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Previous experiences of novice coaches and their coach-created motivational climate: a collective case study

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ABSTRACT

Background: Novice coaches receive little attention in the literature as many studies choose to focus on experienced and elite level coaches. Those involved in the development of coaches have a responsibility to understand how novice coaches are navigating their initial coaching experiences within higher education programs.

Purpose: The purpose of this study was to examine the experiences of novice coaches as athletes and in their current coaching roles. A secondary purpose was to explore how these experiences manifested in novice coaches' observed coach-created motivational climate.

Method: Three novice coaches (2 males, 1 female) were recruited from a higher education coach education program. Two practice observations were recorded for each coach and coded via systematic observation. Semi-structured interviews were conducted with each participant to gather information pertaining to their athletic and coaching history, coaching philosophy, and current coaching position. Using a collective case study approach, interview data and observations were simultaneously reviewed to draw out themes related to participants' experiences.

Results: Novice coaches' informal and formal learning contributed to the conceptualization of their coaching philosophies and subsequent coaching behavior, revealing examples of how novice coaches support and undermine various aspects of their coaching philosophies through engagement in empowering and disempowering behaviors.

Conclusion: This study extends the knowledge of novice coaches experiences and development of coaching practice during their practicum placement in higher education. Among the discrepancies between coaches' intentions for coaching and their actual coaching, behaviors observed were dependent upon the social context.

Introduction

According to the International Sport Coaching Framework, sport coaches learn in a variety of both mediated and unmediated environments (ICCE and ASOIF 2012). Among the mediated environments, coaches learn in a more formal and hierarchical structure, where new concepts are built upon previous concepts. Coach education programs housed in higher education environments embody this structure, although some informal elements can also be included. One such example of this is the use of mentoring throughout coach education experiences (McQuade, Davis, and Nash

2015). Unmediated learning complements these processes, whereby coaches are more motivated to explore topics on their own, through reading books or reflecting on their own experiences.

Regarding these mediated and unmediated learning experiences, previous studies have focused more so on how experienced coaches develop and learn (Côté 2006; Paquette and Trudel 2018; Salmela 1995). The abundance of research in this area clearly delineates a process by which coaches learn, which includes utilization of several sources of formal, informal, and self-guided experiences. Little consideration is given to how the process of development and learning occurs in beginner or novice coaches, particularly those learning in higher education settings. Most coach education programs in higher education rely on formal educational experiences, with attention paid to more informal experiences late in the program. This can be problematic, as Nelson, Cushion, and Potrac (2006) indicate that certain types of formal knowledge can be presented in a fragmented fashion, which can prevent the coach learner from adequately integrating learned information into effective coaching behaviors. If executed effectively, informal learning can have a much higher impact on coach development, through regular engagement in reflection and discussion of coaching practice. The benefits of informal learning, however, are dependent upon the quality of such interactions. Research has indicated that in some cases, even expert or highly experienced coaches lack the ability to see the disconnect between their intentions and their actions (Partington and Cushion 2013). With this being the case, consideration of informal learning in novice coaches warrants further study, especially with regards to how novice coaches frame their informal experiences, such as practicums and volunteer coaching positions, within the formal structure of a coaching education program.

Specific to this study, there is evidence to support the notion that in the development of novice coaches, previous experiences as athletes are influential (Kiosoglous and Vidic 2017) in informing coaching practice. Further, Nash, Sproule, and Horton (2017) indicate that novice coaches tend to receive most of their feedback from other novice coaches or athletes they are working with, instead perhaps, from the coaches they work under. This is an interesting consideration as experienced or expert coaches within the same study demonstrated a more robust network of coaches from which they received more constructive feedback. Since there is evidence to suggest that sport involvement at a young age can impact coaches' lifelong passion for the sport (Lorimer and Holland-Smith 2012), it is possible that these experiences are also shaping how coaches learn how to coach. Indeed, Cushion, Armour, and Jones (2003) assert that coaches often rely on their own experiences and observations, with less attention paid to information supplied in formal settings. This is relevant to the development of sport specific coaching behaviors overall, but even more so for how coaches develop athlete-centered coaching practices.

Athlete-centered coaching is integral to coach education programs who are accredited by the National Council on Accreditation in Higher Education (NCACE). Such programs must follow SHAPE America's National Standards for Sport Coaches, which outlines a specific standard related to athlete-centered coaching: 'Develop and enact an athlete-centered coaching philosophy' (SHAPE American 2018, 1). Since the coaching philosophy guides what a coach will do in action, it is very much related to the behaviors they may possess and where they might learn such behaviors. This includes how a coach might set up the environment and how they communicate with their athletes. Presently, some of the research that focuses on athlete-centered coaching follow two frameworks that explain how athletes are motivated to participate and the specific ways in which coaches influence such motivation.

The two prominent social-cognitive theories of motivation relevant to the sport context are achievement goal theory (AGT) and self-determination theory (SDT). Both theories 'have particularly focused on the role of significant others, such as the coach, in engineering a psychological climate holding important implications for players,' (Duda 2013, 311). In fact, these climates contribute to the quality of sport engagement and athletes' psychological well-being. Recent investigations have focused on the identification of empowering and disempowering motivational climates which align with athlete-centered and coach-centered practice, respectively (Duda 2013).

It is important to note that use of the term motivational climate encompasses several aspects of both AGT and SDT.

According to Duda (2013) an empowering motivational climate is one where coaches are autonomy supportive, task oriented, and relatedness supportive. In contrast, a disempowering climate is one that is controlling, ego-oriented, and relatedness thwarting. Based on the work of Mageau and Vallerand (2003), coaches exhibit specific behaviors that are both autonomy- and relatedness-supportive in nature. They include providing choice in a structured environment, rationales, opportunities for independent work, feedback that is competence-based, avoiding tangible rewards, and preventing ego-involvement. Coupled with a coach's ability to create a climate that is focused on personal goal attainment (Duda 2013), an empowering coach can have a significant impact on the well-being of athletes (Delrue et al. 2019). Further, Bartholomew, Ntoumanis, and Thøgersen-Ntoumani (2009) demonstrated the specific coaching behaviors tied to a more controlling style, including imposing contingent rewards, providing feedback that is controlling in nature, exerting excessive personal control, using language that intimidates athletes, and promoting a heavier focus on evaluation of competition. These behaviors have been shown to contribute to maladaptive behaviors of athletes and are more closely linked to burnout (Isoard-Gautheur, Guillet-Descas, and Lemyre 2012).

Even with the vast amount of research conducted in this area, few studies consider how novice coaches create motivational climates for their athletes and how they might bring in their previous experiences to do so. Based on these limited studies, it is known that novice coaches' behaviors are a product of informal and formal learning experiences as well as their previous experiences as an athlete (Benish, Langdon, and Culp 2021; Cushion, Armour, and Jones 2003). In taking this a step further, it would be helpful to know exactly what behaviors novice coaches produce in these coaching environments and how they might call upon their previous experiences as an athlete. To address this, systematic observation tools could be useful in linking experience and intention to action. Specifically tied to the coach-created motivational climate, using an instrument such as the Multidimensional Motivational Climate Observation System (Smith et al. 2015) allows for the identification of specific behaviors tied to empowering and disempowering coaching. Identifying these behaviors allows researchers and practitioners to specifically address areas of improvement for coaches in the classroom and in the field. Nuances of the overall coach-created climate could be identified as well.

As systematic observation cannot account for why a behavior might be observed, an interpretive approach (via interviews) would serve as a complement, as it provides further insight of the coaching process and contextual factors that shape coaching behavior, including nuances that novice coaches may not be aware of. In combining coach observation and coaches' perception of their coaching behavior, a richer understanding for *what* novice coaches are doing and *why* they are engaging in specific behaviors can be explored (Cope, Partington, and Harvey 2017). Having the opportunity to consider the reasons one may engage in specific coaching behaviors also has the potential to improve a novice coach's ability to engage in reflective practice (Potrac et al. 2000).

Currently, best pedagogical practices for the education of novice coaches have received little attention in coach education research (Walsh and Carson 2019). Further, those involved in the development of coaches within higher education programs have a responsibility to understand how novice coaches are navigating their initial coaching experiences given their athletic history, how their experiences and personal histories are shaping their coaching philosophies, and how they perceive their role in creating an empowering motivational climate. It is possible that if novice coaches are relying more on feedback from others at the same level as them or those below them (Nash, Sproule, and Horton 2017), in concert with reflecting on their own personal experiences which may be disconnected from their actions, they might not be able to appropriately enact an empowering motivational climate. Based on this need, the purpose of this study was to examine the experiences of novice coaches as athletes and in their current coaching roles. A secondary

purpose was to explore how these experiences manifested in novice coaches' observed coach-created motivational climate.

