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HOW DO COACH EDUCATORS INFLUENCE MEANINGFUL BEHAVIOR CHANGE IN SPORTS COACHES?

KAKO UČITELJI-TRENERJI VPLIVAJO NA POMEMBNE SPREMEMBE V VEDENJU ŠPORTNIH TRENERJEV?

ABSTRACT

This article provides an overview of how coach educators influence meaningful behavior change in sports coaches. Drawing upon the extant research, we outline gaps in the literature before reviewing key factors that influence behavior change in sport coaches. The framework for this article provides examples of five specific hypotheses, including: H₁: Ensure coach education programs are structured and sequenced; H₂: Coach characteristics drive behaviors; H₃: Behavior change is more likely to occur when coaches understand the impact of their behavior; H₄: The learning environment must align with needs of coaches; and H₅: Delivering and receiving feedback appropriately informs coach education practice. We include evidence of how an experienced coach educator influences meaningful behavior change in sports coaches. We conclude with recommendations for sport coach development programs and future researchers.

Keywords: coach education, coaching science, sport

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IZVLEČEK

Prispevek obsega pregled, kako učitelji-trenerji vplivajo na pomembne spremembe v vedenju športnih trenerjev. Na podlagi obstoječih raziskav smo prikazali vrzeli v literaturi, nato pa smo pregledali glavne dejavnike, ki vplivajo na spremembo vedenja športnih trenerjev. Okvir tega prispevka so primeri petih specifičnih hipotez, in sicer H₁: zagotovitev, da so programi izobraževanja trenerjev strukturirani in izvedeni zaporedno; H₂: značilnosti trenerjev pogojujejo njihovo vedenje; H₃: sprememba vedenja se bolj verjetno pojavi, kadar trenerji razumejo vpliv svojega vedenja; H₄: učno okolje je treba uskladiti s potrebami trenerjev in H₅: ustrezno dajanje in prejemanje povratnih informacij izpopolnjuje prakso izobraževanja trenerjev. Predstavljamo tudi dokaze, kako izkušen učitelj-trener vpliva na pomembne spremembe vedenja športnih trenerjev. Prispevek se zaključí s priporočili za programe razvoja športnih trenerjev in bodočih raziskovalcev.

Ključne besede: izobraževanje trenerjev, trenerska znanost, šport

INTRODUCTION

Coaches have a pivotal role to play in sport. The behaviors coaches exhibit are crucial in many ways, influencing aspects including enjoyment of the activity, uptake of skill, and continued participation in the sport. It is, therefore, imperative that coaches are aware of the importance and consequences of how their behaviors influence the technical, strategic, and psychosocial development of their athletes.

Coaching science was founded heavily on the analyses of coach behaviors (Gilbert & Trudel, 2004). As a result, coaches have received growing attention in the literature and numerous coach development programs have been initiated. These programs include learning activities applied directly with coaches in order to change coach behavior through education, social interaction, and/or personal reflection (Evans, McGuckin, Gainforth, Bruner, & Côté, 2015). There is also a growing recognition of the role that theory can play in these programs designed to change behavior (Cassidy, Potrac, & McKenzie, 2006; Nelson, Cushion, & Potrac, 2013), as well as the behavior change techniques employed by coaches.

The extant research has helped inform how coaches can reflect on their practice and potentially change behaviors. The majority of these such studies have used instruments to measure behavior in the short-term and compared different groups of coaches (e.g., grassroots vs. elite coaches). Athlete perceptions of coach behavior have been used often, but only present a subjective view. Several qualitative research studies have also helped advance understanding of what coaches perceive to be necessary or desired components of effective coach development (e.g., McCullick, Belcher, & Schempp, 2005).

A recent systematic review by Allan, Vierimaa, Gainforth, and Côté (2018) investigated if and how behavior change theories have been used to inform and evaluate coach development programs across a range of domains. The study found that, of the 29 published coach development programs, only 6 were based on a behavior change theory. Allan et al. (2018) also observed that there is no dominant or comprehensive theory used in targeting behavior change in the coaching context, as no single behavior change theory underpinned more than one program.

