 2023; Vanhove et al., 2015; Woods et al., 2025). Furthermore, during a tournament it may be that dissatisfied non-selected athletes can create an unhealthy atmosphere and conflict. Therefore, it is crucial to focus on team dynamic factors that may prevent or control these challenges, in addition we need to have in mind that team dynamics are essential for optimal team functioning and performance. However, these challenges are common in most elite teams, and not surprisingly, the amount of research investigating different group dynamics features and concepts in sport has been extensive for many decades (Eys & Brawley, 2018; Martin et al., 2014).

The most heavily examined group dynamics concept in sport is cohesion (Eys & Brawley, 2019). Cohesion has usually been conceptualized as a multidimensional construct (Carron et al., 1985), and in sport consistently been defined as "a dynamic process which is reflected in the tendency for a group to stick together and remain united in the pursuit of its instrumental objectives and/or for the satisfaction of member affective needs" (Carron et al., 1998, p. 213). This conceptualization proposed that cohesion should be examined in relation to both the task- and social-oriented aspects of the group and that cognitions concerning the "cohesiveness of the group are related to the group as a totality and to the manner in which the group satisfies personal needs and objectives" (Carron et al., 2002, p. 9).

Further, these authors proposed that a group's level of cohesiveness could be measured through individual

member perceptions, supported by the following assumptions: (a) groups have observable properties; (b) individuals are socialized and integrated into groups and develop beliefs about those groups; (c) individuals' beliefs are based on the information gathered about their group; (d) individuals' beliefs are reflective of common within-group values; and (e) individuals' perceptions of the cohesion can be assessed through self-report questionnaires (Carron et al., 1998). Following the abovementioned conceptualization, Carron et al. (1985, 2002) undertook a systematic research program to develop the Group Environment Questionnaire (GEQ) to assess individual perceptions of group cohesion. Within the GEQ, items were specifically developed to examine a group's integration (i.e., a member's perception of the group as a whole) or their individual attraction to the group (i.e., a member's personal attraction to the group). In addition, both orientations could be assessed through task and social perspectives (Carron et al., 1985, 1998, 2002). The task perspective focuses on how well members are integrated and motivated towards the group's task objectives. Conversely, the social perspective focuses on how well members are integrated socially, and the degree to which they are attracted to the social aspects of the group. Taken together, the combination of these orientations comprises the original four-factor model (Carron et al., 1985): Group Integration-Task (GIT), Group Integration-Social (GIS), Attraction to the Group-Task (ATGT), and Attraction to the Group-Social (ATGS).

Several studies and a meta-analysis have established a positive relationship between performance and cohesion (Beal et al., 2003; Carron et al., 2002; Carron & Eys, 2012; Eys et al., 2015; Filho et al., 2014; Kozub & Button, 2000; Salas et al., 2015). In addition, studies have also linked high cohesion with less debilitating perceptions of anxiety symptoms, athletes' satisfaction, social loafing, team conflict, collective efficacy, team trust and team identity (Costa, 2003; Eys & Carron, 2012; Eys & Beauchamp, 2025; Eys, et al., 2003; Feltz et al., 2008; Haslam et al., 2020; Høigaard et al., 2006).

The relationship between coach behavior and team cohesion is also heavily investigated indicating that training and instruction behavior, positive feedback, democratic leadership, perceived justice, identity leadership and the coach-athlete relationship directly influence team cohesion (Carron & Eys, 2012; Haslam et al., 2020; Høigaard, 2020). In addition, coach behavior is also related to a series of other group dynamic factors which subsequently have an impact on team cohesion (Chelladurai 2007; Horn, 2008; Høigaard 2020). Therefore, the coaches' understanding and perception of what cohesion is, are of great interest in order to understand the phenomenon from an applied perspective. This perspective will give useful information about how to tailor the development of high cohesive performance units.

Building on former reasoning and the fact that no studies have investigated cohesion in national teams from the coach perspective, the first step should be taken to identify how cohesion is constituted in the national team environment. An appropriate step would therefore be to conduct qualitative studies of cohesion. Subsequently, the aim of the current study was to investigate cohesion in national representative teams from the perspective of the coach. Doing so, this study has the potential to expand the coaching and team dynamic literature by providing an understanding of how coaches perceive cohesion within a unique context and within teams with world class athletes.

