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Experiences of competitive masters swimmers: Desired coaching characteristics and perceived benefits

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The purpose of this study was to examine the experiences of competitive masters swimmers by asking them to describe desired coaching characteristics and perceived benefits associated with masters swimming. The research questions guiding this study were: What are masters swimmers' desired coaching characteristics? What are masters swimmers' perceptions regarding the benefits of participating in masters athletics? Semi-structured interviews were conducted with six competitive male masters swimmers aged 49–64 and the qualitative data were analysed using a thematic analysis. According to the athletes, their coaches used effective communication skills to establish positive environments that led to social, health, and performance improvements. In addition, the athletes reported how their coach's kept them focused and motivated prior to competitions when their training became more challenging. Results from this study are of interest to masters swimming athletes and coaches, and could be used to inform the development and design of programs that could optimise the performance and enjoyment of competitive masters swimmers.

Keywords: masters athletes; coaching science; qualitative research; athlete satisfaction

Many ageing adults do not engage in regular physical activity. In fact, almost 60% of people aged 65 and older are physically inactive (Hallal et al., 2012). Lack of motivation and access to facilities, as well as poor health have all been associated with reduced leisure-time physical activity among ageing adults (Cerin, Leslie, Sugiyama, & Owen, 2010). Additionally, researchers have reported that North Americans have negative attitudes towards ageing populations (Baker & Horton, 2011). These findings suggest a need to better understand the experiences of ageing adults who are involved in sport and physical activity. One group of ageing adults, masters athletes, are helping change people's attitudes through a continued investment in sport participation.

Masters athletes are typically over the age of 35 and engage in regular training activities (Young, 2011). Furthermore, they are one of the fastest growing sport cohorts in Westernised countries (Weir, Baker, & Horton, 2011). One sport in particular, masters swimming, has continued to grow in popularity in North America as well as Australia and a number of European nations since its inception in the 1970s. Masters swimming is organised into five-year age groupings (40–44, 45–49, etc.), beginning at 25 years of age. After its first official event in Texas, the United States Swimming organisation was created, followed closely by the first Canadian masters swim club in 1971 (Weir et al., 2011). Today, masters swimmers belong to regional clubs and may choose participation as a competitive venture or simply as a social and recreational activity.

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Historically, research on masters athletes has focused on the relationship between various factors such as physiological aspects and performance (e.g. Tarpenning, Hamilton-Wessler, Wiswell, & Hawkins, 2004) and sport performance and age-related decline (e.g. Baker & Schorer, 2010). An emerging body of research has also investigated psychological aspects of masters athletes' sport participation (Dionigi, 2002; Dionigi, Baker, & Horton, 2011; Lithopoulos, Rathwell, & Young, 2015; Lyons & Dionigi, 2007; Rathwell & Young, 2014; Young & Medic, 2011). For example, Dionigi (2002) interviewed 28 male and female masters athletes aged 60–69 to understand their reasons for continued participation in sports and found that many considered themselves to be competitive on the field and friendly and social off the field. The participants also cited their health and enjoying the benefits of physical activity as reasons for continued participation in sport. Specific to masters swimming, research shows that masters swimmers compete for a variety of personal reasons, including enjoyment, desire for personal achievement and winning, social networking, and health and fitness reasons (Hastings, Cable, & Zahran, 2005; Hastings, Kurth, Schloder, & Cyr, 1995; Stevenson, 2002; Tantrum & Hodge, 1993). Tantrum and Hodge (1993) surveyed 40 masters swimmers from Australia ranging in age from 22 to 70 and found that staying in shape, having fun, being fit, and improving skills were reported as their most important motives. In a qualitative study, Stevenson (2002) interviewed 29 Canadian male and female masters swimmers ranging in age from 21 to 57 years and found that participants were involved in the sport due to the enjoyment of swimming, the structured workouts, and the social relationships. Taken together, masters sport shows the potential to be a positive psychosocial domain where participation is motivated by a desire to stay healthy, active, social, and to delay dependence and ill health (cf. Baker, Fraser-Thomas, Dionigi, & Horton, 2010).