While coach development programs offer important opportunities to change coach behavior and positively influence outcomes in sport, it is clear little is known about the theoretical influences used to design and implement them effectively. Before an appropriate behavior change theory or technique can be selected to inform a coach development program, we require an evidence-based understanding of the key factors that influence behavior change in sport coaches (Allan et al., 2018). The purpose of the present article, therefore, is to provide an overview of how coach educators influence meaningful behavior change in sports coaches in order to provide insights for sport coach development programs and future researchers. We have chosen to focus on five specific hypotheses that may be tested, including: H₁: Ensure coach education programs are structured and sequenced; H₂: Coach characteristics drive behaviors; H₃: Behavior change is more likely to occur when coaches understand the impact of their behavior; H₄: The learning environment must align with needs of coaches; and H₅: Delivering and receiving feedback appropriately informs coach education practice. We use these as a framework for examining how coach educators influence meaningful behavior change in sports coaches, and include illustrative quotations throughout from an experienced coach educator¹ we interviewed for this article.

¹The coach educator has the highest level of coaching qualification in their sport, 28 years of experience as coach to

H₁: Ensure coach education programs are structured and sequenced

Previous research has suggested that the manner in which coach education is structured and sequenced is very important as it influences the coherence of delivery and motivation of coaches (Mallett, Trudel, Lyle, & Rynne, 2009). Other studies involving experienced coaches have also suggested that coach education should be more coach-centred, have appropriate learning resources and take into account other factors including facilities, location and costs (Nelson et al., 2013). These were all suggested as ways to improve coach education provision across eight different sports comprising of both individual and team-based sports. Another commonly cited way of improving coach education is the embedding and creation of communities of practice, whereby coaches can share solutions, philosophies and ideas in a more formal environment than what is often referred to as ‘networking’ (Gilbert, Gallimore, & Trudel, 2009). This could be incorporated early on in lengthy coach education programmes to improve the experience for coaches.

In our illustrative case study, the expert coach educator explains below that much of what is offered in an initial session is informal due to the practical and dynamic nature of how the session is structured:

“At the moment we are essentially setting up different workshops, let’s say we have a menu of typical things we would do, that would attract people that may be threatened if you said ‘you’ve got to come and do a coach education workshop’. You know, 99% of people are gonna go ‘well I’m not a coach, I can’t do that’. So it might be (framed as) ‘how to run a fun drop in session at your club’ or ‘how to run a fun, informal competition at your club.... We’re trying to open the doors. So I would say the easiest way for us to do that is to put on fun sessions where there’s no formality to it, there’s no certification or testing or challenge in terms of expectation, you know? That’s probably our strategy to start with.”

This type of session would fall into the informal learning category as it is not typically classroom-based or highly structured (Mallett et al., 2009). Whilst there are limitations of an informal learning environment for coaches, including lack of quality assurance, there are benefits to this type of learning including a more individualized approach and a more conducive environment for coaches to ask questions (Mallett et al., 2009; Mesquita, Ribeiro, Santos, & Morgan, 2014). Research has found that coaches of the elite level prefer this type of learning environment to classroom based sessions (Mesquita et al., 2014) which may increase motivation for the coaches attending these types of session. The type of session offered by the coach educator in the above quote also suggest that they are there to capture interest. Research into coach perceptions of coach education conducted by Nash and Sproule (2012) has shown that coaches often take part in coach education due to arbitrary reasons, including being pressured by their relevant sport national governing body (NGB), but this does not seem to be the case here.

Research into sport partnerships conducted by Misener and Doherty (2012) highlighted how inter-organizational relationships in sport can increase community engagement, participation and build trust between both stakeholders. Due to the complex nature of sport and development, these are not simple objectives to achieve. Research looking at eighteen multi-stakeholder sport

grassroots, special needs, disabilities and professional participants, and 11 years of experience as a coach educator to participants ranging from elite-level full-time to volunteer, grassroots level. All quotations presented here are from a structured interview about their experiences in influencing meaningful behavior change in sports coach development programs, and they are used with the coach educator’s permission. The coach educator completed a consent form prior to the interview and provided feedback on the interview transcript.

development projects in Australia provides an insight into political and power issues that arise when dealing with multiple stakeholders (including NGBs, government, educational sector) and can provide difficulty in achieving collaboration successfully (Rosso & McGrath, 2017). The challenges associated with working in partnership with multiple parties are not isolated to community, or developmental level, and they are often exacerbated when facilities are shared between development and elite level sports (Hayhurst & Frisby, 2010) as this creates a division between spaces and time allocated for increasing participation (at the developmental level) and improving performance (at the elite level). These issues are common. The quote below gives an insight into how coach educators work with multiple stakeholders:

“We work in partnership with them, so they will circulate it through all their internal communications, email distribution lists, social media. We do the same, essentially we almost put a call to arms out. Anyone we know that might be connected in that area whether it be through other leisure trusts or sporting hubs.... at some point, it feels like there’s going to be a point where we are seen, perhaps, as a threat to existing qualifications or activity at the clubs, and that’s why the relationship between the club coaches and the coaches in the field and the trenches is so important”

Communicating effectively and being open about the aims may potentially negate the likelihood of this occurring and can even be used to build trust and friendships between organisations (Misener & Doherty, 2012; Rosso & McGrath, 2017). This effective communication can also allow partners or even conflicting organisations to see the value in what others are doing and can help minimise any conflict (Hayhurst & Frisby, 2010).