Methodology

The present study employed mixed-methods techniques to include both qualitative and quantitative sources. Tenets of SDT and AGT served as a framework to guide the data collection and analysis procedures. An interpretivist approach directed the collective case analysis of three novice coaches' experiences during their coaching practicum. Case studies have been adopted to present a more detailed account of coaches' learning experiences that are often unique to the individual (Jones, Armour, and Potrac 2003; Jowett 2003; Lorimer and Holland-Smith 2012; Taylor, Werthner, and Culver 2014) and to specific groups of coaches (Gilbert and Trudel 2001). In examining multiple cases simultaneously, the collective case study approach offers a somewhat broader appreciation for novice coaches and their perspectives as a developing professional while maintaining the nuances unique to each coach. As a compliment to the collective case approach, observation data was gathered and analyzed to provide contextual detail to novice coaches' experiences.

Participants

For the purpose of this study, a novice coach was defined as an individual currently undergoing training and supervision in higher education for coaching. The participants were three novice coaches (two male, one female) who were enrolled in a Coaching Practicum course (3 credit hour supervised coaching experience) at a large Southeastern university in the United States. All coaches were in the process of completing a minor in coaching, accredited by the National Council on Accreditation in Higher Education (NCACE), which included 15 credit hours of coursework. Within the program, the Coaching Practicum course is the capstone experience for students and occurs after they have completed coursework in the principles of coaching, psychology of coaching, a sport conditioning lab course, and at least two sport specific coaching courses. Within the psychology of coaching course, students are exposed to theories of motivation including AGT and SDT but are not necessarily expected or explicitly guided to apply them in subsequent coursework. Participants were between the ages of 20–23 years ($M = 21.33$). Two novice coaches reported their race/ethnicity as Caucasian and one as African American. All participants had experience coaching at least two seasons of one sport as an assistant coach; each participant aspired to coach part-time in the future alongside a career as a teacher. Participants were purposefully chosen to represent the varying amounts of experience novice coaches may have as a student before beginning the practicum. Two novice coaches had previous experience as a head coach, while the third had only been an assistant coach. Novice coaches varied in a number of seasons coached previously as well, ranging from two seasons to four seasons. In addition, sports coached also varied among participants, including American football, track and field, t-ball (baseball) and soccer (see Table 1).

Table 1. Individual differences across novice coaches' experiences.

	Ryan	Kylie	Jackson
Coaching roles	Head coach Assistant coach	Head coach Assistant coach	Assistant coach
Number of seasons coached	4	3	2
Sports coached	Track and field, football	T-ball, soccer, track & field, football	Football
Age groups coached	Middle school High school	Youth, ages 6 and up High school	Middle school
Athletic participation	T-ball, wrestling, baseball, golf, basketball, track and field, football	Softball, dance, track and field, cross country	Basketball, wrestling, Flag and tackle football

Instrumentation

To effectively examine the influence of previous athletic experiences, personal histories and previous coaching experiences, the current coaching behaviors of novice coaches were observed before they were interviewed.

Observed multidimensional coach-created motivational climate

The Multidimensional Motivational Climate Observation System (MMCOS; Smith et al. 2015) is a systematic observation method using the frameworks of Self-Determination Theory (SDT; Ryan and Deci 2017) and Achievement Goal Theory (AGT; Nicholls 1989). In using this method, the overall motivational environment created by the coach is quantified within specific time periods by determining to what extent the climate is more need-thwarting (disempowering) or more need-supportive (empowering).

The MMCOS has a hierarchical structure made up of thirty-two lower-order behavioral strategies captured by seven environmental dimensions (autonomy support, controlling, task involving, ego involving, relatedness supportive, relatedness thwarting, or structure). A marking scheme requires coach observation footage to first be divided into four intervals, allowing for a potency rating to be assigned to equal parts of an observation. The potency of each of the seven environmental dimensions is rated on a 4-point scale of 0 (not at all) to 3 (strong potency) to clarify the quality or intensity of the coach's behavior execution. A potency rating is determined by the number of lower-order behavioral strategies tallied throughout the observation. A potency is also assigned for the entirety of the observation to indicate whether the overall coaching climate was empowering (task-involving, autonomy supportive, and relatedness supportive) or disempowering (ego-involving, controlling, and relatedness thwarting).

The primary and secondary researchers completed extensive training in line with those implemented by Smith and colleagues (2015) to ensure reliability before participant footage was observed and marked. Researchers first reviewed the tenets of AGT and SDT as these are the primary theoretical frameworks from which the MMCOS was developed. Next, the researchers reviewed the marking scheme (Smith et al. 2015) and began practice coding using a separate set of coaching videos not included for the purpose of this study. To start, five-minute clips of video were coded in each quadrant of the marking scheme to aid in the familiarization of behavioral strategies, environmental dimensions, and the assignment of potency ratings. During this phase, 20 min of film was coded. Researchers discussed observed behaviors and their correspondence to assigned potency ratings throughout this process. A full-length video (60 min) was then coded by the primary and secondary researcher broken into 15-minute segments – one for each quadrant of the marking scheme. Researchers coded each segment individually and then came together to discuss and reconcile disagreements. Training was completed after the researchers reached an inter-rater reliability of 0.80 for each quadrant of a full-length video; this level of agreement was higher than the 0.70 inter-rater reliability set by Smith et al. (2015). In total, coder training included 140 min of film. From there, the six recorded coaching sessions were coded by the primary and secondary researchers; total film footage equated to 296 min. Film for each session (average length 49 min) was segmented into four equal time intervals, each representing between 9 and 16 min of film. Across the six videos, inter-rater reliability remained acceptable at 0.98.

Semi-structured interviews

Participants were scheduled to complete one semi-structured interview within two weeks of completing the second coaching session. Interviews were between 63 and 90 min in length. The interviews were audio recorded in a private room and conducted by the primary and secondary researchers. Interview questions explored novice coaches' previous athletic experiences, coaching

experiences, coaching philosophy, perceptions of their influence on athlete motivation, and how they perceived their role as an assistant coach. For example, the question, 'What is your coaching philosophy?' followed by, 'Describe a situation where your philosophy was emulated,' and, 'Was there ever a time you felt you changed your philosophy to solve a problem?' all explored coaches' perceived coaching philosophies and beliefs of their role as a coach.[1] The last two questions in the protocol addressed empowering and disempowering concepts, asking coaches if they have heard of these concepts and how they might apply to their current coaching experiences. Participant demographics were also obtained to include gender, age, race/ethnicity, number of seasons coached, and sports coached.

Procedures

Upon receipt of Institutional Review Board approval, students who were enrolled in a Fall semester undergraduate coaching practicum were purposefully recruited to participate in the study. Participants consented to have their coaching filmed on two occasions during their practicum. Prior to being filmed, letters of cooperation were obtained from the corresponding athletic director at each practicum site. Two sport programs were housed within local, public middle schools while the other sport program was at a public high school. As participants were coaching athletes under the age of 18, all parents were informed of the scheduled coach observations at least one day in advance and that any minor appearing on the film would have their image blurred so that they may not be identified in the videos. Based on the nature of the practices, the intention was to not be intrusive and respect the time of the head coaches and the schools. Therefore, only two sessions per novice coach were recorded to capture a snapshot of what their coaching looked like.

Recordings were all filmed mid-season for each participant to ensure that all coaches had an opportunity to develop rapport with their athletes. For each scheduled observation, a researcher appeared at least 10 min prior to the practice session to attach a clip-on microphone to the coach (Sennheiser EW 112P G4 Wireless microphone). The researcher then set up a video camera (Canon Vixia HF R-800) in an unobtrusive location to film; film length ranged from 37 to 63 min. Filming began after athlete warm-ups as this is when the participating coach started providing instruction. Previous studies using the MMCOS (Tessier et al. 2013) captured on average 77 min of film per coach (one video per coach), therefore the present method is in line with the amount of video captured for the current participants which was 98 min on average (two videos per coach).

Data analysis

For the first step in the analysis process, the primary and secondary researchers viewed and analyzed all six recorded coaching sessions from participants. After completing the observational coding using the MMCOS, ratings were totaled and discussed between the primary and secondary researchers prior to interviewing the participants.