Evidence suggests that although masters athletes have attained extensive sport experience, many are still influenced by their coaches' behaviours (Medic, Young, Starkes, & Weir, 2012; Young, Callary, & Niedre, 2014). Researchers have found that masters athletes experienced a decrease in perceived sport-specific confidence and ability due to their prolonged absence from sport (Dionigi, 2002; Grant, 2001; Stevenson, 2002). Baker and Horton (2011) reported that ageing adults who believe that physical and cognitive decline is an inevitable part of growing older may disengage from activities in order to preserve their self-image. This suggests that having a coach who understands the physiological, psychological, and performance potential of masters athletes may facilitate a more positive experience for them. Young and colleagues (2014) proposed that coaches could positively influence masters athletes' involvement and continued participation in sports by creating structured training sessions, which may also help athletes to navigate commonly cited barriers to being active such as motivation and time. Researchers have found that over 70% of international-level masters swimmers reported having a coach (Young & Medic, 2011). Thus, it is clear that even in masters-level sport coaches play a critical role in helping athletes reach their goals, while creating a fun and challenging training environment.

Effective coaches help their athletes meet their needs by adapting their behaviours to various antecedents such as the level of competition, age, gender, ability, emotions, and perceptions of their athletes (Becker, 2013; Cushion, 2010). Perhaps the first coaching model to formally recognise this interplay between coaching behaviours and athlete needs was Chelladurai's Multidimensional Model of Leadership (1978). According to this model, effective coaching depends on the relationship between athletes' interpretation of actual coach behaviour, preferred coach behaviour, and situational contexts. This means that a coach who does not acknowledge the unique contextual factors of masters swimmers (age, time restraints, expectations, etc.) and adjust their behaviours accordingly, might not facilitate successful outcomes from the view of their athletes. Although little empirical research has looked at this model in relation to masters athletes, recent research suggests that coaches of older athletes must be particularly sensitive to the needs and

preferences of their athletes (Horn, Bloom, Berglund, & Packard, 2011). A better understanding of masters athletes' preferences for coaching behaviours and characteristics will allow coaches to more positively influence these athletes.

Smoll and Smith's (1989) Mediation Model of Leadership also placed the interplay between coach behaviours, athlete perception and recall, and athletes' evaluative reactions on coach behaviours at the core of their framework. Accordingly, Smoll and Smith's model suggests that individual difference variables (i.e. self-esteem), situational factors (i.e. age, gender), and cognitive processes (i.e. learning, remembering) mediate coaches' behaviours and athletes' reactions to coaching behaviours. Of note, only studies on youth sport athletes have been used in research with this model (Chelladurai, 2007). However, the constructs of the model appear pertinent to any coach-athlete relationship, including the coach-masters athlete relationship, because subsequent research into the effects of coaches and adolescent and young adult populations has proven that coaches still affect the same outcomes in young adults with their behaviours (Chelladurai, 2007).

Most recently, a coach's ability to read and react appropriately to athlete needs has been referred to as the interpersonal knowledge component of coaching effectiveness. It has been suggested that the foundation of interpersonal knowledge for coaching is the coach's degree of emotional intelligence (Chan & Mallett, 2011; Gilbert & Côté, 2013). Emotional intelligence refers to a coach's ability to perceive, understand, and manage their own and their athletes' emotions to create effective coach-athlete relationships that lead to optimal performance outcomes.

Finally, any discussion of coaching effectiveness and coach-athlete dynamics would be incomplete without consideration of the work of Jowett and colleagues on coach-athlete relationships (Jowett & Chaundy, 2004; Jowett & Ntoumanis, 2004; Lorimer & Jowett, 2013). Their framework, referred to as the 3 + 1 Cs model, includes the concepts of closeness, complementarity, and commitment (i.e. the 3 C's) and co-orientation (i.e. the + 1). Closeness is recognised as mutual feelings of trust and respect, and characterises the affective element of the coach-athlete relationship. Commitment is represented in coaches' and athletes' long-term orientation toward the relationship, and involves the cognitive element of the coach-athlete relationship. Complementarity is reflected in the coaches' and athletes' actions of cooperation and characterises the behavioural element of the coach-athlete relationship. The combination of these three categories is referred to as co-orientation and has been shown to result in positive athlete outcomes.