The use of technology in sport has increased dramatically in recent years and shows few signs of slowing down (Giblin, Tor, & Parrington, 2016). Technology in sport has applications across a variety of levels and activities. The costs can be minimal (e.g., goniometer or mobile phone app) or highly expensive (e.g., 3D motion analysis or GPS). Technology can also be used in coaching and coach education to provide benefits for athletes through more objective and timely feedback (Giblin et al., 2016). When we asked the expert coach educator about extent of technology in their practice, they said the following:

“If I could choose I would have one platform where I could share everything on it. So it would be an app or an online platform so that if we were working together I could post videos up there, I could put documents up there, I could have a plan up there, I could have your goals up there, I could have your coaches up there, like your strength and conditioning, nutrition and lifestyle, psychology if you need it. Everyone feeding into that one platform. That’s how, in terms of pure player development, that’s how I would like to have it. A single platform, actually my next meeting is about that... communication is only as effective as how it is received. There’s no point saying ‘well I have ticked the box, I sent this email, this document, that WhatsApp message’ whatever, nobody read it.”

This suggests that having various different communication platforms can be problematic as some key information is lost, disregarded, or simply not checked. This can have a negative impact for the athlete and may create ambiguity within a coaching team. While this may be a suitable solution to this issue and help share key information about athletes or improve quality of feedback (Giblin et al., 2016), coaches should be aware of their behavior when sharing this information. Giving too much feedback or delivering this inappropriately can be detrimental to the development of the athletes as it make them try to focus on too many cues at once, thus making successful

performance harder to achieve (Ehrlenspiel, 2001). This is a behavior that coach educators can help coaches refine in order to aid the development of athletes. It is clear from the quote above that thoughtful, planned organization has a key role to play in the development of coaches through the delivery of coach education.

H₂: Coach characteristics drive behaviors

“Unless you can practically apply your knowledge and information that you get from various sources, then how good are you gonna be at producing an end result in terms of another coach or another player?”

Common desirable characteristics of coaches have been identified in previous research. These vary due to factors including level of athlete(s), gender, level of competition, and the sport, itself (Nash, Sproule, & Horton, 2008). The quote above from the expert coach educator demonstrates how the practical application of knowledge is a priority for development of effective coaches. This is supported by a review into coaching effectiveness, outlining how the application of knowledge is integral to the process (Côté & Gilbert, 2009).

In terms of leadership style it is common for athletes to prefer high levels of democratic behavior, positive feedback and training, and instructional type behaviors within successful environments (Hoigaard, Jones, & Peters, 2008). At younger ages, it is also common for athletes to prefer coaches who offer high levels of social support in team environments and in individual sports with a coach-athlete dyad (Nicolas, Gaudreau, & Franche, 2011). As highlighted below, it is important for coaches to offer appropriate levels of social support:

“I remember the national coach at the time saying to me ‘you’re too pally, you’re too friendly with the players’ and I went ‘do I not work them hard enough?’ they said ‘no you work them hard, definitely. But you’re too friendly with them’ and I said ‘well what’s the problem with that?’ and they said ‘they need to respect you, not like you’. I said ‘well can you not have both?’, they were old school, it was one or the other, (the national coach insisted) ‘if they like you they won’t respect you’. I’m one of these people, I don’t mind putting myself on the spot, they said this on the [practical setting] and I’m like (gesturing) ‘come across’ to the players, (he asked them) ‘hands up here if you like me’, of course everyone puts their hand up, ‘put your hands up here if you respect me’ and everyone puts their hands up. (The other coach insinuated) ‘Yeah but they’re just saying that’ and one of the kids was like ‘no I really respect him, they’re there for me, they’ve helped me a lot in the last couple of years’. It’s a bizarre caveman type attitude to have (that you can’t be respected and liked)...My experience has been that if I bring fire, it stands out more, because I’m not that person. So they know ‘hey, you’ve stepped over the line mate’... so it has a greater impact. If I’m always fire and I try and bring a bit of humour, then it’s like ‘what are you doing?’”