Information gathered from quantitative and qualitative evaluation of the MMCOS data was used to provide feedback to the participants within their interview, as well as to help participants connect their current practices to previous experiences. In this way, the quantitative data was used to help participants understand the motivational climate they created while coaching. Because the observation data was coded before the interviews, initial coding influenced subsequent coding in the interview data. After completing the MMCOS coding, interviews were conducted and transcribed in full. Member checks were used to ensure participants' responses were accurately depicted.

NVivo 12 (2018) was utilized to organize interview transcripts, codes, and themes. Using an interpretive approach described in Benish, Langdon, and Culp (2021), thematic analysis was chosen to guide the coding of interview transcripts (Braun, Clarke, and Weate 2016) in six phases including three rounds of coding. Primary and secondary researchers familiarized themselves with the raw data by reading and re-reading the transcripts. To further connect the MMCOS and the interview

data, the transcripts of the interviews were organized and coded using the definitions of autonomy-supportive, controlling, ego-involving, task-involving, relatedness supportive, relatedness thwarting, and structure, which are also present within the coding structure of the MMCOS. Additional codes were identified in subsequent passes through the transcripts. Researchers then came together to examine both sets of codes and develop themes to represent prominent codes. Themes were continually refined and revisited until the prominent themes were established and named. The writing of the manuscript completed the analysis with the presentation of the findings.

Methodological rigor and trustworthiness of the data was ensured through several procedures. First, data collected via interview and observations were combined in the analysis to provide a deeper understanding of not only 'what' coaches do but also 'why' they do it (Cope, Partington, and Harvey 2017). Additionally, all three authors had experience in conducting mixed-methods research. The credibility and validity of the findings were insured by the following methods. The primary and secondary authors spent time interacting with the participants on several occasions before filming, watched the films several times, and spent between one and 1.5 hours with each participant. From a data analysis perspective, the primary and secondary researchers completed the necessary training for systematic observation coding and independently classified themes from the transcripts. All themes were compared to identify differences in interpretation and classification and discussed by both researchers until a consensus was reached. Afterwards, a third researcher served as a critical friend to offer challenges to the interpretation and explanation of the data set (Smith and McGannon 2017).

Results

The quantitative results are presented below to support the themes revealed in the data in addition to adding context to the individual narratives. In line with recommendations from Crowe et al. (2011), themes across cases and descriptions of individual narratives are presented to illustrate novice coaches' unique and shared experiences and perceived coaching behaviors. First, descriptive statistics of the MMCOS aggregated from all three coaches are presented to support the themes. Then, central themes extracted from the qualitative analysis are reported to establish similarities across cases. Next, individual narratives are presented to provide context for novice coaches' background, coaching philosophies, and perceived coaching behaviors. Within these narratives, observation data from the MMCOS is reported per case to provide a more complete picture of the participants' actual coaching behaviors. Variations between cases are also documented for ease of comparison. Pseudonyms were assigned to each coach to protect their identity.

Observed behaviors and themes across cases

In examining the mean values of the behaviors observed in the participants' coaching sessions, controlling behaviors had the highest mean ($M = 6.50$, $SD = 2.43$) across all participants, followed by task-involving behaviors ($M = 4.83$, $SD = 2.40$), relatedness supportive behaviors ($M = 4.33$, $SD = 2.73$), relatedness thwarting behaviors ($M = 4.33$, $SD = 3.27$), structure ($M = 4.17$, $SD = 2.48$), autonomy supportive behaviors ($M = 3.67$, $SD = 2.73$), and ego-involving behaviors ($M = 3.33$, $SD = 2.34$).

Using a thematic analysis framework designed by Braun, Clarke, and Weate (2016), 23 subthemes were identified, organized, and grouped into seven themes to describe how novice coaches interpreted their experiences as athletes and as coaches. These themes were novice coaches learning their role, relationship with other coaches, learning sources, athletic experiences, learning from personal coaching experience, emulating previous coaches' behaviors, and behaviors thought to develop athletes and facilitate motivation. Two overarching themes were labeled – role as an assistant coach and linking experience to practice – to effectively capture the essence of the seven themes (see Table 2). Direct quotes aided in the verification of the themes and provided context to novice coaches' experiences.

Table 2. Novice coaches' reflection of coaching related experiences.

Raw data (sub-themes)	Themes	Supporting quotes	Overarching themes
Not in charge Respect and compassion for head coach role Different opinions than head coach but followed directives	Novice coaches learning their role	'I can't go above coach and say go ahead, get in there and take what's his name out. [There were] a bunch of things that I wanted to do or wanted to say but couldn't because I would probably be crossing that line.' – Jackson 'Not every time I'm working for somebody am I going to agree with or think what they're doing is right but I'm still working for them and I gotta be behind them and help them.' – Ryan	Role as an assistant coach
Lack of connection with coaching staff Earning trust and respect of peer coaches Insufficient mentoring	Relationship with other coaches	'I had to work my way in there and gain [coaches'] trust not only the kids. [I had to] show them I knew what I was talking about and could do a good job … and work into their clique.' – Ryan 'From head coach, to athletic director duties, to teaching duties … I try not to overload him … so I try to follow more of the assistant coaches.' – Jackson 'I should have been more proactive to ask questions and ask for help … I received none.' – Ryan	
Coaching program Informal sources Recognized helpful and hurtful coach behaviors Motivated to participate in sport Coaches motivated them	Learning sources Athletic experiences	'[The coaching program] brought that caring aspect out of me more. It made me see first-hand how someone wants to be cared about and how to go about caring for someone you first met. You have to know what you're talking about … You have to be consistent with the kids … showing up and saying you're going to do it.' – Jackson 'I think like a sense of humor with your athletes it lightens the mood, it helps them connect with you better, it makes it easier for them to learn from you and for you to coach them.' – Kylie	Linking experience to practice
Loss of athlete engagement when athletes' perspective ignored Use of humor and sarcasm to build rapport Consistent expectations and structure	Learning from personal coaching experience	'[The] head coach, offensive defensive coordinator, [and the rest of the staff] were all over the place in what we were telling the players and then still expecting them to play a certain way and be consistent in how they played … so I think I hammered down a point in my mind that you know, you gotta have one message coming to the team in order to get them to play the way you want them to play.' – Ryan	
Build relationships with athletes Use of discipline Use of humor and sarcasm	Emulating previous coaches' behaviors	'I've learned through the coaching process and even as I was a player, coaches didn't really explain to me why I'm doing up downs or running the whole field, like, you just gotta run. So I tell them … .this [is] what you did wrong and [these are the] consequences for your actions.' – Jackson	
Providing equal opportunities Encourage towards full potential Ego-involving Creating individual relationships Rewards	Behaviors thought to develop athletes and facilitate motivation	'When I'm out there I'm not really worried about what I'm doing per say I guess I'm trying to help each and every kid that is out there whether they are a starter or a bench warmer, I treat them all the same and try to help them all while I'm out there.' – Ryan 'There was one kid that couldn't, he was struggling he was like walkin' his last lap and I was like [if] you run this and you've beat me I will buy you a bag of M&Ms. And he ran it and he finished it and I bought him that bag of M&Ms.' – Kylie	

When examining these themes, there are connections that can be drawn between them and the mean values of behaviors examined in the MMCOS. In particular, emulating previous coaches' behaviors, which appears under the theme of linking experience to practice is supported in the high mean scores of controlling behaviors observed. All three participants described at least two coaches they have observed using these behaviors, which often included using intimidation or controlling language, giving athletes little to no choice in their training ('my way or the highway'), conditional regard, and promoting direct comparison between athletes.

> Even as I was a player, you know, coaches didn't really explain to me why I'm runnin up downs or why I'm doing up downs or running the whole field like you just gonna run (Jackson)

> I think definitely one of the worst experiences was with the travel baseball or whatever those guys were just horrible. Yelling at you, um um, you know (Ryan)

> I think you know, I went up to him after every race, you know, looking for praise … or looking for something I can do better on … and he would just be like yeah good job … Ok that's it? (Kylie)

Even though the participants knew that these coaching behaviors may not have been optimal and had negative experiences with coaches who used such behaviors, they still used them regardless. This phenomenon of emulating previously experienced behaviors as an athlete is also supported by the low mean scores of autonomy supportive behaviors observed during coaching sessions.

