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Elite Coach Perceptions of Cohesion on Coacting Teams

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ABSTRACT

This study explored the knowledge and perceptions of elite coacting sport coaches as applied to team cohesion. Six experienced university cross-country running coaches who achieved high levels of success and recognition were purposefully chosen and interviewed for this study. Results demonstrated that these coaches valued cohesion and felt it played an integral role in developing team success and satisfaction, despite facing barriers such as intrateam competition and rivalry. Purposeful recruiting, choosing effective team leaders, setting and monitoring team goals, and encouraging social events were some strategies utilized to enhance cohesion and establish positive relationships among teammates. These findings provide a greater understanding of the knowledge of elite coacting coaches and cohesion.

Key words: Competition, Cross-Country Running, Personality, Team Development, Varsity Sport

INTRODUCTION

North American intercollegiate sports attract considerable media coverage and fan support, primarily with high profile *interacting* sports. Interacting sports involve teammates training and competing alongside one another while combining each player's diverse skills in an interdependent pattern of teamwork to achieve a common goal, as occurs in American football and hockey [1]. However, approximately 40% of Canadian collegiate sports are characterized as *coacting* [2]. These athletes also train alongside one another, travel together, and provide social and motivational support to each other. However, coacting sports differ from interacting sports because their athletes simultaneously compete against both opponents and teammates, as occurs in cross-country running, track and field, and swimming [1]. In other words, coacting athletes compete independently for individual recognition but also contribute to an overall team score. As a result, researchers have suggested that cohesion could be extremely difficult to develop and foster in such settings because of the importance placed on both individual and group objectives [3-5].

Cohesion reflects the strength of the social and task-related bonds among members of a group [6]. Cohesion has 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” [7, p. 213]. Carron et al.'s [6] conceptual model suggests cohesion is a multidimensional construct, meaning members integrate information from diverse aspects of the social world relevant to the group (e.g., environment, athlete factors, team factors). In turn, various perceptions and beliefs are generated and classified into two broad categories. First, *group integration* (GI) deals with the beliefs and perceptions individual members hold about the team. Next, *individual attraction to the group* (ATG) refers to each member's personal beliefs and perceptions about what attracts them to the team. Each of the categories is further divided into *task* and *social* cohesion. Task cohesion refers to the orientation towards achieving a collective goal or objective, whereas social cohesion involves an orientation towards achieving and maintaining social relationships within the group. Thus, the model has four related dimensions (*GI-Task*, *GI-Social*, *ATG-Task*, and *ATG-Social*) that are believed to act together in creating a sense of cohesiveness among the group and its individual members.

Research investigating cohesion in sport has historically focused on group interactions of interacting sports as opposed to more individual or coacting sports [8]. This emphasis may have been due to the long-standing assumptions that group influence is more important in team sports and detrimental to team success in independent sports [4], or that increases in cohesion will decrease productive rivalries between teammates [9]. Despite these assumptions, some studies have attempted to identify variables that predict cohesion in coacting teams [e.g., 10-13]. For example, Widmeyer and Williams [13] revealed that individual factors such as member satisfaction and intrateam communication were highly related to the development of both task and social cohesion in coacting teams. More specifically, their findings indicated that membership satisfaction was achieved by balancing positive intrateam competition, social interaction, and individual task improvement amongst members of the team. More recently, Evans et al. [10] investigated the nature of interpersonal relationships in individual sport teams. Similar to Widmeyer and Williams, their findings indicated that most individual sport athletes viewed their teammates as fundamental motivators and important to social facilitation. More importantly, however, Evans et al. [10] revealed that athletes felt group interaction was context-dependent and varied greatly on the sport. In other words, the amount of reliance group members had on one another (e.g., team objectives) could influence the degree of interdependence and the overall level of cohesion within the team. Thus, these findings provide some evidence from athletes regarding the importance of cohesion for individual/coacting sport athletes.