This illustrates the delicate balance that coaches must be aware of between being socially-supportive and being professional in their conduct with their athletes. The “fire” referred to above is often called a ‘scold’ in coaching behavior terms (Partington, Cushion, & Harvey, 2014) and refers to a punitive behavior exhibited towards an athlete or group of athletes by the coach (Smith & Cushion, 2006). A socially supportive manner can help improve the effectiveness of such behavior, but should be used sparingly as a coach (Vinson, Brady, Moreland, & Judge, 2016). This insight also supports research that suggests coaches need to be flexible with their behaviors to increase effectiveness when dealing with their athletes (Cooper & Allen, 2017).

Coaches also play a vital role in the development of their athletes on and off the field, and the behaviors they exhibit are crucial to this process (Smith & Cushion, 2006). In terms of what coach educators want to see in coaches they develop in this area, the following provides an insight:

“The behaviors of the coach are massively important because most people, especially children, in fact most people, mirror and they learn by watching and just being involved in an environment....What I’m looking for is engagement. That could be from the way they do the goal-setting, planning, it can come through from that. I can see how invested you (the coach) are in this player... the flip side of that is I hate disengagement. I don’t think anyone should be, the ego-driven, the values are not in alignment with what I think... should be. It should all be about helping the person..... I don’t like seeing things where players are demeaned or belittled.”

Having a sense of humor is regarded as a positive personality trait as it increases one’s capacity to socially interact with others (Kuiper & Martin, 1998). While this is not a behavior as such, it gives an insight into how having a personality with sense of humor can help change the environment and build trust and authenticity in a coach-athlete relationship as suggested in previous research into elite sports coaches (Ronglan & Aggerholm, 2014). It has also been suggested that humor can be an effective coping mechanism and reduces the incidence of burnout within education professionals (Ho, 2016). Aside from engagement being desirable and belittling behaviors being undesirable, there are occasions that a humorous personality can be beneficial when in a coaching environment and that it was a characteristic coach educators look upon favorably in coaches. Below is an illustration of this:

“It’s a long journey and it can be quite a lonely profession coaching. Humor can be used to defuse a number of difficult situations. Also it chunks things up, if everything is too serious it starts to get a bit wearing for most people. I see humor as a good way of breaking things up and lightening the mood....I think if you are up close, it can be just the body language between the coach and the player. The engagement, the eye-contact, the smiles, again I come back to the humor. If coaches are laughing with their players on the [practical setting] then there’s a connection, a bond there”

The above quote demonstrates how the use of humor can be used to engage athletes and keep them motivated during tough periods. Whilst sports are culturally different, it is suggested that this could be applied across a variety of sports and settings.

The use of questioning with athletes is a behavioral characteristic shown in research (Partington et al., 2014) to be effective, when used in the correct context, in gaining a deeper understanding of an athlete’s perspective and can be used to facilitate deeper thought processes from an athlete. Whilst this is a valuable behavior to use in this context, some coaches avoid the overuse of questioning as they believe that athletes may perceive it as a lack of knowledge on the part of the coach (Potrac, Jones, & Armour, 2002). The example below explains why an expert coach educator feels the use of questioning is worthwhile:

“I want to check for their understanding. But, it’s all about them. So it’s like, I wanna try and find a way to get into their mind, to see through their eyes if you like. So if I, if I asked them ‘So you know, can you think back to the weekend, or can you remember this time in the nationals when you did this, or do you remember when we were in Portugal or whatever

and we did this, can you describe that in your own words and how that felt?'. I want to try and live it through them if you like. It's not about me, it's about them."

The quote above supports the literature suggesting that questioning can be a very deliberate coaching behavior (Partington et al., 2014). In this instance it is clear that the coach educator is trying to gain an understanding of the athlete and get the athlete themselves to think about solutions to issues and re-frame situations in a different way. It is important to state that the demands of the sport and training environment can play an important part in the feasibility of questioning as an appropriate behavior (Claxton, 1988). An example of this was found in research conducted by Smith and Cushion (2006) who found that elite youth football coaches would use questioning sparingly in in-game situations (2.92% of behavior); follow up interviews found that this is not because the coaches did not value questioning, but because the questions could have been a distraction for athletes in a high paced game and make performances suffer as a result. The coach educator is from an individual sport background with more stoppages and breaks available to maximize coach-athlete relationship, which goes some way to explaining their preference to use questioning more frequently.