Methods

The study aimed to gather comprehensive data regarding coaches' perceptions of team cohesion within national teams, making a qualitative research design with semi-structured interviews the most suitable choice (Patton, 2014). The research was deeply rooted in an interpretivist paradigm (Alharahsheh & Pius, 2020), which focuses on the subjective meanings and experiences of individuals within their social contexts. This was supported by a relativist ontology and constructionist epistemology. A relativist ontology suggests that coaches may have different perceptions and interpretations of reality, shaped by their personal experiences, while a constructionist epistemology emphasizes that knowledge is actively formed through social interactions and norms, including the interaction between researchers and coaches (Moon & Blackman, 2014). Central to this study from a constructionist viewpoint were several aspects: 1) the role of language in constructing meaning, 2) the collaborative process of meaning-making, 3) the focus on subjective rather than objective truths, 4) the iterative nature of the process, and 5) the importance of reflexivity. Together, these elements enabled an exploration of how coaches of national teams personally construct their understanding of team cohesion, highlighting the significance of diverse perspectives and interpretations.

Participants

This study utilized a qualitative approach and according to Marshall (1996) and Creswell and Creswell (2018), an ideal sample size for qualitative research will answer the research questions through data saturation. Furthermore, Guest, et al. (2006) stated that between 6-12 participants may be sufficient. Four selection criteria were observed in the current study: 1) Is/has been a head or assistant national team coach, 2) Has more than 4 years' experience as a national team coach, 3) Male and female coaches 4) Coaches from both female and male national teams, and 5) Equal number of coaches from individual and team sports. Purposeful sampling was used to select eight national representative coaches (six male and two female) from 7 different sports and from 4 individual sports (e.g. biathlon, ski jump, cross country, speed skating) and 4 team sports (e.g. handball, soccer, beach volleyball). Three of the participants were also former national team athletes. As a result of the challenges of keeping the participants anonymous, years of experience and age are presented as overall values. At the time the interviews were conducted, these eight coaches (with an average age of 54 years) had accumulated, in total, more than 70 years of experience as coaches of national representative teams.

Procedure

Ethical approval for this study was obtained from the Norwegian Social Sciences Data Service (722257), and procedures were in accordance with the ethical standards of the first author's university. Recruitment of coaches took place through telephone and e-mail agreements, either via the first author, the last author or mutual acquaintances. One of the coaches was used for a pilot interview, to evaluate and confirm that the interview guide was suitable for purpose (Creswell & Creswell, 2018). The results from the pilot interview were incorporated as an integral part of the data material, as it contributed valuable information. Six of the interviews were conducted digitally for practical reasons using the communication platform Zoom and two of the interviews were conducted in-person. Each interview began with a brief explanation of the purpose of the study, clarification of terms (e.g., expressing cohesion in line with

Carron et al., 1998, 2002) and what rights the participants had. Those conducted online were video interviews, where only speech was recorded. The video was only used to create the most natural setting for the interview. In the interview process, the term "cohesion" was used synonymously with the Norwegian word 'samhold', with the intention of increasing the coaches' understanding of the topic being discussed. The interview guides were anchored in Carron et al., cohesion model (1998, 2002) and consisted of three basic themes: (1) general perception of cohesion, (2) different aspects of cohesion (e.g., task, social), and (3) consequences of cohesion. Based on the interview guide, the coaches were exposed to general probing or assessment questions such as "What is the importance of cohesion in national team?" To ensure that the responses were sufficiently in depth, the guidelines set out by Rubin and Rubin (1995) were followed, and questions calling for elaboration, such as "Can you tell me more about the importance of cohesion in the national team?", were used to identify and describe the different understandings, dimensions and consequences put forward by the participants.

Post interview, the participants had the opportunity to ask questions or add further information if they felt themes or topics had been forgotten or wanted to elaborate more on one or more of the topics. The interviewees confirmed the accuracy and meaning of the selected quotations post transcription. The interview was rounded off with the participants being informed of the process and the further work associated with the study.