Further value for studying this topic can be seen in Carron et al.'s [8] meta-analysis of cohesion in coacting sports. More specifically, Carron et al. found the cohesion-performance relationship in coacting sports was stronger than interacting sports, though not significantly stronger. These results were surprising due to the nature of coacting sports, where fewer natural opportunities for developing cohesion exist [8]. An important conclusion from this meta-analysis was the cohesion-performance relationship could not be generalized across all sports due to several differences in team composition and athletes. Given these differences, it is conceivable that coaches may engage in different behaviors when dealing with coacting teams compared to interacting teams. Learning about these behaviors is important since coaches have linked team cohesion to improvements in team performance and success [14-16].

Coaches fulfill a range of different roles that include the development of life skills such

as teamwork, leadership, motivation, and work ethic [17-20]. For instance, Davies et al. [17] found elite University coaches created an environment where these skills and values were encouraged on and off the field of play. Loughhead and Bloom [16] noted the importance of including athlete leaders in team decisions and in establishing team norms. In addition, Vallée and Bloom [20] revealed coaches felt their responsibilities included the development of the person athletically, socially, and academically. All of these areas were found to be enhanced with a cohesive environment [14]. Furthermore, Murray [21] revealed coaches who created a more positive team environment (i.e., delivered positive feedback and social support to their teams) had higher levels of task and social cohesion. Taken together, it is conceivable that the behaviors of the coach directly influence the development of team cohesion.

The Coaching Model (CM) [22] is a theoretical framework which suggests that coaches approach their jobs by creating a mental model of both their team and athletes. This mental model is influenced by three peripheral components (e.g., *coach's personal characteristics*, *athlete's characteristics*, *contextual factors*). These components suggest that coach and athlete characteristics, as well as contextual factors, such as the weather or financial support, need to be considered in the development of the mental model. Coaches then incorporate these peripheral components to determine which of three primary components are used to maximize athlete development and performance. These primary components include: a) how they organize their season (*organization*), b) how they help athletes develop the appropriate skills during practice (*training*), and c) how they coach during competition (*competition*). The CM proposes that coaching success is associated with various interpersonal, cognitive, and operational aspects of leadership [23]. For the current study, the CM was used as a framework to describe how coaches developed and fostered cohesion in a coaching environment, while still maintaining the highest levels of performance both on and off the field of play.

Thus, the purpose of our study was to explore the knowledge and perceptions of elite coaching sport coaches as it applied to team cohesion. In particular, various components of team dynamics such as developing the team environment, setting and monitoring team goals, and overcoming intrateam competition were examined. To date, little research has investigated cohesion in coaching sports from the perspective of the coach, even though *coaching* sports represent nearly half of all Canadian [2] and American [24] university sport teams. This study has the potential to expand the coaching literature by providing an understanding of how coaches perceive and develop cohesion within the specific population of coaching sport teams. Findings, in turn, may lead to the development of more effective coaching strategies for teams faced with intrateam rivalry and competition.

METHOD

PARTICIPANTS

Purposeful sampling was used to select six high-performance university cross-country running coaches for the current study. According to Marshall [25] and Creswell [26], an ideal sample size for qualitative research will answer the research questions through data saturation. According to Guest et al. [27], between 6-12 participants typically are sufficient for reaching data saturation. Four selection criteria were followed in the current study. First, they were all current head coaches of a Canadian University cross-country running team. The sport of cross-country running was chosen due to its strong coaching nature where teammates train together, yet independently and simultaneously compete against one another in competitive situations. Unlike other coaching sports like swimming or track and field, each

cross-country team member competes in the same distance for each race. Thus, we deemed it best to stay within one sport-specific domain for interview consistency. Second, each participant had a minimum 10 years head coaching experience at the university level or higher in cross-country running. Third, they completed at least a Level 3 in the former National Coaching Certification Program (NCCP) and/or a competition stream certification (high performance) from the new NCCP¹. Finally, a group of knowledgeable individuals in the sport identified each participant as one of the best coaches in their field based on success in the community, classroom, and field of play [cf. 28]. Aside from the research team, the group of knowledgeable individuals included two highly accomplished cross-country and track and field coaches with over 35 years of combined coaching experience at the collegiate level. Overall, the current study included four coaches who won at least one national championship, five with international coaching experience, and six who received multiple coach-of-the-year awards.