Individual coach observations and narratives

While novice coaches reported similar perspectives, coaches' unique experiences and backgrounds provide valuable context for individual coaching behaviors. These are further explained in separate narratives with attention paid to the participant's observed behaviors. In addition to the observations, the narratives include information about coaching philosophy which serves as an indicator of coaches' perceived and potential coaching behaviors. For ease of comparison, the prominent differences between novice coaches are presented in Table 1 and are noted as each case is presented.

The first coach, Ryan, was in his third year of his undergraduate program. Ryan had accumulated approximately four seasons of coaching experience to include two seasons as an assistant coach for a track and field program at the middle and varsity level, one season as a head middle school football coach at a private school, and one season in his present role as an assistant middle school football coach at a public school. At the time of the study, Ryan's assistant football coaching position was his practicum coaching assignment.

Ryan's athletic history was diverse; he participated in a variety of sports throughout his youth (see Table 1). In recalling his experience with his former coaches, one of which was his father, Ryan remembered coaches who were not invested in their sport programs and others who were harsh and yelled at athletes frequently. Ryan felt he learned how to gain the trust of players in observing his previous coaches by having fun, using sarcasm, and relating to them by telling stories.

Overall, Ryan indicated that his philosophy and coaching practices stemmed from his coursework, how his dad coached, and coaching books and documentaries. Ryan's coaching philosophy was centered on prioritizing athletes' goals and individual needs. In practice, he felt he worked to help all athletes regardless of their position to ensure individual development and improvement. He mentioned in his interview how his previous experiences as an athlete and a coach influenced this philosophy. In fact, his time as a head coach was quite impactful. In comparing Ryan's observed behaviors with his interview, he demonstrated a capacity to attend to individual athletes' level of understanding for tasks while inviting conversation and questions to further their development. This aligned well with Ryan's desire to prioritize athletes' individual needs and to emphasize the building of relationships with each athlete. In the interview, Ryan reflected how his previous coaching role as the head coach for a middle school football team significantly influenced his coaching:

[When I coached, I] was really talking at the kids. I didn't do a great job at creating relationships with them. I thought it would work better if I was above them … I was their boss I guess you could say. But it didn't work well. Cause even though what I was saying may have been the right things, how I was saying it to them didn't register and they pretty much shut down.

Ryan then explained how he resolved to spend more time building relationships in his practicum placement as an assistant football coach:

I did develop those relationships this time and you could see, it was a night and day difference because my coaching didn't really change, I was definitely more positive than negative … but just creating those relationships immediately turned the kids on, they would listen, they would do what [I] asked them to because they trusted me.

After observing two coaching sessions, Ryan's coaching behaviors were scored with the MMCOS and reported in Table 3. Ryan exhibited a strong empowering and a weak disempowering climate in the first practice and a moderate empowering and a weak disempowering climate during the second practice. In examining the differences between the two coaching sessions, Ryan engaged in various empowering coaching behaviors that were task involving, structured, and supportive of athletes' autonomy and relatedness needs. In his first coaching observation, Ryan displayed a warm communication style, consistently guided and organized practice activities, provided specific and constructive feedback while also encouraging athletes to provide their own perspectives. However, these behaviors were inconsistent across coaching sessions as the second practice showed considerably less engagement in empowering behaviors across all categories. Ryan's communication was observed as colder and more distant; he offered little opportunity for athletes to feel autonomous and did not offer much feedback or praise. Despite this, his provision of structure remained consistent from practice one to practice two.

Ryan described his coaching style as hard-nosed as well as compassionate in the way he interacts with athletes. He mentioned how he often mimics his father's use of sarcasm to relate and build relationships with athletes. Further, Ryan believed that in some cases, discipline or tough love can be necessary to ensure this development and to maintain a consistent environment. In Ryan's second practice observation, interactions with athletes were not as frequent and a decrease in empowering behaviors was observed across all four environmental dimensions. This decrease resembled Ryan's tendency to be more hard-nosed or showing tough love as his communication showed a decrease and a shift toward a colder tone.

While Ryan demonstrated an awareness of his engagement in a few disempowering coaching behaviors (intimidating behaviors, material rewards and conditional regard), observations revealed additional controlling behaviors to include belittling, recognition of inferior performance, a cold communication style, and controlling directives. When dealing with difficult athletes, Ryan noticed he engaged in intimidating behaviors such as yelling or ignoring. He felt these behaviors emerged as a result of frustration and wanted to improve in this area. Other coaching behaviors that Ryan described within his coaching included the use of material rewards to encourage athletes' effort.

The second coach was Kylie who was in her fourth year of her undergraduate program. Kylie had coached youth tee-ball (baseball) and soccer at a local recreational sport facility for a year and a half before fulfilling her practicum coaching position as a high school assistant track and field coach. She also briefly coached football. In total, Kylie had approximately three seasons of coaching experience.

As an athlete, Kylie participated in many sports including softball, dance, track and field, and cross country. In reflecting on her sport experiences, Kylie felt that she did not reach her full potential in sport and attributed this to her laziness and lack of discipline. Other than the coach who did not give her regular feedback, Kylie recalled other coaches throughout her childhood who encouraged her and tried to harness the potential they knew she possessed. For example, one coach often referred to her as 'lightning,' serving as an encouragement for her to run faster.

Previous coaching experiences were also memorable and illustrated how Kylie perceived her coaching. When coaching soccer, Kylie recalled having no experience with the sport or with

Ryan		Practice 1		Practice 2	
Motivational climate	Behavior categories	Score: 0–12	Examples of behavior	Score: 0–12	Examples of behavior
Empowering	Autonomy-supportive	8	Coach consistently invited players to express when they were unsure by asking, 'Do you understand?' Players seemed comfortable sharing their perspectives with the coach and received helpful instructions for tasks in return.	2	Coach asked, 'What do we have here?' to evaluate athletes' understanding of the play. Coach had less interactions with players overall. Coach gave occasional description of tasks and player expectations.
Practice 1 Strong	Task involving	9	Coach gave feedback that was specific to help players understand what they did well and could do better. 'Sandwich approach' observed. Players' effort was acknowledged often, and role importance was discussed.	4	Task related feedback was given when necessary. Recognition of player effort was observed but was relatively infrequent.
	Relatedness supportive	9	Communication style was consistently warm and invited player interaction. Coach interacted with players in non-sport related conversation and displayed care and unconditional regard. Coach communicated that a missed tackle was ok, and that the player did what he could.	4	Communication was not perceived as warm this practice. However, care and concern were shown toward a player, 'If you need anything let me know.' The coach let an individual know that he was listening to his concerns, 'I hear you,' 'I understand.'
Practice 2 Moderate	Structured	8	Instruction and practice organization is consistent. Guidance is given frequently to help players understand their position and role.	6	Clear instructions are given. Guidance through drills was observed less frequently as the coach was communicating less.
Disempowering	Controlling	6	At times, more controlling language was used. 'You gotta … catch the ball/make the tackle.' Used intimidation behaviors (shouting).	4	Some controlling language observed.
Practice 1 Weak	Ego involving	0	No behaviors observed.	2	Players' inferior performance was emphasized on a few occasions.
Practice 2 Weak	Relatedness thwarting	0	No behaviors observed.	3	Communication was cold. At times, belittling was observed.

(*Continued*)

Table 3. Continued.

Jackson			Practice 1		Practice 2
Motivational climate	Behavior categories	Score: 0–12	Examples of behavior	Score: 0–12	Examples of behavior
Empowering	Autonomy-supportive	3	Brief opportunity for player input and sometimes a chance to try new positions. However, the organization of this was lacking. Rationale for tasks was observed on occasion.	1	Athletes were told what to do but were not told why it was important that they do it. Coach did not ask athletes to share their perspectives. Athletes seemed disengaged with the coach.
Practice 1 Weak	Task involving	4	Feedback was often non-specific with some recognition of improvement: 'My man! That's what I'm talking about … I want you to … ' Instructions were given but specifics related to what the athlete did well were not highlighted.	4	Feedback was often non-specific: 'There we go,' and 'better effort.' Positive encouragement could be significantly increased. Praise was limited and non-specific: 'Good job, but … '
Practice 2 Weak	Relatedness supportive	2	'That was some good coverage,' was encouraging for an athlete who attempted proper coverage. Unconditional regard was observed: 'It's ok.'	3	Coach occasionally engaged in non-instructional conversation with athletes. Coach did not explicitly convey care to individual athletes.
	Structured	3	Coach attempted to organize practice, but players did not respond quickly and seemed unsure of what to do. Changing of positions seemed unclear.	3	Instructions/guidance were provided to indicate appropriate field coverage for players. Overall practice structure was inefficient.
Disempowering	Controlling	5	Dialogue was often controlling in nature: 'I need you to be on top of that,' 'You better be … ' Some athletes appeared to be told what positions to play when others seemed to have a choice.	6	Controlling dialogue: 'You gotta catch the ball,' 'You should have … ' Physical control observed when the coach physically moved a player into position. Negative conditional regard observed.
Practice 1 Moderate	Ego involving	3	Coach was observed emphasizing the inferior performance of an athlete: 'You gotta have him!'	4	Coach observed emphasizing inferior performance: 'You messed up.'
Practice 2 Moderate	Relatedness thwarting	5	On occasion, the coach was observed ignoring athletes' perspectives. Belittling behavior: 'He's small! You're supposed to be on top and pick it!'	4	Belittling and a cold communication style were observed toward the end of the practice.