H₃: Behavior change is more likely to occur when coaches understand the impact of their behavior

Coach education has been shown in some research to change coach behavior; however, the theory and techniques used to change this are not fully explained and are at times implemented incorrectly (Allan et al., 2018). It has been suggested in recent research that in order for coaches to change their future behavior, they need to be more aware of their current behavior and the implications that this may have for the athletes (Lyle & Cushion, 2010; Partington et al., 2014). This is supported by the following quote where an expert coach educator explains strategies to increase self-awareness of behavior:

"As an exercise to get people to understand how they behave, I normally tap into what are your values? What drives you? What are your attitudes of excellence? What are your beliefs? You know, all that stuff to make them realise 'Oh maybe that is why I behave like that' or 'Maybe that is why I could polish this bit up' and make it a little bit more healthy."

The response to the above shows how being aware of the need for self-awareness is a first step in changing behavior in coaches. Although there are not many coach education programs that explicitly use behavior change theory, one of the most commonly used models used within coach education is the five-stage cyclical 'Transtheoretical Model' (TTM) as proposed by Prochaska and DiClemente (1983). Out of six coach development programmes that met the criteria for the review conducted by Allan et al. (2018), the TTM was used in two of these. The above quote links into this model clearly, as it attempts to clarify how a coach can move from not wanting to change behavior/unaware of behavior (Stage 1: Pre-Contemplation) to thinking about changing their behavior (Stage 2: Contemplation) (Prochaska & DiClemente, 1983). Another commonly used behavior change model in coach education include self-efficacy theory (Bandura, 1977). No matter which behavior change theory is used, there remains a possibility that the intended recipient of the change may not fully commit to the change, or become resistant to the notion that they should change (Harvey et al., 2013; Partington et al., 2015). It is also clear from other studies (e.g., Leduc, Culver, & Werthner, 2013) that for deep learning and changes to occur, reflection is of significant importance. It is suggested then that any mention of behavior change is framed

in such a way that allows the recipient to understand the benefits. Below, is an example of how a coach educator attempts to make coaches more open to behavior change:

“I don’t like the word ‘change’ because of the way people react to it. So if I say to you ‘you have to change’ part of your ego is going to go ‘so what’s wrong with how I am now?’. I would much prefer ‘develop’ or ‘mould’... so that’s what it is, it’s shape. I’m a believer you should be who you are to your core, as long as it’s healthy. It should be to find ways to make your communication or body language more sophisticated... to be your most authentic self.”

There are few longitudinal studies that monitor behavior change within sports coaches. One such study that did show a change in behavior of coaches over time was conducted by Partington et al. (2015), where five youth football coaches had their behavior measured using the Coach Analysis and Intervention System (CAIS) in conjunction with video recordings. These recordings were also used to aid the coaches in reflecting upon their coaching practice. This study found that coaches reduced the amount of total instruction and amount of feedback given, while increasing the amount of silence and questioning behaviors. From the resultant interviews the coaches gave an insight as to how and why they changed, and placed significant value on the video being used to enhance self-awareness (Partington et al., 2015). A season-long intervention conducted by Harvey et al. (2013) investigated the effectiveness of video as a reflective tool for coaches at team collegiate level. They found that as coaches became more self-aware they did try to adapt their behavior, however the success of this was limited and varied between participants (Harvey et al., 2013). In order to change a behavior, such as in sports coaching, it is suggested that the coach needs to be aware of their current behavior, possess a willingness to change, and retain belief that this change can be successful (Prochaska & DiClemente, 1983). The coach educator gives their perception on the malleability of coaching behaviors below:

“So I think it can be done, but I think, you know you’ve seen experiences of criminals being rehabilitated in healthy ways and coming out and changing their lives, so it can be done, but it’s like a hard, hard job.”

This quote shows that coach educators believe that coaching behaviors can be changed, but acknowledges that it is a difficult job that requires a lot of thought and effort. The role of video technology in this process is also explained as being of value:

“Real time feedback, they have to determine how they felt it went, some video evidence to show ‘look how you delivered this, what do you think of that? You set that up beautifully’. Probably some car crash stuff like ‘you’re speaking and no one’s watching’ that stuff. The more evidence you have, like tangible evidence, the better. I don’t think you can underestimate that reflection piece from a coach’s point of view.”

This quote provides further support for the use of video being used to aid reflection within the coach education process and ties into previous research (Harvey et al., 2013; Partington et al., 2015) that highlights the effectiveness of video-based reflection being useful in changing behavior in coaches.