Analytical process

The analysis was conducted with an abductive approach, through continuous interchange between empirical findings and theoretical perspectives (Carron et al., 2002, Høigaard, 2020). This approach facilitates emphasizing an open and exploratory process to identify unexpected insights and illuminate underlying mechanisms. Our analysis was grounded in the data while we simultaneously used theoretical concepts and literature on team cohesion to deepen our analytic interpretations. This analysis process recognizes the researcher's role as an interpretative agent in the construction of knowledge, where subjectivity and interpretation are integral parts of the analysis process. All interviews were transcribed, and a thematic approach was applied in the analysis process (Braun & Clarke, 2022). NVivo was used as a data management program, where the six phases of reflexive thematic analysis were used: 1) getting to know the data material, 2) coding, 3) identification of themes, 4) review of themes, 5) defining and 6) naming themes. Phase 1 involved getting to know the data material and jotting down notes along the way. Through a systematic process in phase 2, codes were identified, named and produced with the aim of identifying the meaning behind the quotes from the interviews. The codes were mostly semantic, but not exclusively. In phase 3, a search was made for patterns in the codes, and various subthemes were identified. The subthemes were then later placed into themes (Braun & Clarke, 2022). In phase 4, systematic work was carried out in reviewing the various themes and validating that the themes matched the subthemes and codes. In phase 5, each topic was named to provide conceptual clarity for the reader, with a summary related to the issue. In the final phase, the report itself was written.

Based on the dataset which included 237 codes we worked down ten subthemes and four main themes. Reflexivity in the work has been central, to have a conscious and critical reflection on one's own perspectives, influence and preconceptions (Braun & Clarke, 2022;

Marshall & Rossman, 2016). The analysis process was a dynamic process, where the codes were analyzed several times so that new or alternative points of view could emerge (Widerberg, 2011). To protect participant anonymity, the sport and participant names were removed or replaced with pseudonyms. The two female coaches were given the pseudonyms Ane and Mie, while the six male coaches were given the pseudonyms Stig, Jens, Nils, Max, Stian and Ingar. Interviews were conducted in Norwegian; the authors translated all quoted material into English and then back-translated those quotes into Norwegian to check for shifts in meaning (Younas et al., 2022). An English-native member of the research team reviewed the translations, and the research group discussed the content and meaning of each quote to reach consensus.

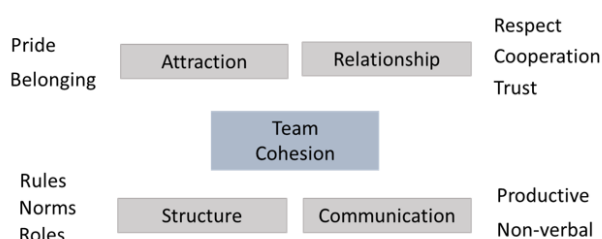
Ethical considerations

The study has followed NTNU's guidelines for data collection. The principle of data minimization was used, where only audio recordings were stored on NTNU and Nettskjema's secure storage services. All participants have signed an information letter, including a statement that they could withdraw at any point in time with no justification. The participants had the right to access the data material and could withdraw at any time. All the participants agreed, and none withdrew. All data has been treated confidentially, and based on their distinctive positions, it has been chosen to anonymize the participants' sports to avoid possible identification.

Results

The thematic analysis generated four main themes linked to cohesion in terms of: Being part of a national team is attractive, Quality relationships, Formal and informal structure, and Adaptive communication (see Figure 1).

Figure 1: National coaches' perceptions of cohesion in national team



Being part of a national team is attractive

This theme is related to the actual recognition or pride associated with being an athlete on a national team in addition to an emotional bond to the team, and a feeling of team belonging and membership that positively impacts the athlete's identity. The category consists of two sub-themes: feeling of pride and experience of belongingness.

Feeling of pride involves a positive feeling of belonging to something greater. Feeling a shared pride of carrying the flag 'on the chest' in international competitions and performing at the highest level was described by the coaches as highly attractive.

I think it's largely about championships, meeting other nations in major tournaments—that is the dream for so many. And I think that stands above everything else. Representing, being one of the few

who represent Norway in championships. The pride in that. (Mie)

Experience of belongingness focuses on experiencing a positive identity and connection to the team, where athletes feel understood, accepted, and valued by the other team members. The national team, as a performance unit, was described by the coaches as a place that many athletes wanted to be a part of. Several coaches described the national team as a unit or family, where everyone had a common goal to perform their best for the team and the nation.

