

Insights into the Importance of Relational Coaching for Masters Sport

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Research into the Masters (or adult) sport context has revealed important socially mediated participatory motives for Masters athletes, including a strong connection between their learning in sport and the relationships they have with their coaches. The purpose of this insights article was to identify and describe links between relevant relational perspectives in sport coaching and dominant themes extracted from research pertaining to the psychosocial aspects of coaching adults. Three theoretical perspectives are purposively explored: interdependence theory, humanistic coaching, and andragogy. We considered how these parallel bodies of literature ascribe to the particularities of coaching adults to provide insight on how to frame effective coaching approaches and coach–athlete interrelations for this unique athletic sample. We make the case for ongoing research using an andragogical model of coaching in Masters sport in understanding how coaching Masters athletes is a complex and nuanced phenomenon.

Keywords: andragogy, coach learning, humanism, interdependence, Masters athletes

In the last two decades, we have seen a remarkable growth of participants in organized adult sport. Largely termed Masters Athletes (MAs), these adults typically (a) are over 35 years of age; (b) are registered for sport in some fashion, which may include formal registration to a sport club with a coach; and (c) have acknowledged that they prepare through training in order to compete (Young, Callary, & Rathwell, 2018). Masters sport registration rates have been escalating, commensurate with aging demographics, and increased opportunities for active leisure among the aging cohort (Hastings, Cable, & Zahran, 2005). Increased demands for coaching is a consequence of such growth. Understanding coaching approaches that are tailored towards this athletic cohort could help promote adult sport and retain adult sportspersons (Young & Callary, 2018). Coaching practice is generally enhanced by research-based information. Thus, MAs' coaching needs should not be neglected.

A number of research studies have explored MAs' psychosocial motives for involvement in sport, MAs' diverse sources of their commitment, and how their involvement both defies yet reinforces normative beliefs about aging (e.g., Dionigi, 2016 and Young et al., 2018 for reviews). Social influences continue to predominate MAs' interests in sport participation (e.g., Hodge, Allen, & Smellie, 2008; Santi, Bruton, Pietrantonio, & Mellalieu, 2014). As an important social influence, Masters Coaches (i.e., coaches of MAs) have become increasingly pertinent in discussions of quality sport experiences for adults (e.g., Callary, Young, Cassidy, & Culver, in press). An increased focus on the role of coaches (theoretically and practically) is important, considering that Masters cohorts may represent the fastest growing segment of sport participants in westernized countries (Weir, Baker, & Horton,

2010). Further, physical literacy for adults may depend on the capability of organizations to offer trained personnel nuanced in the art of working with older sportspersons (Jones et al., 2018). Importantly, the International Sport Coaching Framework (2013) identifies that context and relationships within coaching are significant, proposing that authentic and enriched athlete experiences arise when coaches employ strategies that consider age-cohort nuances. However, there is little understanding of how to coach middle-aged and older adults, as the vast majority of research in coaching focuses on youth or high-performance (emerging adult) populations.

While the psychosocial aspects of coaching Masters sport have been largely neglected in the research, Callary et al.'s line of inquiry (e.g., Callary, Rathwell, & Young, 2015a; 2015b; 2017, 2018; MacLellan, Callary, & Young, 2018, 2019; Rathwell, Callary, & Young, 2015; Young, Callary, & Niedre, 2014) has shown that (a) MAs want coaches to use *adult learning principles* and (b) Masters coaches variably deliver coaching in line with MAs' preferences, which are often very nuanced compared with youth. This seminal body of literature, supplemented by other notable works (also see Ferrari, Bloom, Gilbert, & Caron, 2016; Morris-Eyton, 2008), particularly underscores the importance of relationships and interpersonal skills for Masters coaches. Social-relational skills are important for coaching MAs. We propose that conceptualizations of coaching that robustly address social relations and coach–athlete (C–A) relationships are fundamental to this field.

As is the case in any underexamined field of study, there is a need to identify conceptual frameworks to effectively guide questions and scaffold emerging empirical answers in a manner that may also guide applied coaching practice. Recent forays into understanding Masters coaches' approaches led investigators to develop links with the andragogy in practice model (APM), a well-known adult learning model in education (Knowles, Holton, & Swanson, 2012). Andragogy is "a set of core adult learning principles that apply to all adult learning situations" (Knowles et al., 2012, p. 2). The six core principles are outlined in Figure 1

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and described below in relation to coaching MAs. Andragogy offers an educational perspective on the specific learning characteristics of adults. The APM was used to explain how MAs and coaches all agreed that coaching adults was inherently different than coaching youth (Callary et al., 2017; MacLellan et al., 2018). Callary et al. (2017) described how coaching approaches were deemed effective by MAs when they were aligned with andragogical principles. These effective practices were composed of the following characteristics, when coaches (a) explained why MAs were working on particular skills or activities, (b) enabled and allowed MAs' self-direction, (c) took into account MAs' prior experiences in and out of sport, (d) worked within the constraints of each adult's readiness to learn, (e) made efforts to include a problem-oriented approach to training, and (f) facilitated an intrinsically motivating environment (Callary et al., 2017; MacLellan et al., 2019). These initial sport studies helped to confirm six core principles that largely coincided with Knowles et al.'s (2012) APM principles entitled, respectively, learner's need to know, self-concept of the learner, prior experiences of the

learner, readiness to learn, orientation to learning, and motivation to learn.