INTERVIEWS

Face-to-face semi-structured, open-ended interviews were conducted with each participant following approval from the university ethics review board. This type of interview allowed researchers to initiate a topic of discussion, while giving the interviewee the freedom to answer openly with few restrictions and discuss what was regarded as relevant [29, 30]. This interview approach created an environment that was similar to an everyday conversation, allowing the researcher to build a conversation within a precise subject area and establish a conversation on a pre-determined subject [29]. Each interview lasted between one and two hours and occurred in the city where the participant was coaching, at a mutually agreed time, date, and location.

Prior to the interview, the primary researcher established rapport with each participant by engaging in a general discussion related to coaching and the sport of cross-country running. These conversations also involved discussions about personal athletic and educational background, as well as the number of years involved in coaching. The research team created the interview guide. Section one contained opening statements intended to introduce the main topic of study and to initiate the discussion (e.g., How do athletes' individual ability influence the team's atmosphere? What role, if any, does cohesion play on a cross-country running team?). Section two was based on Côté et al.'s [22] CM and Carron et al.'s [6] model of cohesion (e.g., How do you prepare for an upcoming cross-country season? How does the relationship between teammates influence the competitive environment? How does the relationship between teammates influence the training environment?) Lastly, the third section included concluding questions that allowed participants the opportunity to add any comments relevant to the study. The same interviewer and interview guide was used with each participant to ensure consistency.

DATA ANALYSIS

Thematic content analysis was used as a method to examine, analyze, and record patterns

¹ The new NCCP is made up of three streams and a total of eight contexts, each with its own requirements. Coaches in the competition stream usually have previous coaching experience or are former athletes in the sport. They tend to work with athletes over the long term to improve performance, often in preparation for provincial, national, and international competitions. The competition stream has three coaching contexts: introduction, development, and high performance.

<http://www.coach.ca/competitive-coaches-s15435>

within the data [31, 32]. Researchers have considered thematic analysis to be a very useful method for capturing intricate meaning within a data set [33]. This method helps provide a description of the data set from the researchers' perspective [31]. Prior to the data analysis, interviews were transcribed verbatim with minor edits. For example, names, schools, and locations were changed to code numbers to ensure confidentiality of each participant. Next, each interview was analyzed line-by-line and divided into distinct patterns called meaning units. Meaning units represent patterns of segmented text comprised of words, phrases, or paragraphs that convey the same idea and related to the same topic [34]. Each meaning unit was assigned a tag, inductively, relevant to its content along with a description of its meaning.

The primary purpose of an inductive approach is to allow the findings to emerge from the frequent and dominant patterns built into the raw data [31]. In other words, tags are assigned without trying to fit the data into a pre-existing model or frame. Once each meaning unit was tagged, they were examined for similarities and grouped together to form larger classifications called properties. Each property then received a tag based on the common features shared by the meaning units. Finally, the properties were examined and grouped into larger over-arching themes called categories, in a comparable manner to the creation of properties. The data was examined until saturation of understanding was reached and no new tag/property/category emerged at any level of classification from the inductive analysis.