H₄: The learning environment must align with needs of coaches

The way in which coach education is framed is very important to the development of coaches. It has been suggested that there are benefits to coaches if learning takes place across *formal*, *non-formal* and *informal* coaching environments (Mallett et al., 2009). Practical-style learning

delivery is very common in coach education (Leduc et al., 2013), is often preferred by coaches as a more worthwhile learning experience (Vella, Crowe, & Oades, 2013), and is used across various levels of coach education from grassroots to elite performance. This practical learning and delivery would be classified as *non-formal* or *informal* due to the fluid and non-classroom based nature of the learning environment (Mallett et al., 2009). An insight into the benefits of different types of delivery and learning environments is as follows:

“Coach education in the last 15 years, has become very information led rather than practically led. Which is ironic, because at the end of most qualifications they have to do a practical assessment. I always feel there’s a danger that they leave the course vastly knowing more than they can do. In a lot of cases, they leave the course knowing how to sit an assessment, not actually how to coach.”

From the quote above it is clear that the coach educator feels that practical delivery in a less formal setting is of greater value than more formal theoretical content. This is not to say that the value of formal content is not of value. Research looking at coach perceptions of coach education programmes suggest that sport-specific content can be delivered successfully but the pedagogical requirements of coaches are not being met (Nash & Sproule, 2012). It is suggested then, that some form of formal, theoretical content can help bridge this gap. Below the expert coach educator gives an insight into how a combination of formal and less formal delivery methods can be used in delivery of a new coach education course (in order to protect anonymity, the word “court” in quotes below refers to the sport environment in which the coach education is delivered):

“It’s a brand new course, it’s very content heavy. Great content, it’s a course that lasts the whole year. So I do, like the first module, so I thought ‘ok I need to pay homage to the person that wrote this content’ it’s all great stuff and I had a hand in writing it as well. So I’m doing it and I was powerpoint-court, powerpoint-court, powerpoint-court. And again it was that kind of, ‘I can’t sleep again’ thing. It’s not the best way of doing it.... now I go on the court, we work practically and then we come back to the powerpoint, (as if talking to coaches) ‘you’ll see we’ve done that-that-that.’ I do it the other way round. So I make it come to life. And then I come back to the powerpoint and say ‘right we’ve done that. Is there anything we’ve missed?’ and somebody will go ‘yeah we didn’t talk about the angle of the hips...’ or whatever. So we’ll go back (on the court) and cover that. I much prefer that way.”

This illustrates the amount of flexibility required in delivery of coach education as well as highlighting the deep thought processes that underpin the development of coach education.

The role of video technology to aid reflection is again mentioned, as discussed in Partington et al. (2015), but also highlights how more formal, classroom-based resources can be used to enhance the less formal practical delivery for coaches. The coach educator gives insight to the idea that coaches prefer to learn in a learner directed, less formal environment as it aids problem solving and decision making. Below is an example into how delivery methods are adapted to engage coaches:

“We’re led by our own learning preferences, but I think most people in sport are visual and kinaesthetic. There’s probably a few that are auditory and whatever but, or prefer writing down, so you have to do a bit of everything. I learn, or I cement my learning, by writing things down as well. But I much prefer getting out and trying stuff, working with my peers, churning it over, trying to break it apart and put it back together that kinda stuff.”

This shows that the coach educator is aware of the fact that a combination of learning environments are useful to enhance engagement among a variety of coaches. However, it is clear again that they are also aware of the preferences of the majority of the group. This is backed up by the previously mentioned research and is perhaps influenced by the fact that the role of most coaches involves much practical delivery (Nash et al., 2008); therefore, learning in such an environment has a link to this learning environment. This theme is continued in the following quote where the rationale for practical led delivery is expanded further:

“We get the question of ‘do you have this written down?’. But when you say ‘no’ and maybe direct them to a YouTube channel, we’ve never had anyone say ‘this is a scandal’ you know? Whereas, if you delivered a lecture thing and then they said ‘can you show us how to bring this to life?’ and if I was hypothetically to say ‘no, sorry I can’t do that’ that is a scandal.”

To say all coaches prefer learning in a certain way would be overly simplistic.