When the ambition is to see how far you can go and stand at the top of the podium. I also think that in 'the sport,' to talk about it, it's also about belonging to a performance unit that can go far and being part of that is a major motivation. (Ingar)

Quality relationships

This theme includes various relational qualities that the coaches described as important components or aspects of cohesion. The category includes the following three subthemes: mutual respect of differences, cooperation on and off the field, and trust as a building block.

Mutual respect of differences between athletes means showing care, consideration and valuing others in the team. Respect in the team was seen as important among the coaches, as the athletes could have different needs. The teams consisted of many different athletes who had to be allowed to be themselves and this had to be considered. Also, respecting each other led to a better tone in the team.

They also must be allowed to be different, be allowed to be themselves. There should be respect for that, it's not like everyone is molded into the same mold, but in some cases? there has to be an expectation that this is how we feel... But beyond that, people have to be allowed to be themselves and be confident in that. (Jens)

Cooperation on and off the field indicates how athletes in the team help each other in different situations and contexts. Being supportive, showing care and being fair were seen as important attributes by the coaches to create a positive communication and performance culture.

Good unity in a national team, there are many ways to look at it, but one way is that they both help each other both in and outside of training, and in and outside of competition arenas. So that means that, even though they are individual athletes, they help each other to be good in training. We push each other to carry out the training together, to make sure that there is a high enough quality on the training field. (Jens)

Trust as a building block indicates that the athletes have a feeling of faith, security and dependence towards the other athletes in the team. Trust was described as something fundamental by the coaches, to be able to work together, have open communication and support each other.

I think we've worked well on that, so at the bottom there's trust. That's the building blocks of the whole concept, there's unconditional trust and respect for. What you come up with. (Nils)

Formal and informal structure

This main theme includes team features that the coaches described as important components or aspects of cohesion. This theme includes the following three subthemes: Adherence to the team rules, adherence to the team norms, and the importance of role acceptance.

Adherence to the team rules was primarily related to the written rules and guidelines. Frequently these rules designed by both the athletes and the team coaches/administrators aim to establish a healthy and efficient team environment. The driving rules were often adapted to the team's specificity and reflected the values in the team and expectations of the players.

They were the ones who defined what to do if someone doesn't comply with the guidelines they set themselves. And the reason we did it that way was because they had to have ownership. They had to have a sense of belonging and they had to be able to identify with it, and then it becomes a lot easier when, when I as a coach can say HELLO. This is what you have decided, you have said that you want it that way. And it's also a lot easier because helping each other, because everyone knows what applies at any given time. (Jens)

Adherence to the team norms were described as the 'unwritten rules' linked to various behavioral standards that created stability in the team. The coaches described this as 'being happy on behalf of others' and accepting choices that promote the team over the individual. Being loyal to the team and being inclusive was something several coaches described. The norms were engrained in the culture of the team.

Even in those situations where they are competing against each other, for the last place. So, show care, show compassion for the one who doesn't join, at their own expense. The fact that the one who doesn't join, gives his congratulations, says good luck and congratulates on a great race. Show that we are a unit even though we are competing against each other. (Stig)

The importance of role acceptance was described by the coaches as highly necessary to perform a task effectively and achieve the results the group require. Role acceptance refers to the social and task-related conditions within the group. Athletes accept their role regardless of how satisfied they are, because they must fulfill a role that is important for performance and efficiency in the team.

For a group to function, you must continuously work on tolerance in the group and through that accept differences in each other. When you work with teams, not everyone likes each other equally, but as a group we must tolerate and accept each other, for a common understanding of what is required to achieve the goal the group has set itself. It is important that everyone understands their role in the team. So, we work incredibly hard on values and commitments. This process is worked on continuously and is crucial to achieving the goal, to win medals. (Ane)

Adaptive communication

This theme includes the following two subthemes: productive communication, and non-verbal communication.

Productive communication implies a constructive, effective, and respectful way of talking in the team, both socially and in relation to the tasks and challenges they may face. The coaches highlighted that productive and positive communication is particularly important, to keep up the team's spirits, which is very demanding, especially in adversity. They also emphasized that productive communication contributed to smaller energy leaks, as they focused more on the things they could do something about.