(*Continued*)

Table 3. Continued.

Kylie			Practice 1		Practice 2
Motivational climate	Behavior categories	Score: 0–12	Examples of behavior	Score: 0–12	Examples of behavior
Empowering	Autonomy-supportive	6	Coach allowed athletes to choose a 'C' or 'J' shaped entry into the high jump. Athletes were also free to attempt the high jump in any order. Rationales occasionally offered to explain tasks	2	Little to no opportunities for choice. Reasons for tasks were given on occasion. Athletes' input was considered but not invited.
Practice 1 Moderate	Task involving	6	Coach favored a sandwich approach to feedback. A praise or acknowledgement was given followed by a critique of what the athlete should do next: 'That was great, you used your arms perfectly.' 'Try to work on that arc in your back.'	2	Feedback was minimal and often lacked specific corrective information: 'You went right into the bar.' 'You gotta flop backwards.' Effort was recognized toward the end of practice.
Practice 2 Not at all	Relatedness supportive	6	Coach listened to athletes' perspectives and sought to include all athletes in practice activities. Communication style was warm. Unconditional regard observed: 'If you don't make it, it's ok.'	2	Coach attempted to reassure athletes low in confidence: 'Just try it.' 'If you don't make it you can try it again.' Overall, the coach did not convey a warm communication style and seemed irritable.
	Structured	4	Guidance provided throughout exercises. Instructions could be clearer and more specific. 'Just do it' was non-descriptive.	1	Short and non-descriptive instructions provided. Coach did not provide guidance through activities or explain learning expectations.
Disempowering	Controlling	7	Coach frequently engaged in controlling language: 'You have to … ' 'Stop thinking about it.' Coach gave the indication that there was little room for error: 'That's how you should do it every time.'	11	Overall provision of instruction was controlling, and tone was cold. Intimidation behavior was evident while athletes were being punished. Called out athletes who were not completing burpees.
Practice 1 Moderate	Ego involving	4	Inferior performances were recognized and called out: 'What'd you mess up?' What did you forget?' Encouraged rivalry: 'Let's see if the girls can out jump you today.'	7	Inferior performance was emphasized: 'This past weekend you couldn't do it,' & 'You can't do much worse than these two. Prove me wrong.' Punishment: 'If you screw up, I'll scratch you.'
Practice 2 Strong	Relatedness thwarting	4	Belittling observed: 'Where was that on Saturday?' and 'It's not that hard.'	10	Belittling and a cold communication style were evident throughout the entirety of the coaching session: 'He looked like a dead fish.'

youth athletes (age 6 and up). Despite this, she felt she learned on-the-job and adapted to the developmental needs of the group. This often meant incorporating things the children asked to do during practice to foster engagement:

> Eventually I would end up incorporating [what they wanted] in somewhere [and] I'd have their skill incorporated as well … I like making them happy, cause if I made them upset it was game over for the day.

Kylie noticed that for her athletes to listen to her, she had to listen to what they wanted. She brought this experience with her when coaching high school athletes where she observed that older athletes required a similar amount of instruction and feedback to scaffold the learning of skills.

Kylie's coaching philosophy and goal for coaching was to lead by example and shape athletes into better people both on the field and in the world. In this way, she hoped the skills learned in track would transfer to other areas of athletes' lives such as at school, at home, and within their relationships. Kylie aspired to help athletes reach their full potential in developing their athletic abilities, character, and career aspirations which she draws from her own drive for personal improvement. An additional source of Kylie's philosophy was a professor within the coaching program who taught similar values.

Kylie's MMCOS scores (Table 1) showed a considerable shift from practice one to practice two. Her empowering and disempowering climate scores for practice one were both moderate while in practice two her empowering climate was not at all salient and her disempowering climate was strong. Kylie displayed a variety of empowering behaviors during the first practice to include task-involving feedback, opportunity for choice, recognition of improvement, warm communication style, unconditional regard, and guidance through instruction. Meanwhile, disempowering behaviors evident within the first practice included controlling language, conditional regard, recognition of inferior performance, encouraging rivalry between teammates, and belittling.

During the interview, Kylie described interactions with her current athletes that revealed how she perceived her coaching style. One account illustrated Kylie's interaction with an athlete hesitant to race at sectionals:

> She [the athlete] was hating on herself the whole time she was warming up and I was like no, you have got to do this. I am so proud of you that you have gotten here thus far. You just need to finish it out. I mean, just do your race.

While Kylie was hoping to support and encourage this athlete, her response also reinforced the notion that the athlete did not have a choice to withdraw from the race, a more disempowering behavior. When the athlete jumped off the track before finishing, she admitted to Kylie that she had not wanted to run the race and had low confidence in her abilities. In other instances, Kylie displayed empowering coaching behaviors by asking questions and seeking to understand athletes' perspectives when they did not seem engaged. In describing her coaching style, Kylie felt she was more laid-back in her provision of instruction and feedback and sought to give equal praise and criticism in her provision of feedback.

However, Kylie also mentioned that a strict coaching approach was important to her and felt all athletes should receive discipline regardless of favoritism. Here, exercise as punishment and material rewards were perceived as useful in improving athletes' adherence to coach directives. Observation of her second practice showed evidence of this perspective, including a drop in potency for empowering behaviors and a shift to a colder communication style. Disempowering behaviors were more frequent in the second practice with the addition of intimidation, punishment, and cold communication. In comparison to Ryan's second practice, Kylie's shift in demeanor was could have been due to the influence of other coaches she was working with, as opposed to working with difficult athletes.

Kylie's description of a laid-back coaching style was reflected in her low scores for creating structure. Athletes were not always informed of the reasons why they were engaging in specific exercises nor was there consistent guidance toward improving their performance. Kylie was shown at times considering athletes' perspectives and desires in shaping the activities of practice, corroborating her

desire to accommodate athletes' needs. In recalling Kylie's desire for praise from previous coaches, it is interesting to note that her provision of praise was not always forthcoming. During the second practice, athletes were reminded of instances where they did not execute behavior proficiently instead of acknowledging the improvement that had occurred. Ironically, this behavior did not align with Kylie's aim to provide equal amounts of criticism and praise but resembled the behavior described of her previous coach. Meanwhile, Kylie's engagement in disempowering behaviors appears related to her desire to help athletes reach their full potential as reflected in her controlling language. In using directives, Kylie would favor what she felt athletes needed to do to improve over athletes' individual goals or perspectives.

Our final participant, Jackson, was in his fourth year of his undergraduate program. Jackson had the least amount of coaching experience, totaling two seasons. During practicum, Jackson specifically worked with the defense, linebackers, and special teams as an assistant middle school football coach.

As an athlete, Jackson participated in several sports including basketball, wrestling, and football. Jackson reported several memorable experiences with coaches throughout his athletic participation that he carried with him in his coaching role. As an eighth grader, Jackson was injured during a basketball game and was ignored by the coaching staff. After leaving the game early, Jackson decided to quit the team and remembered that his coaches never inquired why he left. He described this incident as being very hurtful and felt that his coaches did not care about him. When he was later injured in wrestling, he recalled how his coach was there to comfort and encourage him immediately following the incident. Other memorable experiences included the strong connection he felt with one of his football coaches who was very energetic and encouraging towards his athletes. Jackson also described more distant relationships with coaches who did not know all their athletes' names and only attended to their star athletes. Ultimately, Jackson expressed an appreciation for the coaches who sought to develop a relationship with him, who were knowledgeable, who communicated care, and who conveyed energy in their coaching.