Coaching by nature is very complex, dynamic and attracts people from various backgrounds. There has been research conducted that looks at the difference in coach education preferences of coaches with varying levels of experience and academic background. This was conducted by Mesquita, Isidro, and Rosado (2010) and the findings suggest that coaches who have a more significant academic background had a distinct preference for informal learning environments. It is possible that an underlying reason for this is that coaches from a more academic background are so used to a formal setting therefore a change of environment may be useful for them. This poses challenges for coach educators as they have to accommodate people from a wide variety of backgrounds. Below the coach educator explains how they adapted delivery of the session to engage with more experienced coaches:

“I want everyone to feel a part of it. To do that, like I worked with 40 coaches... some of them have got 30, 35, 40 years of experience. I don’t want to be that person who comes in and says ‘this is what we’re doing’ as it’s foolish to do that with that level of experience. So what I did was I said ‘this is my vision, this is one tiny little part of it’ so help me make this better. So we’re all on the [practical setting] working through a player profile ‘what do you think of that, no I don’t like that bit, ok, I agree’, and we’re on draft 5 of this player profile and now I’m sending it out to them try it out with a player and give me some feedback. So it might even be draft 12 before we even pilot it. So that process galvanises coaches that are already great. It was all based on (the fact that) I know what I want, ‘this will improve communication between if you have a player and work at a club and you send them to me as a coach, we should be working together for the betterment of that player’. But because of the hierarchy it’s this kinda ‘he’s just stolen my player’ we should be working together to do that. For me that was coach education, but I did it in almost the Gandhi quote of leadership in terms of ‘they are my people I shall follow them, for I am their leader’. I don’t want to be that person at the top of a pyramid, I wanna be behind them like the bumper bowling!”

From this quote it is clear that a democratic approach has been taken. This seems to have been used for two reasons: 1. to use the experience and education within the group to improve the content; and 2. to keep the coaches motivated and buying into the coach education programme. The chosen approach from the coach educator above shares certain characteristics with recognised approaches such as communities of practice (Culver & Trudel, 2008) and learning communities (Gilbert, Gallimore, & Trudel, 2009). These have both been shown to increase ownership and engagement amongst coaches, which may help increase engagement in coach education.

H₅: Delivering and receiving feedback appropriately informs coach education practice

Due to the lack of research into the outcomes of coach education from an NGB perspective much of the research in this area has focused on the perceptions of coaches on their coach education programmes in which they participated. One such study was conducted by Nash and Sproule (2012) who found that coaches were concerned about the quality of the assessors within coach education. An area identified specifically for concern was clarity of communication and quality of feedback. Little is known about this from a coach educator's point of view. The coach educator below gives an insight into how "mini-assignments" can help improve the quality of feedback that is given to coaches:

"I say to people when I work with them that it (coaching) is a lifelong project. It's not for this course, and for me as well, that's why I do all those podcasts and those blogs and those videos and whatever, it's for me to reflect on how I communicate. That's my life goal in terms of that side is to be the most effective, succinct communicator I can. So that the person, the receiver on the other side of the loop that we create, is what I believe it could be in terms of effectiveness."

It is clear there is an understanding that communication is a vital part of the thought process. There is also a desire evident to communicate well and give appropriate feedback. The ability of a coach educator to provide appropriate feedback has been suggested to be of critical importance to coaches on the coach education programmes (Cushion, Armour, & Jones, 2003). Should the feedback be inappropriate or overly critical this can create an environment that breeds anxiety in the coaches who are participating in coach education (Cushion et al., 2003). Therefore, it is crucial that when giving feedback a balance is achieved between being critical, yet also helpful for the coaches. Quality feedback from coach educators can aid reflection in coaches (Partington et al., 2015). Reflection is a very useful skill to develop for coaches as it can help inform and improve coaching practice (Gilbert & Trudel, 2001). Below, the expert coach educator explains the challenges involved in getting some coaches to engage with the reflection process:

"Someone asked me that in an interview about 5, 6 years ago, 'what tools do you have to help people reflect on courses?' And I'm not a massive fan, I know you've got the thing 'what did you do well? What could you have done better?' that's not reflection for me, that's just the tip. And I really struggled with the question, it was one of those questions where I was like 'because I'm a natural reflector I almost can't empathise with someone who can't reflect. I don't. I don't know the reason why someone isn't a natural reflector. I might know a bit more now in terms of personalities, experiences or the neuroscience of it if you like. But then it's like, how do I help them come out of their shell and be comfortable? Because there's normally an underlying reason mentally that they don't wanna open up and reflect honestly."