In sum, influential coaching effectiveness frameworks from the past 40 years of coaching research all share the recognition that coaches must adapt their behaviours to meet the needs and motives of their athletes. The needs and motives of youth and collegiate sport athletes are well documented in the coaching literature (e.g. Becker, 2013). However, very little is known about the needs and motives of masters-level sport participants, which represents a significant void in the coaching literature. As such, the purpose of this study was to explore masters swimmers' experiences of coaching, by identifying the various coaching characteristics and behaviours that promote positive outcomes. The research questions guiding this study were: What are masters swimmers' desired coaching characteristics? What are masters swimmers' perceptions regarding the benefits of participating in masters athletics?

Methods

Upon receiving ethical approval from the first author's university, the research team enlisted the help of *gatekeepers* (Holloway, 1997) to identify participants for this study. The gatekeepers were two individuals who were familiar with masters swimming in Canada. The current study purposely selected competitive masters swimmers aged 49–64 old for this study because this age group

represents the greatest participation numbers within masters swimming (Masters Swimming Canada, 2015).

Participants

Masters swimmers from two swim clubs that employ full-time coaches, located in the suburb of a large metropolitan Canadian city, were invited to participate in the study. Six competitive swimmers, all male, responded to the invitation to participate in the study. Participants' highest level of competition in masters swimming varied; one competed at the Provincial level, three at the National level, and two at the World Masters Games. At the time of the interviews, all of the athletes had been involved in masters swimming for a minimum of five years and were ranked in the top 10 in their province for their respective age groups.

Data collection

Qualitative research is focused on obtaining in-depth descriptions of an individual's or a group of individuals' lived experiences or perceptions of a phenomenon (Creswell, 2013; Sparkes & Smith, 2014). One type of qualitative method, interviews, is particularly beneficial when attempting to better understand an underexplored topic, as participants are afforded the flexibility to focus on aspects of their experience they feel is important (Rubin & Rubin, 2012). As a result, we conducted interviews with masters swimmers to allow them the opportunity to provide detailed descriptions of their experiences in masters swimming as well as their perceptions of their coaches.

The six masters swimmers who agreed to participate in this study identified a time and location for an individual, face-to-face interview with the lead investigator. The interviews were conducted in quiet locations (e.g. offices, meeting rooms) near their training facilities. Participants were verbally explained their rights as research participants prior to reading and signing a consent form. The length of the interviews ranged from 45 to 70 minutes. Members of the research team created a semi-structured interview guide (see [Appendix 1](#)). The same interview guide was used for each participant. Given that participants may have had previous athletic and coaching experiences outside of masters swimming, we asked them to focus on their experiences as athletes in masters swimming. All interviews were audio recorded, transcribed verbatim, and stored using the NVivo software package (QSR International, 2014).

Data analysis

The current study followed Braun and Clarke's (2013) guidelines for conducting an inductive thematic analysis. One of the strengths of using a thematic analysis is that it is "not wedded to a specific theory" (Sparkes & Smith, 2014, p. 124). For this reason, however, researchers are also encouraged to identify the *theoretical assumptions* and *approach* that guided their study (Braun & Clarke, 2013). First, the current study was guided by the theoretical assumption of social constructivism (Creswell, 2013), whereby it was assumed the masters swimmers' nature of reality was co-constructed through their experiences of living in North America (see Clarke, Braun, & Wooles, 2015). Second, the approach used in this study was to focus on the semantic meanings of participants' experiences in masters swimming and their perceptions of their coaches. This is different than other approaches such as Interpretative Phenomenological Analysis (Smith, Flowers, & Larkin, 2009), in which researchers are encouraged to interpret participants' experiences. We chose to focus on the semantic meanings of participants' experiences in masters swimming because the members of our research team have not participated in masters swimming as athletes or coaches.