Given these experiences, it comes as no surprise that Jackson described coach caring as the center of his coaching philosophy. During his interview, he described how he exemplified coach caring by prioritizing relationships, learning athletes' names, and being concerned with their lives outside of sport. In emulating this philosophy, Jackson indicated that he would provide explanations when disciplining athletes while avoiding more of a tough love approach. Jackson felt that in showing athletes he cared, athletes would feel empowered to pursue their goals:

> Caring about a person [means] a lot to me. When a person cares about me, it just makes me feel at the top. So, if I can make this young man feel he's at the top there's no tellin' what he can do or how far he can take his success.

Jackson's desire to be a more caring coach was not reflected in his MMCOS scores (Table 1). Jackson displayed a consistent weak empowering and moderate disempowering climate across the two observed practices. Jackson offered few opportunities for athletes to have choice throughout practice, did not maintain efficient structure and provided non-specific feedback with little to no instances of praise. Athletes were often unresponsive and appeared disengaged when interacting with Jackson who occasionally offered non-sport related conversations with athletes and a few instances of unconditional positive regard. Thus, Jackson's disempowering climate was more salient due to his moderate engagement in controlling directives, emphasis on inferior performances, belittling, and a cold communication style.

Jackson's view of discipline is reflected in his disempowering coaching behaviors as he both spoke of, and was observed using exercise as punishment as an appropriate way to enforce respect as long as a rationale was communicated:

> When you guys are fumbling too much on the field … we have the drill called punch it out … and if it comes out, we need push-ups. If it doesn't come out, good, we will keep going.

Jackson mentioned yelling at athletes when threatening future discipline and when athletes have not been responding to instruction. Although he felt he has decreased his frequency of yelling, he believes that yelling can be effective in garnering athletes' attention. Despite this, Jackson described his coaching as more laid back than demanding and would provide suggestions and correction when needed to guide athlete development:

> If you're not taking the proper number of step-backs, I'm gonna let you know. But for the most part, I'm here to make sure you understand you know what you're doing, make sure you're taking the correct and right steps to avoid injury. I'm not, do it right, do it right now.

In comparing Jackson's perceived and actual coaching behaviors, Jackson's caring philosophy was not strongly manifested across the two observed practices. His claim that he avoids a tough love approach while focusing on providing explanations for disciplinary actions was not observed. In fact, low scores for relatedness supportive and autonomy supportive behaviors suggested that caring behaviors were infrequent and sporadic in practice. Instead, his controlling dialogue, limited opportunities for choice, and negative conditional regard were rated higher in potency. Jackson alluded to his engagement in many of the observed disempowering behaviors during his interview, thus, establishing his awareness of these behaviors in his coaching. Nevertheless, Jackson's empowering motivational climate was weak and stood as a contrast to his value of providing encouragement and care to his athletes.

Discussion

The purpose of this study was to examine the experiences of novice coaches as athletes and in their current coaching roles. A secondary purpose was to explore how these experiences manifested in novice coaches' observed coach-created motivational climate. Our findings suggest novice coaches' role as an assistant coach was an important contextual factor with respect to novice coaches' learning, coaching behaviors, and relationships with other coaches. Also, novice coaches were shown to link previous experiences to their coaching practice using knowledge gleaned from informal and formal learning sources, previous athletic and coaching experiences, and beliefs about athlete motivation. In cross-referencing novice coaches' observed coach-created motivational climate and their intended coaching behaviors, coaches were documented both supporting and undermining various aspects of their coaching philosophies through their engagement in various empowering and disempowering behaviors.

Role as an assistant coach

Novice coaches frequently spoke of the challenges associated with their role as an assistant coach that revealed their own personal needs. Ryan, Kylie, and Jackson described how they lacked strong relationships with members of the coaching staff, received insufficient mentoring, and identified incongruence in coaching strategies between themselves and their respective head coaches. These findings indicated a lack of support and guidance throughout their practicum learning experiences. Such deficiencies in novice coach training are not uncommon, as novice coaches have previously reported a lack of formal support systems, especially in the receipt of feedback (Nash, Sproule, and Horton 2017). Without feedback regarding coaching practice from reliable sources (such as practicum supervisors and/or more experienced coaches), novice coaches' can be deprived of the development of reliable coaching knowledge and opt to rely on feedback from less credible sources such as athletes, peer coaches, and parents.

The need satisfaction of the coach has been considered as an antecedent to promoting similar need-supportive climates for athletes (Rocchi and Pelletier 2017). Zakrajsek and colleagues' (2019) interviews found assistant coaches' motivation and basic need fulfillment could be meaningfully influenced by their respective head coaches via nurturing close connections, assigning meaningful

responsibilities, asking for their opinions, recognizing good work, and investing in their development. As our novice coaches' alluded to having little responsibility within their programs (autonomy), felt they had to prove their worth and earn the trust of coaches on staff (competence), and were insecure about their relationships with other coaches (relatedness), it is possible they were not in an optimal environment to facilitate need satisfaction or create an empowering motivational climate for their athletes. Limited screening of mentor coaches has previously been reported as a contributing factor of poor learning experiences for student-coaches within higher education (Trudel, Milestetd, and Culver 2020). Therefore, instructors in higher education should consider the importance of novice coaches' need satisfaction within their practicum placements and the quality of the mentorship they are receiving as this is likely to benefit both the student-coach and the athletes they will instruct.

Linking experience to practice

This study documented perceived sources of coach learning in addition to the related learning experiences of novice coaches enrolled in higher education. Sources such as formal education and informal sources (e.g. peer coaches, learning on-the-job) have previously been reported across experienced and inexperienced coaches as important components to the novice coach (Walker, Thomas, and Driska 2018). While the present study also supports the notion that novice coaches reference their personal athletic experiences to inform their coaching practices (Benish, Langdon, and Culp 2021; He, Trudel, and Culver 2018), it appeared, for the current participants, that previous athletic experience became less relevant as they accumulated more diverse coaching experiences. In fact, this notion was present despite all three coaches having completed similar course requirements at the time of the study in fulfillment of the coaching minor. In addition, in certain cases, the dissonance between previous experiences as athletes and emulating coaching behaviors observed by supervisors was present. For example, although Jackson discussed his feelings that coaches did not care about him, he emulated behaviors he saw from his supervisors that could also serve as reasons for his current athletes to feel that he did not care about them. This also ties to participants' low use of autonomy supportive behaviors and an overreliance of controlling behaviors observed.

Learning opportunities in an applied context provides novice coaches a space to test coaching knowledge and further identify areas to enhance knowledge or engage in different behaviors. From the standpoint of developing need supportive behaviors, novice physical education teachers tend to adjust from what they were taught based on the social context and norms established by the cooperating teacher (Taylor, Ntoumanis, and Smith 2009). Connecting this to coaching, novice coaches in the current study tended to shift away from need supportive behaviors to align more closely with the norms established by their supervising coaches. Further, the reflective process, which is well established in their coaching program curriculum, was not fully translated into practice. This was evidenced by the participants in the current study demonstrating a limited understanding of what coaching behaviors impacted athlete motivation, revealed in the ways novice coaches described the strategies they thought to be effective and necessary.

Disconnect between intention and action

The finding that novice coaches displayed behaviors that supported and undermined aspects of their beliefs about coaching, as explored through philosophies and intended coaching behaviors, could potentially be explained within the context of the coaches' development. In research with elite coaches, empowering coaching behaviors were found to be intentionally, and yet, intuitively implemented as they directly aligned and complemented elite coaches' beliefs about coaching (Cooper and Allen 2020). While Cooper and Allen (2020) demonstrated coaching philosophy as an antecedent to empowering coaching behaviors, Cushion and Partington (2014) posit that using coaching philosophy as 'a valid unproblematized explanation of coaches' thoughts and action' (864) is problematic and does not appropriately recognize the importance of the social context on coaching behavior and the

unconscious nature of coaching practice. Indeed, this idea could also account for the inconsistency in behaviors used from one practice to the next. For novice coaches Kylie and Ryan, the social context was incredibly relevant as their behavior was often shaped or informed by the motivational climate created by the head coaches and thus often divulged from novice's preferred coaching strategy. Such behavior has been reported with other student-coaches who were found to be 'sacrificing individual beliefs, learnings and positions to the dominant organizational culture' (Gomes et al. 2018, 76). Within these contexts, it appears novice coaches' learning experiences and the opportunity to apply course concepts to the field can be somewhat restrictive and create an environment where novice coaches' personal beliefs are subdued or diverted to attend to the wishes of the coach in charge. In other words, novice coaches often have limited freedom to test out concepts learned in their coursework during the field-based experience, which could further impede their ability to engage in deeper learning.