VALIDITY

Methods for enhancing validity are used by researchers to increase rigor employed in data analysis [26, 35]. Specifically, Yardley's [35] four principles for demonstrating validity (i.e., sensitivity to context, commitment and rigour, transparency and coherence, and impact and importance) were followed in the current study. Sensitivity to context reflects the numerous ways in which a study captures the appropriate context of the phenomenon being studied. For instance, the research team created an interview guide using the existing relevant empirical literature and theoretical orientations. During the development of the interview guide, two pilot interviews were conducted under the supervision of an experienced interviewer in an effort to evaluate its effectiveness. The participants were two experienced collegiate coaches who met most of the inclusion criteria. Both participants provided feedback on the interviewer and the interview guide. Pilot data were not included in the analysis. Furthermore, participants were given full verbatim transcripts, allowing them an opportunity to add or modify any response communicated during the interview. Commitment and rigour involves ensuring an in-depth engagement with the topic, completing a thorough data analysis, and applying well-grounded methodologies. In the current study, a peer reviewer classified 135 meaning units (25% of the total data) into 56 tags with 89% accuracy. This peer review process helped reduce researcher bias and ensured that an accurate representation of the coaches' experiences was formed [30, 36].

Transparency and coherence aims to make the process of research – including data collection and analysis – clearly visible to all readers. A paper trail of the analysis was kept which included quotations, text excerpts representing each step of the analysis to provide evidence to the reader regarding the analytic interpretations. Finally, the importance of the study ultimately rests on the usefulness of the findings in practical application, future research, and theoretical interpretation. The current results provide information for coaches on the development of cohesion in coaching sport teams, a previously underrepresented population in the coaching literature.

RESULTS

The data presented in the manuscript represents 73% of a total database on coacting coaches' perceptions of cohesion. The additional 27% of data related to coaches' personal characteristics and coaching evolution were not central to the purpose of the current manuscript, and thus were not included. Two categories are presented: *Athlete Personality and Characteristics* and *Team Development*. These categories include information that describes how athlete characteristics influenced the development of cohesion and how coaches cultivated the team environment while maintaining success both on and off the field. Participant quotes will be used to illustrate the coaches' experiences and are labeled as C1 through C6 for participant identification purposes and continuity of the information provided.

ATHLETE PERSONALITY AND CHARACTERISTICS

Prior to discussing the development and maintenance of cohesion, coaches described how various athlete characteristics influenced cohesion. This information represented 23% of the total data set or responses received.

The physical and psychological make-up of Canadian collegiate cross-country runners was included in this category. Specifically, coaches discussed the athlete characteristics they felt were vital to the development and maintenance of cohesion within a cross-country running team. Five of the six coaches discussed the importance of physical ability and talent when choosing their team:

The main thing we look at while recruiting is how well they can perform. It's like any sport. Wayne Gretzky didn't make it to the NHL because he was a nice guy. It's the same with our sport. Talent comes first. (C1)

While the coaches felt physical ability was the most important characteristic, they also emphasized individual characteristics such as intrinsic motivation:

As long as you're enthusiastic, motivated, and enjoy the journey, which most of my athletes do, it's a very positive experience for the entire team. Not everyone can win every race, but each runner can contribute in some way. The journey is more important than the destination. Runners must find a motivational push. (C5)

It's hard to keep everyone motivated because not everyone can be in the top 7 and represent our team at nationals. So it's important to keep our 10th, 11th, and 12th athletes motivated and making them feel as though they contributed if we won. (C4)

While personal motivation was critical for individual success, coaches also noted the importance of social skills, work ethic, and discipline in contributing to the overall sense of togetherness and team success.

Recruits usually come here to visit and interact with the team. Ideally, you want someone who is going to be able to sit down at the table and talk, and take a genuine interest in us as well. We're constantly building our team, so it's important that my athletes get along. (C4)

I remember those who went from worst to best on the team because they never gave up. I remember those who showed up every day and ran their hearts out for the school and for their teammates. Success is beyond talent. (C3)

Along the same line, five of the six coaches expressed the value and benefit of having athletes who were concerned about the well-being of others, as expressed by the following quotes: “As a coach, you want to see a group that is unbelievably genuine and supportive of one another”. (C5)

I’ve discovered that if you promote altruistic beliefs and you’re pretty good technically, you actually win on the field of play quite a bit. And not just the all-cheesy “we’re all winners at heart” type stuff, you actually win national titles. (C4)