The first step of the inductive thematic analysis involved reading each transcript in its entirety several times while listening to the audio recordings of the interviews to gain familiarity with the data. Initial codes were generated for the first interview transcript and were mapped onto a master list. Generating initial codes was viewed as an iterative process whereby the master list was modified as new ideas or concepts emerged from the other five interviews. Some examples from the final list of initial codes included “Coaching – motivation”, “Training – family and work commitments”, and “Aging – training adjustments”. The next step of the analysis involved grouping similar codes into higher-order themes. Two higher-order themes emerged from our analysis and will be described in more detail in the results section.

Trustworthiness

Qualitative researchers are encouraged to outline the steps taken and decisions made throughout the research process so readers can judge the quality of their findings for themselves (Sparkes & Smith, 2014; Yardley, 2008). Rather than using criteriological approaches such as Lincoln and Guba’s (1985) parallel criteria, qualitative researchers have been encouraged to select criteria based on the context and purposes of their research (Smith, 2009; Sparkes & Smith, 2009, 2014). The current study utilised researcher triangulation and participant feedback (Sparkes & Smith, 2014; Yardley, 2008). Researcher triangulation is the process of incorporating multiple perspectives throughout analysis so the data is not reflective of only one researcher’s interpretation of the findings. The authors met regularly throughout the analysis and preparation of the paper to ensure the results and conclusions best represented the participants’ insights and experiences in masters swimming. All four authors emerged on the same analysis, results, and conclusions of this study. Participant feedback was also used in the current study. Participant feedback incorporates the participant in the data analysis by checking with them to ensure their comments, as well as the researchers’ interpretations of their comments best reflect their realities. Given that research on masters athletes is relatively new, we wanted to ensure we accurately captured the participants’ perceptions of their coaches. Participant feedback occurred at two time points: (a) immediately following the conclusion of the interview (i.e. “Would you like to add anything else related to our interview?” and “Do you have any final comments or questions?”) and (b) once the results were finalised, a summary of the results were sent to participants and they were asked to add, modify, or clarify their comments and/or ideas. In sum, researcher triangulation and participant feedback helped to ensure we best represented the participants’ experiences in masters swimming as well as their perceptions of their coaches.

Results

Results from the thematic analysis revealed two higher-order themes: *Coaching Behaviours and Characteristics* and *Perceived Benefits*. These two higher-order themes will be described by using quotes from the participants. Participants were all assigned a label (e.g. A1–A6) to credit their comments and protect their confidentiality. Prior to outlining the two higher-order themes, a narrative of participants’ swimming background will be provided to give more information about their experiences, which will also help contextualise their quotations.

Swimming background

Athletes described their sporting experiences beginning with their childhood experiences in swimming and culminating with their current involvement in masters swimming. During their youth and adolescence, three participants competed in elite swimming, two had limited

experiences in swimming, and one had no youth sport experiences. All the participants described periods of declined involvement in physical activity prior to joining their masters swim clubs and emphasised how they carefully organised their family and work lives to find time to train as competitive athletes. Four of the six athletes said they worked 40 hours per week or more while two others said they worked 10–14 hours per week. Despite their diverse athletic histories and family and work commitments, all participants reported that health concerns motivated them to join a masters swim club. Participants reported that regular physical activity was an important way to help them achieve a healthier body and more positive body image.

Coaching behaviours and characteristics

In this higher-order theme, the participants described their masters swimming coaches' main roles and responsibilities. In particular, communication, organisation, and teaching skills emerged as important characteristics that masters swimmers looked for in their coaches. Communication was described as the feedback and motivational messages they received from their coaches, including how their coach framed their goals. In addition, the athletes reported how the coach helped keep them focused and motivated when their training got more challenging.