It is also possible that novice coaches may not have developed a robust reflective process to connect the coaching strategies they learned in their coursework with how they apply that knowledge in the field. Incongruencies have previously been identified between coaches' intended coaching versus their action (Benish, Langdon, and Culp 2021; Partington and Cushion 2013). This low self-awareness and incongruence, known as cognitive dissonance or an 'epistemological gap' between understanding and practice, was present in our study. In the case of Kylie, she was shown continuing to give more critical corrective feedback despite having expressed her desire to provide equal amounts of criticism and praise. This mismatch between intention and action was further illustrated in how novice coaches engaged in empowering and/or disempowering climates. According to Cooper and Allen, cultivating consistent empowering climates requires the coach first have an 'awareness of how their current practices may create differing climates before discussing strategies that create an empowering climate' (2020, 185). Therefore, enhancing novice coaches' implementation of empowering coaching practices first requires a higher awareness of how coach behaviors are shaping the motivational climate and an intentionality to implement such strategies.

Limitations and future directions

The collective case approach adopted for this study poses inherent methodological concerns. As few cases were examined, results cannot be generalized to all novice coaches in higher education. However, we assert the value of the case studies in informing future research (George and Bennett 2005) and the further development of theoretical frameworks. As theoretical frameworks such as SDT and AGT are continually tested quantitatively, having case studies that document individual use of the behaviors associated with these two frameworks provides the context and examples needed to educate coaches and coach developers towards more empowering and need-supportive coaching practices. Future research should consider a more robust sample from multiple formal coaching education programs to explore novice coaches' knowledge and implementation of empowering coaching as related to their intended and actual coaching behaviors. Filming coaches for longer periods of time across multiple practices would also be recommended to better capture novice coaches' motivational climate.

Also important to note, novice coaches were familiar with the concept of creating an empowering motivational climate but appeared to have had little experience actively applying the concepts of SDT and AGT to their coaching experiences. Future research should consider implementing existing need-supportive training methods (similar to Berntsen and Kristiansen 2019; Duda 2013) with developing coaches enrolled in higher education to facilitate the adoption of empowering coaching behaviors and in accordance with the SHAPE America's National Standards for Sport Coaches (SHAPE America 2018). Similar interventions have been successful in training youth sport coaches to adopt a more need-supportive coaching style (Reynders et al. 2019) and could challenge novice coaches' beliefs regarding the effectiveness of controlling coaching (Benish, Langdon, and Culp 2021; Matosic et al. 2018). Integrating such interventions early in sport coaches' careers could be optimal, as need-supportive interventions have been shown to be most effective for trainees who have little experience in their profession (Su and Reeve 2011).

The evaluation process used in the current study could be a template for improving the mentoring process for novice coaches engaged in higher education coaching programs. As Paquette and Trudel (2018) suggest, merging assessment and learning could allow coaches to see the connection between their coursework, previous experience, and behaviors they actively engage in. It may also allow them to see the behaviors of their mentor coaches from a wider and more informed perspective. However, it is important to stress the use of assessment as a reflective process, not to be prescriptive of the behavior's coaches should and should not engage in. Although the interview process can be time-consuming, it could allow the coach educator to better understand the novice coach's experiences and provide individual guidance to better facilitate learning. In other words, having a conversation with the novice coach about what she or he is experiencing outside of the classroom could help strengthen their understanding of concepts learned within their coursework.

Conclusions

The present study extended the understanding of novice coaches' previous experiences as athletes and as coaches during their higher-education practicum placements. Among the discrepancies between coaches' intentions for coaching and their actual coaching, novice coaches were found to engage in both empowering and disempowering behaviors. Novice coaches' perspective of their role as an assistant coach provided important recommendations for how these coaches want and need to be supported during their practicum experiences. Therefore, it is recommended that program coordinators seek supportive coaching programs to nurture and facilitate the needs of the developing coach. In addition, novice coaches link their experiences to practice in a variety of ways, which further illustrates the need to understand personal experiences and how that may impact the implementation of an empowering motivational climate.

Note

1. A full listing of the interview questions are available upon request.

Disclosure statement

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References

Bartholomew, Kimberley J., Nikos Ntoumanis, and Cecilie Thøgersen-Ntoumani. 2009. "A Review of Controlling Motivational Strategies from a Self-Determination Theory Perspective: Implications for Sports Coaches." *International Review of Sport and Exercise Psychology* 2 (2): 215–233. doi:10.1080/17509840903235330.

Benish, Diane, Jody Langdon, and Brian Culp. 2021. "Examination of Novice Coaches' Previous Experience as Athletes: Examples of Autonomy Support and Controlling Behaviors as Influences on Future Coaching Practice." *International Sport Coaching Journal* 8 (1): 48–61. doi:10.1123/iscj.2019-0031.

Berntsen, Hedda, and Elsa Kristiansen. 2019. "Guidelines for Need-Supportive Coach Development: The Motivation Activation Program in Sports (MAPS)." *International Sport Coaching Journal* 6: 88–97. doi:10.1123/iscj.2018-0066.

Braun, Virginia, Victoria Clarke, and Paul Weate. 2016. "Using Thematic Analysis in Sport and Exercise Research." In *Routledge Handbook of Qualitative Research in Sport and Exercise*, edited by B. Smith and A. C. Sparkes, 191–205. London: Routledge.

Cooper, Doug, and Justine Allen. 2020. "'I Don't Want to Give Them My Brain for the Day … and Then Take It Back': An Examination of the Coach-Created Motivational Climate in Adult Adventure Sports." *International Sport Coaching Journal* 7 (2): 175–188. doi:10.1123/iscj.2019-0026.

Cope, Ed, Mark Partington, and Stephen Harvey. 2017. "A Review of the Use of a Systematic Observation Method in Coaching Research Between 1997 and 2016." *Journal of Sports Sciences* 35 (20): 2042–2050. doi:10.1080/02640414.2016.1252463.

Côté, Jean. 2006. "The Development of Coaching Knowledge." *International Journal of Sports Science & Coaching* 1 (3): 217–222. doi:10.1260/174795406778604609.

Crowe, Sarah, Kathrin Cresswell, Ann Robertson, Guro Huby, Anthony Avery, and Aziz Sheikh. 2011. "The Case Study Approach." *BMC Medical Research Methodology* 11 (1): 100-108. doi:10.1186/1471-2288-11-100.

Cushion, Christopher J., Kathy M. Armour, and Robyn L. Jones. 2003. "Coach Education and Continuing Professional Development: Experience and Learning to Coach." *Quest* 55 (3): 215–230. doi:10.1080/00336297.2003.10491800.

Cushion, Christopher J., and Mark Partington. 2014. "A Critical Analysis of the Conceptualisation of 'Coaching Philosophy.'" *Sport, Education and Society* 21 (6): 851–867. doi:10.1080/13573322.2014.958817.

Delrue, Jochen, Bart Reynders, Gert Vande Broek, Nathalie Aelterman, Maarten De Backer, Steven Decroos, Gert-Jan De Muynck, et al. 2019. "Adopting a Helicopter-Perspective Towards Motivating and Demotivating Coaching: A Circumplex Approach." *Psychology of Sport and Exercise* 40: 110–126. doi:10.1016/j.psychsport.2018.08.008.

Duda, Joan L. 2013. "The Conceptual and Empirical Foundations of Empowering Coaching™: Setting the Stage for the PAPA Project." *International Journal of Sport and Exercise Psychology* 11 (4): 311–318. doi:10.1080/1612197x.2013.839414.

George, Alexander L., and Andrew Bennett. 2005. *Case Studies and Theory Development in the Social Sciences.* Cambridge, MA: MIT Press.

Gilbert, Wade D, and Pierre Trudel. 2001. "Learning to Coach Through Experience: Reflection in Model Youth Sport Coaches." *Journal of Teaching in Physical Education* 21 (1): 16–34. doi:10.1123/jtpe.21.1.16.

Gomes, Rúben, Robyn L. Jones, Paula Batista, and Isabel Mesquita. 2018. "Latent Learning in the Work Place: The Placement Experiences of Student-Coaches." *Sport, Education and Society* 23 (1): 68–81. doi:10.1080/13573322.2016.1141287.