When you are positive in a group, there are many other positive side effects of that. Like when you are positive socially in a group, you have, shall we say... less fear of failure, easier to ask for help, yes. Learning from others. (Stian)

So, but that's the thing about being very clear at the start about how we want it to be here. How are we going to talk to each other, what has a positive effect on another person, and what doesn't. And it affects us coaches just as much, sort of. Giving feedback makes the runners better, what makes them realize that they're not good. It's about the whole way you communicate. So that's kind of, what I feel is the most important thing, is that you have a good and clear plan for how you're going to work together. (Max)

Nonverbal communication represents the athlete's awareness of how their non-verbal communication can be expressed to other athletes. Awareness of facial expressions, attitudes, movements and gesticulation was described as important, as this provided information about the attitudes, feelings and intentions of the athletes and the coaching team and administrators.

So, we work quite closely together, they became a little more aware of how their behavior affects others. Also, it's not just what they say, but also what they. The body language they have and yeah. So that process there was very useful, I think a lot of people learned from themselves and when he was supposed to teach how he laid the lines in his race and for the others, he kind of had to think through it a little more. (Max)

Discussion

Cohesion has been identified as a crucial factor for group functioning, well-being, and performance and is one of the most researched phenomena within sports group dynamics research (Beal et al., 2003; Carron et al., 2002; Evans & Dion, 2012; Eys & Brawley, 2018; Haugen et al., 2023; Høigaard, 2020). Surprisingly, however, there are few studies explicitly examining cohesion within national teams or indeed from the vantage point of coaches. This is unexpected given the well-established connection between leadership and cohesion in both research and literature, highlighting a significant responsibility for coaches in elite contexts to cultivate high-performing teams (see Eys & Carron, 2012; Carron et al., 2012). Based on the fact that cohesion is a critical factor in the development of high functioning performance teams, developing an understanding of the coaches' perceptions of this phenomenon is vital. Thus, the main purpose of this study was therefore to investigate coaches' perceptions of team cohesion in national teams.

Through qualitative semi-structured interviews with eight national team coaches across various sports, this study sought to identify and categorize the findings based on four main themes, and two or three subthemes, that represent coaches' perceptions of team cohesion within national teams (see Figure 1). The results indicate that players perceive team cohesion within the national team as a multidimensional phenomenon, supporting previous research (Carron et al., 2002; Eys & Beauchamp, 2025; Eys & Brawley, 2018; Forsyth, 2021; Høigaard et al., 2026). Sports research has consistently utilized Carron's model (Eys & Brawley, 2018), which distinguishes between social cohesion and task cohesion. Social cohesion relates to interpersonal attraction and emotional support experienced among team members, while task cohesion pertains to the agreement on goals and the strategies for achieving them (Carron & Eys, 2012; Høigaard, 2020). The findings of this study are partly in line with Carron's model suggesting that cohesion in the context of a national team comprises both a social / emotional and a task / structural dimension. It is important to emphasize, however, that these aspects of cohesion are not discrete and mutually exclusive factors. There is ample reason to believe that these factors are interrelated and integrated into facets that collectively constitute the phenomenon of cohesion.

Cohesion perceived from the coaches' perspective amplifies our first category *attraction* containing pride and belonging. This parallels to Beal et al. (2003), who stated that group pride emphasizes the importance that members place on identifying with and being part of the group. Experiencing pride and belonging to the national team may encourage players to invest and engage more purposefully in the team's activities and play, thereby impacting the task or structural aspects of cohesion (Bruner et al., 2014). Attractiveness aligns with research on transition rituals (Høigaard, 2020; Romagna, 2021), where the ritual itself is exclusive. The national team can be seen as one of the most exclusive sports teams to join, as it brings together the best players from all over the country. Players who join the national team have been considered worthy of wearing the national team jersey and can therefore be thought to have a more conforming behavior towards the team values and philosophy and contribute to the team's cohesion and team attractiveness. Furthermore, belonging can firstly be related to the fact that when team members interact, they are often more likely to develop true friendship bonds. According to the exposure hypothesis, individuals who are familiar with and are similar to one another (i.e., elite athlete in the same sport) are more likely to reciprocate positive feelings and develop bonds of friendship (Reis et al., 2011). This in turn, may lead to an increased willingness to engage in personal and informal communication, which may serve to further strengthen friendship bonds between group members and may even lead to group member social interactions outside of the group context (Chowdhury, 2005). However, and secondly, belonging may also be understood in conjunction with social identity. According to identity theory, individuals strive to position themselves and define themselves as members of a group or category (Ashforth & Mael, 1989; Haslam, 2004). By making their membership in the national team visible (for example, by wearing a uniform), membership becomes clearer and more explicit and helps to reinforce team identity (Høigaard, et al., 2013; Haslam et al., 2020). This sense of belonging will reinforce the experience of being included and strengthen friendships.