Finally, the key elements that defined effective athlete leaders were also discussed by the coaches. Four of the six coaches felt that team leaders were an extension of the coaching staff and played a role in developing a positive team environment. Specifically, coaches revealed the leaders actively organized social events and continuously monitored the team environment:

People are always looking for social stimulation. Leaders usually take charge in organizing team activities such as movie nights. I ask that they take over that stuff rather than me. Captains can have a huge impact on the development of cohesion because they’re “one of the group.” (C2)

They have a strong influence on all aspects of development, not simply cohesion, but certainly cohesion. Everything that goes on between these walls is impacted by the leaders and captains. Whether it’s organizing team dinners, social nights, sport games, etc. (C5)

I put a great deal of importance on the role of our leaders and captains. They’re responsible for keeping the team afloat and ensuring that no one is left behind during social events. They’re often the glue of this team. (C6)

TEAM DEVELOPMENT

Team development represented 50% of the total data set or responses received. This category included information on coaches’ organizational skills throughout the season, including setting team and individual goals, as well as their influence on developing team cohesion.

The process for establishing team and individual goals for cross-country running athletes, particularly as a component to developing cohesion, was discussed by the coaches. Five of the six coaches believed that setting individual and team goals were critical to building a successful team:

I think it’s important to have common objectives for the team. I think it brings them together; it’s something they can all strive for together at the same time. I find they’re more likely to get motivated and work hard towards the goal and probably have a better sense of community and togetherness while they’re doing it if they’re all on the same page. (C5)

Team goals generally involve our behavior as a group rather than our success. We set team goals for motivation, support, and being there for each other before setting outcome goals. Of course, we will try to win and establish that as a goal, but it won’t be our priority. (C2)

Additionally, given the coaching nature of the sport, coaches felt team and individual goals should be closely connected:

I really believe that team goals are the same thing as the individuals’. A person never has

to give up their individual goal in any way to improve the team because the better the individual does, the better the team does. Basically if you're performing better as an individual then you're also helping the team. (C6)

My job is to put everyone's goals together and come up with a team goal. We'll start in the spring with a broad-based notion of where we want to get. From that, we'll have a team meeting and figure out where the team is heading. We don't want to get in the way of an athlete's personal ambitions, but we also don't want to hurt the team. It's finding the right balance. (C4)

In addition to setting goals, the organizational aspects of coaching an elite cross-country team included recruiting, training camps, and training strategies. Coaches revealed that these organizational aspects were particularly helpful in the development and maintenance of cohesion.

All participants discussed recruiting and felt it was an important first step for developing and fostering team cohesion. Coaches considered more than just physical talent while recruiting. They wanted athletes who would fit the team values and contribute to a positive team environment:

Recruiting is a process. We can't just go to a high school race and ask the top 5 runners to join. Recruiting is all about finding the best fit and that doesn't necessarily mean having the fastest runners. (C3)

Recruits usually come here, visit the team and interact with everyone. This doesn't mean we expect them to be socially gregarious and the center of attention; however, I can tell whether someone will fit in and whether they will have the personality to make it on this team. (C4)

We never want to recruit someone who is *too* competitive. Anytime they get on the line, they seem to think that they have to beat the person next to them. Eventually, it hurts the team, there's no camaraderie or trust. However, you need someone with a bit of a competitive "edge". They need to have the right blend. (C2)

Coaches also disclosed that training camps were a staple in a team's development for a number of reasons, which included a general orientation, physical training, and developing relationships between teammates:

Camp is meant to develop the team on a different level. Forget about running, you're all runners. At camp, you learn who has good books, who likes computers, and who's in the same program as you. Every team should start off like that. (C3)

On a sunny day during training camp, I'll sit all the rookies down on a log and tell them "Okay, this is how the game is played in university and on this team." It's important for rookies to understand the competitive and cooperative environment of this team. (C4)

We do 7am sessions every day of camp and during the first 48 hours, we'll go really hard. I suppose it's similar to the military concept where they're trying to build you up as a unit, so the first thing they do is break you down. (C4)