He, Chao, Pierre Trudel, and Diane M. Culver. 2018. "Actual and Ideal Sources of Coaching Knowledge of Elite Chinese Coaches." *International Journal of Sports Science & Coaching* 13 (4): 496–507. doi:10.1177/1747954117753727.

ICCE and ASOIF (International Council of Coaching Excellence and Association of Summer Olympic International Federations). 2012. "ISCF_1_aug_2012.Pdf.".

Isoard-Gautheur, Sandrine, Emma Guillet-Descas, and Pierre-Nicolas Lemyre. 2012. "A Prospective Study of the Influence of Perceived Coaching Style on Burnout Propensity in High Level Young Athletes: Using a Self-Determination Theory Perspective." *The Sport Psychologist* 26 (2): 282–298.

Jones, R. L., K. M. Armour, and Paul Potrac. 2003. "Constructing Expert Knowledge: A Case Study of a Top-Level Professional Soccer Coach." *Sport, Education and Society* 8 (2): 213–229. doi:10.1080/13573320309254.

Jowett, Sophia. 2003. "When the 'Honeymoon' Is Over: A Case Study of a Coach-Athlete Dyad in Crisis." *The Sport Psychologist* 17 (4): 444–460. doi:10.1123/tsp.17.4.444.

Kiosoglous, Cameron, and Zeljka Vidic. 2017. "Shedding More Light on the Factors That Predict Coaching Success in Rowing." *Journal of Sport Behavior* 40 (1): 108–127.

Lorimer, Ross, and David Holland-Smith. 2012. "Why Coach? A Case Study of the Prominent Influences on a Top-Level UK Outdoor Adventure Coach." *The Sport Psychologist* 26 (4): 571–583. doi:10.1123/tsp.26.4.571.

Mageau, Geneviève A, and Robert J Vallerand. 2003. "The Coach–Athlete Relationship: A Motivational Model." *Journal of Sports Sciences* 21 (11): 883–904. doi:10.1080/0264041031000140374.

Matosic, Doris, Nikos Ntoumanis, Ian D Boardley, and Constantine Sedikides. 2018. "Narcissism, Beliefs About Controlling Interpersonal Style, and Moral Disengagement in Sport Coaches." *International Journal of Sport and Exercise Psychology* 18 (5): 592–606. doi:10.1080/1612197x.2018.1549580.

McQuade, Sarah, Louise Davis, and Christine Nash. 2015. "Positioning Mentoring as a Coach Development Tool: Recommendations for Future Practice and Research." *Quest* 67 (3): 317–329. doi:10.1080/00336297.2015.1048810.

Nash, Christine, John Sproule, and Peter Horton. 2017. "Feedback for Coaches: Who Coaches the Coach?" *International Journal of Sports Science & Coaching* 12 (1): 92–102. doi:10.1177/1747954116684390.

Nelson, Lee J., Christopher J. Cushion, and Paul Potrac. 2006. "Formal, Nonformal and Informal Coach Learning: A Holistic Conceptualisation." *International Journal of Sports Science & Coaching* 1 (3): 247–259. doi:10.1260/174795406778604627.

Nicholls, J. G. 1989. *The Competitive Ethos and Democratic Education*. Cambridge, MA: Harvard University Press.

NVivo (version 12). 2018. QSR International Pty Ltd.

Paquette, Kyle, and Pierre Trudel. 2018. "Learner-Centered Coach Education: Practical Recommendations for Coach Development Administrators." *International Sport Coaching Journal* 5: 169–175. doi:10.1123/iscj.2017-0084.

Partington, M., and C. Cushion. 2013. "An Investigation of the Practice Activities and Coaching Behaviors of Professional Top-Level Youth Soccer Coaches." *Scandinavian Journal of Medicine & Science in Sports* 23: 374–382. doi:10.1111/j.1600-0838.2011.01383.x.

Potrac, Paul, Clive Brewer, Robyn Jones, Kathleen Armour, and Jan Hoff. 2000. "Toward an Holistic Understanding of the Coaching Process." *Quest* 52 (2): 186–199. doi:10.1080/00336297.2000.10491709.

Reynders, Bart, Maarten Vansteenkiste, Stef van Puyenbroeck, Nathalie Aelterman, Maarten De Backer, Steven Decroos, Jochen Delrue, et al. 2019. "Coaching the Coach: Intervention Effects on Need-Supportive Coaching Behavior and Athlete Motivation and Engagement." *Psychology of Sport and Exercise* 43: 288–300. doi:10.1016/j.psychsport.2019.04.002.

Rocchi, Meredith, and Luc Pelletier. 2017. "How Does Coaches' Reported Interpersonal Behavior Align With Athletes' Perceptions? Consequences for Female Athletes' Psychological Needs in Sport." *Sport, Exercise, and Performance Psychology* 7 (2): 141–154. doi:10.1037/spy0000116.

Ryan, R. M., and E. L. Deci. 2017. *Self-Determination Theory: Basic Psychological Needs in Motivation, Development, and Wellness*. New York: The Guildford Press.

Salmela, John H. 1995. "Learning from the Development of Expert Coaches." *Coaching and Sport Science Journal* 2 (2): 3–13.

SHAPE America. 2018. *Quality Coaches, Quality Sports: National Standards for Sport Coaches*. 3rd ed. Reston: SHAPE America.

Smith, Brett, and Kerry R. McGannon. 2017. "Developing Rigor in Qualitative Research: Problems and Opportunities Within Sport and Exercise Psychology." *International Review of Sport and Exercise Psychology* 11 (1): 101–121. doi:10.1080/1750984x.2017.1317357.

Smith, Nathan, Damien Tessier, Yannis Tzioumakis, Eleanor Quested, Paul Appleton, Philippe Sarrazin, Athanasios Papaioannou, and Joan L Duda. 2015. "Development and Validation of the Multidimensional Motivational Climate Observation System." *Journal of Sport and Exercise Psychology* 37 (1): 4–22. doi:10.1123/jsep.2014-0059.

Su, Yu-Lan, and Johnmarshall Reeve. 2011. "A Meta-Analysis of the Effectiveness of Intervention Programs Designed to Support Autonomy." *Educational Psychology Review* 23 (1): 159–188. doi:10.1007/s10648-010-9142-7.

Taylor, Ian M, Nikos Ntoumanis, and Brett Smith. 2009. "The Social Context as a Determinant of Teacher Motivational Strategies in Physical Education." *Psychology of Sport and Exercise* 10: 235–243. doi:10.1016/j.psychsport.2008.09.002.

Taylor, Shaunna L, Penny Werthner, and Diane Culver. 2014. "A Case Study of a Parasport Coach and a Life of Learning." *International Sport Coaching Journal* 1 (3): 127–138. doi:10.1123/iscj.2013-0005.

Tessier, Damien, Nathan Smith, Yannis Tzioumakis, Eleanor Quested, Philippe Sarrazin, Athanasios Papaioannou, Nikolaos Digelidis, and Joan L. Duda. 2013. "Comparing the Objective Motivational Climate Created by Grassroots Soccer Coaches in England, Greece and France." *International Journal of Sport and Exercise Psychology* 11: 365–383. doi:10.1080/1612197X.2013.831259.

Trudel, Pierre, Michel Milestetd, and Diane Culver. 2020. "What the Empirical Studies on Sport Coach Education Programs in Higher Education Have to Reveal: A Review." *International Sport Coaching Journal* 7: 61–73. doi:10.1123/iscj.2019-0037.

Walker, Lauren F, Rebecca Thomas, and Andrew P Driska. 2018. "Informal and Nonformal Learning for Sport Coaches: A Systematic Review." *International Journal of Sports Science & Coaching* 13 (5): 694–707. doi:10.1177/1747954118791522.

Walsh, Julia, and Fraser Carson. 2019. "Searching for a Signature Pedagogy in Novice Coach Education." *International Sport Coaching Journal* 6: 349–353. doi:10.1123/iscj.2018-0049.

Zakrajsek, Rebecca A., Johannes Raabe, Tucker Readdy, Sara Erdner, and Andrew Bass. 2019. "Collegiate Assistant Coaches' Perceptions of Basic Psychological Need Satisfaction and Thwarting from Head Coaches: A Qualitative Investigation." *Journal of Applied Sport Psychology* 32 (1): 28–47. doi:10.1080/10413200.2019.1581855.