Two of the athletes described how their coach communicated with them using motivational verbal cues:

My coach motivates me verbally. He lets me know that I can do it and he also tells me what elements I can improve on. For example, he is currently pushing me to do bilateral breathing, which I know eventually will help my swim mechanics. At the moment, it is tough switching. (A2)

In terms of the way that my coach motivates, when your body is screaming that it doesn't want to go anymore and you want to stop, our coach will be there with a yell or verbal encouragement like, "Come on you can do it ... Go! Push!". (A1)

Although masters swimmers felt it was important for their coaches to motivate them, some of the athletes simply valued the fact that they had a coach. For example, two participants discussed this in more detail. A5 noted, "For the majority of masters swimmers, having a coach is motivation because they give you something to focus on whether it be a time or a skill". Similarly, A4 said:

The role of the coach when I started was to keep me there. They did that by encouraging me and being sympathetic to the fact that it was a tough workout for me. They tried to get me to focus on enjoying the swimming and not worrying about competing.

Additionally, the participants reported that their coaches' organisational skills were paramount to their enjoyment of masters swimming. As one participant described, "The thing that I like the most about having a coach is that their role is to designate the workout in terms of intensity and length so you will stay fit or get more fit by doing it" (A3). Other swimmers said they enjoyed how their coaches organised their weekly and yearly training schedules:

Our current coach puts out a plan for the whole year. You start at the beginning of the year at the bottom and you work your way to peak physical condition for whatever you are training for, whether it is distance or short distance events. (A6)

In addition, the coach has a plan when you will do your distance work, your warm-up, your core set, your cool down and when you do over distance. People are attracted to some form of structure because they know they can come on a Tuesday night and there will be a core set and some stroke work. They are attracted to that structure. (A5)

While strong organisational skills were something the masters swimmers looked for in their coaches, they acknowledged it was likely challenging for their coaches to plan practices for masters swimmers:

It is also the coach's role to ensure that everyone is benefiting from that workout as much as possible and part of this comes from realizing that not everybody is at the same level. At our club we have development folks right up to former Olympians so coaches have to recognize that a workout needs to be modified to match a lane. Lanes are matched by ability and by workout. (A4)

Based on their comments, it appears that coaches of masters swimmers have to be able to adapt their training programs based on their athletes' abilities but also to be sympathetic to masters athletes' lifestyles that involves balancing work, family, and training.

In addition to their communication (motivation) and organisational skills, masters swimmers described the importance of having a coach who has the ability to provide technical instruction (teaching skills):

Our coach is also looking to make sure our stroke is efficient. If you are really pushing and you're tired, typically your stroke falls apart and our coach is there to make sure that things don't fall off and get sloppy. (A1)

Different individuals will have individual consultations to learn what they need to work on. Like for me, my coach wants me to work on the bilateral breathing basically for the next month or so until I'm comfortable enough with this element and then we will work more on my form. That is part of his plan and I've been working with him on that. (A2)

Although four of six of the masters swimmers in the study had previous experiences in swimming prior to joining the club, all of them recognised that they required technical stroke training. One swimmer noted, "technique is about the same as with age group [youth] swimmers, but you need to spend more time doing stroke mechanics the older you get because it helps you move through the water quicker" (A5). Another swimmer remarked, "Our current coach knows swimming mechanics really well. He can pick out little things that people are doing and notice small things to help people improve" (A6).

While participants felt it was important for their coaches to have strong technical teaching skills, *how* coaches provided technical instructions appeared to be equally important. For example, A2's comments indicated "... then *we* will work on ...", which indicates that masters athletes prefer coaches who are aligned with athlete-centred coaching ideals as opposed to autocratic forms of teaching and instructing.

Perceived benefits

In this higher-order theme, the athletes discussed the types of benefits that resulted from their participation in masters swimming. The athletes outlined social, health, and performance benefits, which they felt were fostered by their coaches' behaviours.

The masters athletes discussed the types of social relationships they had with their coaches and teammates, including how these relationships affected their overall enjoyment and experience as masters swimmers. Four of the masters swimmers noted that their relationships with their coach extended beyond technical and tactical training tips and involved a personal relationship that affected their overall well-being. For example, A4 said, "My coach encouraged me and continuously reinforced that he saw something in me. I didn't notice that for myself but that helped me the most as a masters swimmer". Furthermore, two of the swimmers considered their coaches to be a friend:

I would say that my coach and I are friends. Besides the workout element, we can talk about other things, too, like aging (laughs). My coach is one year older than me and so there are some other elements in life that we can talk about. I know what he is going through. (A2)

The relative age of masters athletes and their coaches may be unique to this sporting context and may positively influence coach–athlete relationships. For example, it is possible that masters coaches are the same and perhaps younger than some of their athletes, which is not common in other sporting contexts. As a result, coaches of masters athletes may have to navigate and balance their personal and coaching relationships with athletes.