A final organizational task for many of the coaches involved adopting training strategies during the season that were designed to develop the team as well as the physical aspects of each individual runner:

In practice, there's no avoiding that individuals who run similarly will run together. But we sandwich the session to counteract this. They warm up as a group and cool down as a group. The important thing is that everyone is back together again. We try to get as much "together-time" as possible. (C3)

I sometimes recommend that they share the workload. I will ask the weaker runners to lead the interval once in a while so they're not always hanging on the back of the group. Ultimately, this is good for the individual and the team's morale. (C1)

The coaches' perceptions of the development and maintenance of cohesion in cross-country running was discussed. Specifically, it included topics such as the relationship between teammates and intrateam competition. Given its direct relationship to the purpose of the study, it is not surprising that this property accounted for over 25% of the total data set or responses received.

The notion of cohesion was essential to team development and success. All six coaches stated the importance of cohesion in a coaching team:

Cohesion is very important on a cross-country team, no question, even given the dynamic of the sport. They all help each other. They all support each other. They all cheer for one another. I've been around the sport long enough to see athletes perform better when they have a network of friends backing them up. They all compete with each other and hopefully they're all friends when they walk off the course. (C2)

Cohesion in cross-country has to happen. Tactically and strategically, the team is more effective when it is cohesive. There's that degree of intimacy and trust that you have to have in elite level athletics. (C4)

Despite its importance, cohesion was not always an easy objective to attain. Coaches noted that overcoming intrateam competition was critical to the development of a positive team atmosphere:

Of course I want each individual to have a competitive edge, but I don't want them to burn each other every time they see each other on the course or in practice. That can be destructive to the individual and the team. I try and control when and where they are competitive. If you compete with someone long enough, you start seeing them only as a competitor. (C1)

Coaches also purposely tried to control the level of intrateam competition among their athletes:

I prepare my athletes for intrateam competition. I explain why I break them into groups and I always give a speech at the beginning of the year that discusses racing each other. If you're here to race every day, leave. If you can't race once in a while, leave. It's all about balance. Sometimes I want my runners to race in practice, depending on the workout. If that's going to motivate them, great! And I'll be the judge and I'll be the one who will stop it if it gets out of hand. (C2)

Intrateam competition is tricky because it will depend on how well the team gets along. Basically, if the team is more cohesive and can handle a little friendly competition, I'll suggest that they compete a little more during workouts for added motivation. But if the team is more hostile and not that cohesive, then I'll hold back on those workouts so I don't

involuntarily promote more hostility. You have to know your team and play it by ear. (C6)

Coaches also discussed many other factors important to cross-country running such as developing friendships and caring for teammates. Coaches purposely tried to enhance the development of friendships and social cohesion on their teams by encouraging team social events:

We encourage potlucks and team functions. We try to bring them together any way we can. It puts the team in an environment where they don't necessarily have to talk track. They can take advantage of other things they have in common and really develop lasting friendships, and indirectly help their performances. (C3)

Typically, many of the athletes will get together outside the formal environment, usually in the form of off-day runs. But there are also team dinners and potlucks that are a huge part of our culture and environment. They seem to happen because the team recognizes the benefits of such events. (C6)

Coaches also discussed using training sessions as a means to developing close relationships:

After a really tough workout, they're all lying on the grass afterwards, holding their stomachs and panting. But they're all suffering together! I find suffering together helps them see each other on the same level and it allows them to develop a deeper appreciation for their teammates. Empathy is huge in this sport. My first and last runner may not be on the same competitive plane, but they train and suffer together, and in the end, they become closer because of it. (C2)

Ultimately, coaches noted that the purpose of developing a cohesive coacting team was to improve the overall performance, satisfaction, and enjoyment of their athletes. All coaches indicated that cohesive teammates worked together more efficiently and succeeded during competitions:

When they get on the course, they're trying to beat one another, and that's fine. But you need that sense of a team ship when they are racing. For example, if you're running alongside a teammate and you're trying to take over another school on a hill, then both runners have to be in sync with one another to take full advantage. There are team tactics during races. Our stronger runners may also try and sucker an opponent early so that they'll eventually die down. We talk about that during practices and absolutely work it into competition. (C2)

We absolutely set things up technically because team stuff is a strategic element of cross-country. We have key words that are short and fast that allow communication between teammates during races. We interact all the time in races but team interactions are completely useless without trust and cohesion. (C4)

DISCUSSION

Given the increasing popularity of university coacting sports such as track and field, swimming, and golf across North America, it is surprising that most research on cohesion and coaching has focused on interacting sport teams [8]. The current study examined how a sample of elite cross-country running coaches selected their athletes and cultivated a positive

team environment despite the many barriers (e.g., intrateam competition and rivalry) that are encountered by coaching sport teams. The current study has begun the process of addressing this overlooked realm of coaching psychology, and the results can be used to provide a more complete understanding of the knowledge and behaviors of elite coaches

Coaches in this study felt that physical ability was the most important characteristic for incoming collegiate runners, a finding that is consistent with previous research in elite endurance sports [e.g., 37, 38]. Following the identification of physical talent, the current coaches specifically recruited athletes who demonstrated high work ethic, determination, motivation, and strong social skills that they believed all contributed to a positive team environment. Similarly, previous findings have emphasized the importance of individual personality traits on team processes and outcomes in sport and non-sport environments [39, 40]. Specifically, Mathieu et al. [40] reviewed team-related research in business and found that extraverted, hard-working, and agreeable individuals led to increased communication, team viability, and performance. Our current coaches also felt these personal characteristics were particularly important for success in cross-country running because only the top 7 runners on each team contribute to the overall team score, thus allowing the less skilled runners to fulfill non-performance type roles (e.g., motivator, social supporter). Overall, coaches indicated that while physical ability was the most important foundational variable for cross-country running, success would not be possible if the physical talent was not combined with athletes who possessed a number of important personal characteristics.

Despite the coaching nature of cross-country running, coaches in the current study emphasized the development and maintenance of cohesion as a critical element in the success and satisfaction of their athletes. Coaches revealed that strong team cohesion led to cooperation that was reflected in performance on the running trails, strong interpersonal relationships off the trails, as well as an ability to resist disruption to the team atmosphere (i.e., intrateam competition, rivalry). These results support Carron et al.'s [8] meta-analysis that found cohesion had a significant role in building group processes in coaching sports and that cohesion is multidimensional in nature [e.g., 6]. Specifically, coaches developed and fostered cohesion by establishing collective task objectives such as short and long-term goals throughout the year (*GI-Task*), organizing social events (*GI-Social*), recruiting individuals who would connect interpersonally (*ATG-Social*), and establishing clear roles among teammates (*ATG-Task*). Similarly, in their early investigation of cohesion in coaching sports, Widmeyer and Williams [13] revealed that collegiate golfers shared many of the same strategies as the current coaches to develop and foster cohesion (e.g., team goals, communication, interpersonal attraction). Therefore, the current findings provide further support that cohesion is an important component to the success and enjoyment of coaching teams and can be achieved through cohesion-building strategies such as team goal setting, purposeful recruiting, and social events.

Given its importance, coaches acknowledged that developing cohesion was a season-long process requiring significant planning. This development of cohesion took place in all three of the central elements of the CM (i.e., organization, training, and competition) [22]. Specifically, coaches in the current study began their preseason organization by recruiting and searching for talented runners who also fit within their long-term vision and team concept. Training camps were aimed at developing strong runners as well as a positive team atmosphere that would carry over to success during competitions. Practices and competitions during the season were used as a way to foster and maintain cohesion, which is similar to research on elite coaches of interacting teams [e.g., 16, 20, 41, 42]. Coaches structured their practices to increase the time athletes spent together (e.g., warm up, cool down group

training runs, staggered start times, etc). They believed this planning helped their athletes become more united and invested in their programs, and in turn, led to increased athlete satisfaction and successful performances during competitions.