The category labeled *relationship* contains the following three themes: respect, cooperation, and trust. Respect among teammates as described by the coaches is

seen as fundamental for creating a cohesive, supportive, and effective team, ultimately leading to better outcomes and more fulfilling team experience. Respect among teammates promotes inclusivity because everyone feels included and valued regardless of their background, role, needs or challenges. Furthermore, when teammates respect each other, it contributes to a reduced emotional conflict level because they are more likely to address disagreements constructively and with empathy. Being in respectful team environments will more easily support personal and professional growth and development, as they feel valued and then they will be more open to feedback and learning from one another.

Respectful interactions contribute to a positive team atmosphere and enhance cooperation. In national teams, coaches highlight cooperation among team members as vital in their understanding of cohesion. Team members' motivation and ability to cooperate are fundamental for development and a core characteristic in a high-performance unit. Researchers have also highlighted that communication and cooperation contribute significantly to strengthening the collective unit (McEwan & Beauchamp, 2014; Peters, 2020; Schei, 2023).

Coaches describe the environment for the national team athletes as unsafe, referring to the continuous pressure both from the outside (e.g. expectations from the nation, federation, media and other stakeholders') and within the team (e.g. role position, playing time, selection to the main sport competition such as World Cup, Euro championship tournament, Olympics) to deliver top results. In such environments, trust is seen as a decisive factor for developing a high performing team and crucial for athletes to bond together in a positive and constructive way.

Trust has been shown to be an important team dynamics factor and is often referred to as a psychological state characterized by positive expectations regarding others' intentions and behavior (Eys & Brawley, 2018; Rousseau et al., 1998; Mayer et al., 1995). Trust in teams has, however, been described as a shared perception among team members, with mutual expectations that members will act in the team's best interest and make themselves vulnerable to each other (Larsen et al., 2025). Based on the coaches' perception of cohesion, trust seems to be an interwoven part of their team cohesion description.

The category *structure* encompasses rules, norms, and roles, highlighting the instrumental function of cohesion (Severt & Estrada, 2015). This instrumental function serves as a framework or structure that maintains the group's integrity, enabling it to achieve both individual and collective goals. It aims to maximize the rewards gained from reaching these goals while minimizing any potential penalties or losses. Groups are typically formed to fulfill a specific purpose. For a national team, this often involves developing athletes and teams to reach their highest potential, compete on prestigious sporting platforms, and to win medals. In sports literature, the instrumental concept is often referred to as task cohesion. It represents the collective commitment of group members to their tasks, characterized by a "general orientation toward achieving the group's goals and objectives" (Brawley et al., 1993).

The coach rules, and associated values and norms, represent and form the structure that underpin the manifestation of cohesion and it is a roadmap for how to behave and work together most effectively. It is central in the concept of cohesion because it can lay the foundation to develop a strong cohesive unit. However, this demands that the "rules" highlight and reflect the component of team cohesion (see Figure 1). In addition, the effect of these

rules is dependent on the need for team members to accept them, live by them, and identify themselves within them. Subsequently the rules become the norms that represent the team and contribute to the construction of the team culture (Schein & Schein, 2017).

The final theme in the category is structure acknowledged roles. A well-balanced team where task roles and social roles are occupied was perceived as important by the coaches and a necessary precondition to enhance cohesion. Coaches' perceptions mirrored the existing group dynamics knowledge of roles and their importance (Eys et al., 2007; Fransen, 2014). Firstly, clear and accepted roles reduce role ambiguity and contribute to an organized team, ensuring that various tasks are covered and objectives are met and contributing to team cohesion by providing structure and clarity. Moreover, lack of role ambiguity reduces misunderstanding among team members and reduced role ambiguity promotes open communication and mutual understanding, which are vital components of team cohesion (Schei, 2023). Clearly assigned roles further encourage team members to take ownership of their responsibilities, which fosters a sense of accountability. When everyone is dependable and accountable, it reinforces bonding and trust, further enhancing cohesion. Finally, effective teams rely on the interdependence of their members and when roles are clearly defined, team members understand how 'their' work contributes to the larger team goals and how they depend on each other's performances (Giske et al., 2015; 2022; Holt & Sparkes, 2001).