In addition to the social relationship with their coaches, athletes also described the social relationships they formed with other members of the club. As one participant noted, “I have met a lot of friends and new and wonderful people that I never would have met had I not joined the club” (A4). Similarly, A6 highlighted the social aspects of masters swimming:

This is a very social club. I have made a lot of friends at the club. When I moved to this area I didn’t know a lot of people. Being part of the club introduced me to a lot of people, which is great because we are about the same age and we have the same interests. It’s become a very social club and I have met some great people.

For all of the participants in this study, the social benefits were an important reason for their initial and continued participation in masters swimming.

From a health perspective, the athletes described a number of benefits associated with masters swimming, which included weight loss, improved energy, and lowered stress levels. As noted earlier, health benefits were an important reason the participants joined their swimming clubs. Additionally, the participants noted that health remained an important outcome for masters athletes once they began training with their clubs:

The club has also been good in keeping me healthy. At one point I lost about 40 lbs and although I have put a lot of it back on again, I’m sure I’ll be able to lose it. Also, because I will be wearing a bathing suit on the deck, I will be motivated to lose the weight rather than having a gut hanging out. (A6)

Swimming also contributed to me losing more than 50 pounds and I started to feel better about myself. I just really love getting into the pool. It’s low impact so I didn’t hurt anything other than I developed a bit of a swimmer shoulder, which is pretty common. (A4)

The male swimmers in this study highlighted their weight loss as the most important health-related outcome of their involvement in masters swimming.

The swimmers also described how their involvement encouraged them to adopt healthy habits away from the pool. As one swimmer noted, “swimming made me change my whole lifestyle in terms of what I ate and what I did. I got back into a gym and was working out again and I got hooked on working out” (A4). Another swimmer noted:

Since I became involved in masters swimming, I’ve lost two inches around my waist and dropped from medium to small. I haven’t lost any weight because I’ve turned fat into muscle and I feel better so I would say this is part of the motivation ... it makes me want to go out early and run and bike and go to the swim workout. And, I’m enjoying it. (A2)

Apart from the social and health benefits reported by the participants, performance also emerged as a benefit of masters swimming. Competition was one way that athletes measured their performance. As one participant described, “For me, the competition aspect of masters

swimming is really important. Some people don't compete and they don't want to compete, but for me I have always liked the competitions and competing" (A6). Other swimmers cited more intrinsic reasons for enjoying the performance outcomes associated with masters athletics. For example, A3 noted:

What I like about competing is pushing myself. I enjoy the feeling after you finish, when you know you've done something that you have never done before. You've done it reasonably well and you know that not everyone can do it.

Similarly, two other swimmers measured their performance in terms of the improvements made during the season, "I want to improve in swimming. As long as I continue to see improvement, I will enjoy it" (A3).

I measure my progress as a swimmer based on myself. People like to improve their times. I prefer to be in the top 10, and maybe that doesn't sound like much, but that is where I like to fit in. I would rather be the best but what can you do? Obviously I would like to go to a swim meet and win but it's okay if it doesn't happen. (A6)

The athletes said their coaches played an important role in improving their performances by helping them to focus on technical and tactical aspects of swimming during practices: "Coaches are important in order to ensure that we were getting the proper workout for each component of a competition" (A4).

My coach's role is also to tell me how to prepare for the race before I get there. I never had any interest in doing the research for myself. You start with smaller distances and then you do some longer distance stuff and you build strength and speed in that. I would not have been able to put it together and to make a plan to figure it out by myself. (A3)

In addition to helping them during practices, the swimmers felt that having their coach present at competitions positively affected their performances. As one swimmer noted, "I like my coach with me during competitions. It helps with the mental aspect of the competition and it is always nice to see familiar faces" (A2). Another swimmer described a similar feeling, "Having feedback, especially during competitions, is very important because I have some specific [swim] meet goals" (A1).