Finally, given the coacting nature of cross-country running, it came as no surprise that coaches discussed intrateam competition and rivalry among team members as a potential hurdle to performance. Because of these issues, the coaches often encouraged social events such as dinners and movie nights so their team members could interact and get to know each other on a personal level. Previous research established that intrateam competition could be detrimental to team success and overall functioning if not monitored properly as it could lead to tension between teammates [4, 43]. The coaches in the current study were aware of this potential negative outcome and devised friendly competition between teammates during practices as a motivational tool that they felt improved overall team functioning. Evans et al. [5] also supported the inclusion of intrateam competition as a fundamental contributor to individual sport experiences even though it had both positive and negative connotations attached to it. More specifically, Evans et al. [5] revealed that while some athletes viewed intrateam competition as detrimental to team performance, others viewed it as a positive experience as long as team goals remained the top priority. Coaches in the current study shared a similar view and added that intrateam competition could enhance team success and satisfaction if implemented sparingly and thoughtfully.

A few limitations of the present study should be noted before the conclusion of this paper. First, the interviews focused solely on the coaches' perceptions and thus interviewing athletes or gathering observational data might provide a more complete understanding of the influence of cohesion on the sport. For instance, perhaps athletes would view social cohesion as much more (or less) critical to intrateam competition as coaches perceived it to be. Second, while cross-country running was chosen for its strong coacting component, differences may exist in other coacting sports such as swimming or gymnastics because of the domain-specific requirements of each sport. For example, cross-country athletes usually compete at a distance and in isolation from the coaches while gymnasts usually compete in an arena where teams and coaches sit and discuss strategies together. Third, it would be advantageous to investigate differences between Canadian and American collegiate cross-country running coaches. For instance, the heightened intensity, budget, and popularity of collegiate sports in the United States could influence the recruiting process, competitive atmosphere, or behaviors of their cross-country running coaches. Lastly, the current findings may not be applicable for coaches who coach at the Olympic or professional levels since most intercollegiate teams experience frequent roster and leadership changes that could influence coaching decisions pertaining to cohesion.

CONCLUSION

The findings of the current study have practical implications for research both inside and outside of sport. The findings are specifically useful for head coaches in charge of university coacting sport programs. First, the current study provides a greater understanding of the dynamics of cross-country running. Earlier research assumed that coacting sports such as cross-country running were considered *individual* sports where little intrateam interaction and cooperation were required [e.g., 3, 4]. However, the current findings indicate that cross-country running is a team sport that requires positive relationships among members for optimal success, despite the perceived individualistic nature of the task. Coaches of coacting teams should be aware of the social nature of this finding when they are recruiting. Meetings with prospective athletes, their parents, and former coaches may ensure that talented athlete

recruits are also the *right fit* for the team before they are offered a position on the roster. Second, the current study has begun the process of addressing the overlooked realm of coaching sport coaching and can be used to provide a more complete outline of the experiences of expert coaches. Third, this study presented the philosophies of coaches who continuously produced athletes that excelled in the classroom, community, and sporting field. The current findings illustrate effective coaching strategies that included how to maintain positive coach-athlete relationships as well as a positive team environment. This result was accomplished by organizing team social functions throughout the season and by having frequent communications with their team leaders. Perhaps future studies can explore the effects of team building interventions on the performance and functioning of coaching teams. Finally, as previous research has suggested [e.g., 44], intrateam competition has often been promoted as a motivational tool in the business world to enhance individual productivity and status. However, the current results suggested that controlled, friendly competition can be used to achieve success among members with the help of high social cohesion. In other words, highly cohesive members may yield positive performances without harming relationships, or create rivalries between teammates. While business and sport contexts differ, the current findings demonstrate the potential benefits of well-coached individuals who perform collaboratively within team contexts.

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