The *communication* category encompasses two key themes: productive communication, and non-verbal communication. Coaches identified productive verbal intra-team communication as vital for fostering a growth-oriented team culture, enhancing team effectiveness, and promoting team cohesion. In forming cohesive teams or when defining cohesive teams, coaches stress the importance of maintaining open, clear, and honest communication, not only in training and competition but also during all social interactions. Additionally, there is a strong focus on creating an environment that encourages openness and expression of opinions, motivating athletes to address any dissatisfaction they might feel. This approach aligns with research indicating that teams in which members directly confront challenges with involved parties and demonstrate a willingness to find solutions are more likely to achieve improved well-being, self-confidence, motivation, reduced conflict, and decreased role ambiguity (Cunningham & Eys, 2007; Sullivan & Feltz, 2003). Moreover, intra-team communication has been directly linked to team cohesion (Høigaard, 2020; Schei et al., 2023; Sullivan & Feltz, 2003; Sullivan & Short, 2011).

In addition to verbal communication, coaches highlight the significance of non-verbal behavior. Non-verbal behavior includes facial expressions, posture, general movements, and gestures, serving as a sub-process of non-verbal communication (Furley & Schweizer, 2020). Non-verbal cues shape the flow and interpretation of communication; when aligned with or supporting productive verbal statements, they enable team members to navigate communication dynamics more effectively, fostering stronger relationships and potentially contributing to enhanced team cohesion. Non-verbal communication is also closely tied to emotional states and body language (Barsade et al., 2018). For instance, in volleyball, supportive communication has been recognized as a positive predictor of collective efficacy beliefs, whereas negative body language may foresee negative collective efficacy beliefs (Fransen et al., 2012).

Limitations, future research and practical implications

In this study we examine cohesion within national teams from the eight coaches' perspectives using a qualitative data collection with only one interview with the participants. At first glance it may be argued that this limits the extent to which findings can be generalized to other sports teams (e.g., at different levels or in non-national contexts) and may not fully represent the complex phenomenon of team cohesion in national teams due to the narrowed perspective from coaches alone. However, in line with Smith (2018), the present study possesses noteworthy generalizability potential by providing rich, contextualized descriptions and explicating the mechanisms that underpin observed phenomenon. The study enables theoretical (analytical) generalization and supports case-to-case transferability; consequently, the findings can inform understanding and practice in similar contexts beyond the immediate sample.

In this study, cohesion has not been explored from a gender perspective (considering both male and female teams or male and female coaches) or across different types of sports (individual versus team sports). Future research should therefore address these aspects to provide a more nuanced understanding of team cohesion within the national team context.

This study offers valuable insights for practical application. It sheds light on various facets of cohesion, which can aid coaches and sports psychologists in identifying and measuring factors that contribute to team cohesion. More importantly, these identified factors can serve as a roadmap for developing cohesion in national teams. However, it's crucial to note that cohesion is dynamic and multidimensional, with interrelated aspects influencing each other. Although the study examines and describes these factors individually, a holistic view of the findings—considering them as a combined toolkit—is advocated for achieving optimal cohesion. For athletes, understanding these components may enhance their perception of group dynamics within a team.

Conclusion

The main purpose of the study was to investigate coaches' experiences and descriptions of the phenomenon of cohesion in national teams, with the recognition that there is still much to explore and learn in this area. The findings show that cohesion is perceived as multi-dimensional in line with research literature, containing both task and social factors. Cohesion was perceived by the coaches as an important factor to create a growth minded team, by developing the team's social and task-related needs, in addition to the teams' performance. The study concludes that coaches who recognize and have a good understanding of how the various cohesion factors impact the team, will be better equipped to develop the team's cohesion and performance. The study also shows how the coach can influence the team's cohesion, through planning, motivation and evaluation, which from a practical standpoint, could help coaches and athletes to identify and apply the various factors to promote team cohesion and performance. These findings might be relevant to other national teams and other high-performing teams, which should be explored more in future research.

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