The quote above shows that the coach educator understands the value of reflection in a coaching setting and uses it to improve their own practice. It does, however, highlight an area for improvement in developing reflection skills in their coach education program. One such study that focussed on developing deeper reflection amongst coaches was conducted by Koh et al. (2015) with two elite youth basketball coaches. This study involved using interview questions based around the three types of reflection proposed by Gilbert and Trudel (2001) and did yield positive results, with both coaches engaging more in the reflection process and one coach increasing their self-awareness. This intervention study was only effective with a very small sample size and was conducted over a 16-week period. Implementing this in larger scale coach education programs

would be very time consuming and perhaps be unfeasible. It is, however, proposed that elements of this could be implemented within coach education to increase reflection among coaches who are not *natural reflectors* as the coach educator described them. When the coach educator was asked to reflect on their own coach education, they highlight how they seek feedback:

“In terms of a working relationship, I have no problems personally with people saying ‘this is what my preferences are’. In terms of course delivery there is feedback, we don’t always get to see that and unfortunately we only get to see it when shit hits the fan. You know someone’s said ‘it was clear the tutor didn’t like me’ or whatever, you know? That’s the downside of it, is you only get to see it when it’s potentially an HR thing the way the world is going, however I would much prefer if they told me about the good and the bad stuff. Because they wouldn’t tell me about the bad stuff if it was just about course delivery, it’s only if it’s like going to an HR side, so I’ve said, to the [governing body] for example, ‘give me all the shit, I don’t mind reading if someone says ‘they talk too much’ for example.’ That might be a common thing, because I go off on these rants and get overly passionate about it or whatever, so some people might be going ‘let’s just get back on the court mate.’ It might be that some people don’t like anecdotes, analogies whatever, ‘just tell me straight’.”

This is expanded upon further in the quote below, where specific types of feedback are requested by the coach educator to help inform future practice:

“I would get it as real-time or as post-close to real time as I could. It’s trying to find a sophisticated way of getting it in a constructive manner. Erm, even if it is graded, you know something 1-5, 5 being excellent, 1 being poor, ‘what did you think of that session in terms of the organisation or the communication’, you know ‘how well has the learning been embedded in your mind? If below a 3, why?’ You know, that kinda stuff. It wouldn’t affect me (negatively) at all.”

As research has shown that coaches often lack self-awareness (Cushion, 2010; Partington et al., 2014), it would not be unreasonable to state that coach-educators also lack in this regard due to the fact that the majority of coach educators have previously been coaches. Increasing self-awareness of coach-educators may potentially help inform future coach education programmes and also allow coaches and researchers alike to understand more about the challenges associated with being a coach educator.

CONCLUSION

The aim of this paper was to provide an overview of how coach educators influence meaningful behavior change in sports coaches. We chose to focus on five specific hypotheses related to how coach education is structured and sequenced, what characteristics drive behaviors, when behavior change is most likely to occur, the importance of the learning environments, and delivering and receiving feedback. Our intent was to draw upon the extant research within this framework, with supporting illustrative quotations from an experienced coach educator, in order to provide insights for both sport coach development programs and future researchers.

The importance of feedback for coaches and athletes was identified strongly in the article. It is suggested that video and audio technology is further integrated into coach education across sports and contexts to improve the quality of this feedback and aid reflection. This may aid

meaningful behavior change in coaches. It is also proposed that coach education should allow for learning to occur across the spectrum of formal, non-formal, and informal environments due to the different types of learning outcomes that can be achieved in each setting and efforts should be made to frame coach education in a way that is relevant to the target audience. This encompasses the level of qualification, but also the characteristics of the individuals themselves. For coach educators to promote reflection and more meaningful learning in their coach participants it is advised that more probing type questions can be asked to engage those who may not 'naturally' reflect. This area also requires further study.

To increase the knowledge base in what is an important area of coach education it is suggested that more evaluations of coach education success are conducted. There remains a lack of follow-up studies in this area, meaning that currently coach educators and NGBs are unaware whether or not their programmes are promoting meaningful change in their participants. It would be of value for more research to be conducted into the perceptions and reflections of coach educators on their practice. To monitor this effectively, such follow-up studies should use measures that are backed up by evidence-based literature, perhaps in conjunction with video technology to increase the accuracy of findings. Furthermore, there remains an even greater lack of research into the area of how coach educators are trained. This area was touched upon by the experienced coach educator in this article, yet there was very little research to discuss this effectively within the paper. Given that coach educators have such a significant role to play in the development of coaches, it is critical that they themselves are trained appropriately. When achieved, coach educators will be able to influence meaningful behavior change in sports coaches.

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