Discussion

Masters swimming has continued to grow in popularity since its inception in the 1970s. Despite this, coaches of masters athletes remains a highly underrepresented topic in the literature (Young et al., 2014). The results of the current study make a unique contribution by identifying various coaching behaviours and characteristics that this particular group of masters swimmers felt promoted ideal training and competition environments that led to improved social, health, and performance outcomes. As with all studies, there are limitations that must be acknowledged. Findings from the present study may only be indicative of male swimmers aged 50–65 and their coaching experiences. Moreover, these findings were gathered from North American athletes' perspectives and may not be applicable to other masters sport settings around the world. Finally, results from this study may not be as applicable to recreational masters swimmers.

An interesting finding from the current study was the swimmers' descriptions of how their age, family, and work commitments affected their participation and enjoyment as a masters athlete. According to the Multidimensional Model of Leadership, situational characteristics and

the social and cultural context of the group set the parameters for *required behaviours* (Chelladurai, 1978). *Preferred behaviours* refer to the preferences of the athletes in terms of the support the coach gives them, the type of instruction they expect, and the feedback they require (Chelladurai, 1978). In the current study, five of the six participants had children, four of the six worked 38 hours or more a week at their job, and five of the six were married. These contextual factors can create stress for the swimmers in terms of the amount of time they spend away from their families and work. As such, the results highlight the importance of coaches having individual meetings with masters athletes to learn about their family and work lives so they can incorporate this information when setting seasonal training plans and performance goals (Côté & Salmela, 1996; Young et al., 2014), thereby increasing alignment between athlete preferred behaviours and coach required behaviours (Chelladurai, 1978).

All of the masters swimmers in this study, including those who had previously competed in high-level competitive swimming prior to joining their masters swimming club, desired coaches who had strong teaching skills. This suggests that participants may have had low perceived competence in their abilities upon returning to competitive sport, which has previously been cited in the literature on masters athletes (Dionigi, 2002; Grant, 2001; Stevenson, 2002). Therefore, it is reasonable to conclude that masters' coaches need to be effective teachers and motivators during training sessions in order to improve the competence and confidence of their athletes. In fact, Young et al. (2014) has suggested that coaches of masters athletes should frequently recognise athletes' effort and personal investment of time and energy as ways to nurture commitment and promote athlete confidence. Once again this result highlights that masters athletes, due to their experiences, are likely to have a much clearer sense of the coaching strategies that are likely to be perceived as most appropriate and effective for them (Chelladurai, 1978).

In the current study, the athletes generally were surprised and pleased with the social benefits that arose from joining their masters swim clubs. Although making friends and socialising did not initially motivate them to join their clubs, they all felt it was an outcome that improved their experience as masters swimmers. Findings from the current study are related to Becker (2009), who found that coaches who established a family-like environment and who took an interest in athletes' personal lives fostered a positive team environment that included support, caring, and mutual trust. Furthermore, Lyons and Dionigi (2007) found that participation in masters sport led to a sense of community and belonging for athletes. Along the same line, having a shared sporting interest later in life with others appeared to provide participants with a renewed sense of relevance and vitality, which one could argue are among the most important benefits of masters sport participation. As a result, coaches of masters athletes must focus on fostering social cohesion among team members by creating a positive team climate during training sessions and competitions (Loughead & Bloom, 2013).

Findings from the current study indicated that masters swimmers valued having a positive relationship with their coaches. More than half of the participants noted their relationship with their coach went further than technical and tactical training advice, and involved a personal relationship that affected their overall well-being. In fact, two participants considered their coach to be a personal friend, suggesting that coaching masters athletes may require a greater level of empathic accuracy than may be needed when coaching youth athletes. Empathic accuracy, and the ability to accurately sense and manage emotions, are cornerstones of recent coaching effectiveness frameworks such as the integrated definition of coaching effectiveness (Côté & Gilbert, 2009; Gilbert & Côté, 2013) and the 3+1C's model of coach-athlete relationships (Jowett & Ntoumanis, 2004; Lorimer & Jowett, 2013). Both of these conceptual frameworks highlight the importance of a coach's ability to connect with their athletes by accurately reading and nurturing athlete emotional needs.

The participants cited health benefits as an important outcome stemming from their participation in masters swimming. These benefits were described as weight loss and improvements in energy for some, and as a way of preserving their current physique or as way to get their body back to its previous shape by others. Previous research on masters athletes has indicated that health benefits were a common motivator influencing involvement in masters sport (Dionigi, 2002; Grant, 2001; Hastings et al., 1995, 2005; Howells & Grogan, 2012; Stevenson, 2002). The results of these studies, together with the current findings, shows that perception of body image appears to be an important motivational force for masters athletes. However, in a sport such as swimming, the potential health benefits may be offset by undesirable changes in body shape. For example, the female masters swimmers in Howells and Grogan's (2012) study reported there was a "fitness threshold" they did not want to cross for fear of being viewed as too muscular and masculine. Therefore, although coaches should emphasise the health benefits of physical training to their masters athletes and provide advice and suggestions on how to lead a healthy lifestyle, coaches should not assume the changes in body image that stem from physical training will be positively perceived by all masters athletes.

Finally, the six masters athletes reported that performance outcomes and improving their technical skills influenced their masters swimming experience. These findings extend Hodge, Allen, and Smellie's (2008) work, which found that masters athletes were primarily task oriented and tended to have longer commitment, enjoyment, and participation in sport. Thus, coaches of masters athletes should consider emphasising both personal growth opportunities that stem from competition and the outcome-oriented motivations such as race results, rankings, and winning championships.

Conclusions and recommendations

Overall, the present findings provide a greater understanding of the perceived benefits and preferred coaching behaviours of masters swimmers. Currently, there are very few coach education resources available regarding coaching masters athletes. For example, Australia and the UK who have extensive coaching development programs do not include masters athletes in their coach education programs. Canada appears to be one of the few countries that has created an early version of coach education specific to coaching masters athletes. As the masters athletics coach certification program is in its early stages of development (Coaching Association of Canada, 2015), results from the present study can be used to stimulate further discussion on coach education needs and design for masters-level sport settings. The current findings may also provide masters swimming coaches with a better awareness of their athletes' preferred behaviours, which may help them to improve their coaching effectiveness.

While the results of the current study provide information regarding the thoughts and perceptions of athletes on coaching behaviours and characteristics, many questions about coaching masters athletes can still be explored. For instance, are masters coaches informed about the most effective ways to coach their athletes? How do masters coaches specialise and develop? How important is continual improvement and performance gains for sustaining motivation to train in masters sport? What coach feedback profile (i.e. type, amount, frequency) is most desired and perceived to be most effective by masters athletes? Using the results of the current study as a foundation, future research that addresses these types of questions will further advance our understanding of effective coaching practices in masters-level sport settings.

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Appendix 1. Interview guide

Opening Questions

1. Describe your swimming experiences before you became a masters swimmer?
 - Did you compete at a high level in other sports?
2. Briefly describe your progression into masters swimming?
 - Why did you get involved with your current club?

Key Questions

1. Describe what you enjoy about masters swimming?
 - Socialization with peers
 - Health/fitness
 - Physical challenges
2. Describe your goals or aspirations as a masters swimmer?
 - Competitively
 - Socialization/Fun
 - Health/wellness
3. Describe your training regimen?
 - What is the intensity level
 - Frequency
 - Role of coach
4. Describe your competitive season?
 - Frequencies
 - Role of coach
5. Describe the role of the coach for a masters swimmer?
 - Enjoyment
 - Empowerment
 - Teacher
 - Tactician
 - Creating an environment
 - Time commitment
 - Tell me about the barriers to being a masters swimmer?
6. Financial
 - Ageism
 - Lack of recognition that it's a "real" sport?

Concluding Questions

1. Would you like to add anything else related to our interview?
2. Do you have any final comments or questions?