The APM (Knowles et al., 2012) also acknowledges that social and psychological factors are at play (see Figure 1). In particular, Knowles et al. suggested how core principles are applied depends on instructors flexibly responding to individual learner differences (e.g., locus of control), situational differences, and differences in content matter. Moreover, the emphasis on various core principles may depend on the goals and purposes for learning, such as whether an individual is undertaking self-growth activities, whether the learning process has been mandated for institutional growth (e.g., when an organization requires training to enhance productivity), or whether there is a climate oriented toward social change and conscientiousness raising. These factors allow for flexibility in terms of how instructors apply various principles and affect the ways that learners will behave, according to the principles. In each of the aforementioned sport studies (Callary et al., 2017; MacLellan et al., 2019), the investigators illustrated how the six core principles were enacted in social relations with

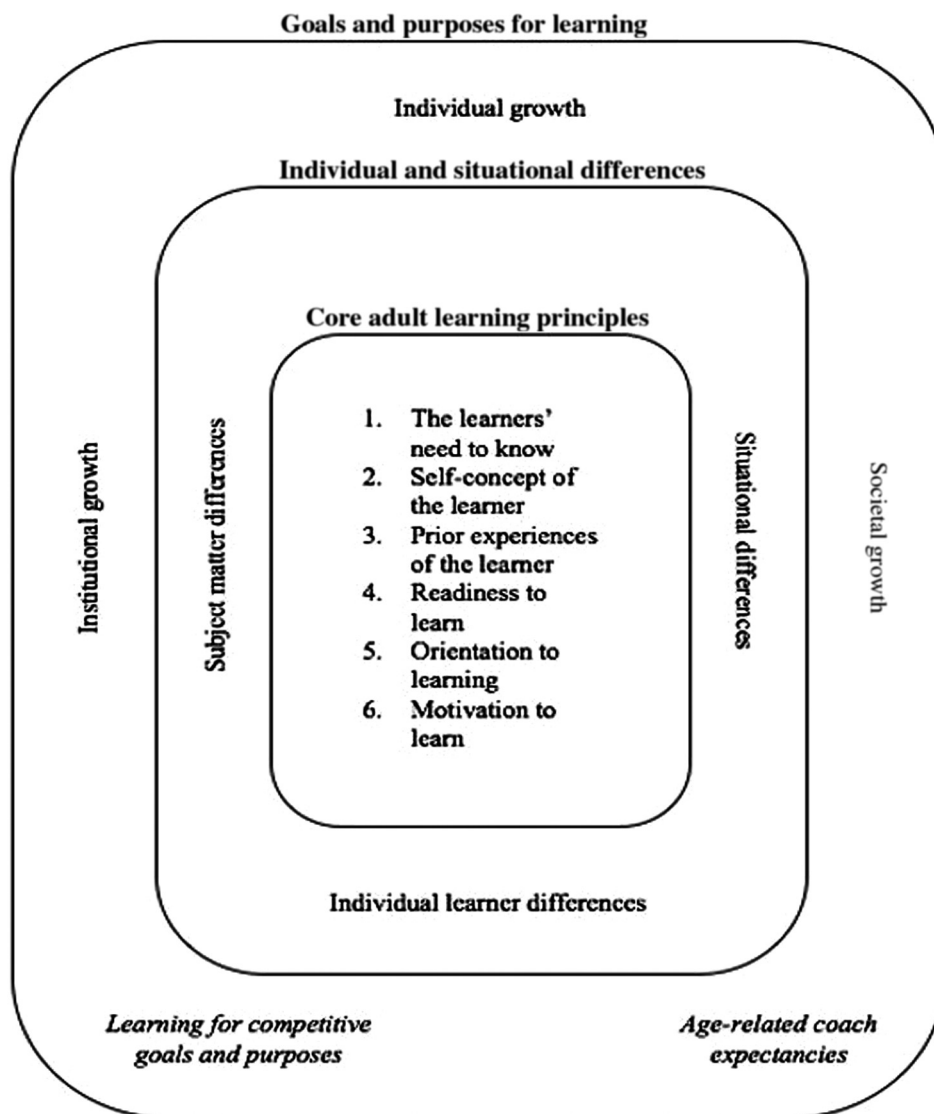


Figure 1 — Andragogy in practice model adapted for adult sport. The model is based on Knowles et al. (2012) but has been modified to include two italicized sport-specific additional features based on findings from MacLellan et al. (2019): *Learning for competitive goals and purposes* and *age-related coach expectancies*.

respect to the content matter of sport and adults' learning of movement behaviours.

In an effort to identify other conceptual frameworks that might shed light on coached Masters sport, and thus provide theory that could support other types of questions regarding the social relational aspects of coaching adults, we turn to popular perspectives used in sport research to develop socially oriented and holistic coaching approaches. Callary et al. (2017) noted that many of the qualitative themes from their exploration of adult learning are congruent with notions of *humanistic coaching* (HC; e.g., Lyle, 2002). Further, they also noted parallels between social affiliation/relatedness espoused by MAs within a coached context and similar emphases central to *interdependence theories* of sport coaching (e.g., Jowett, 2007). Thus, we purposively reviewed theoretical approaches that hold relational skills at their core, converging specifically upon literature framed by interdependence and humanistic conceptualizations as a bridge to the relational aspects of andragogy. This paper identifies and describes links between relevant relational models extracted from research findings pertaining to the unique psychosocial context of coaching adults. The insights gleaned from this paper develop an understanding of the growing practical scope of coached Masters sport by advancing complementary relational frameworks to enrich research capacity in this context. We call for research that uses theoretically sound models that, as shown in this paper, have value in Masters sport.

Purposive Literature Review

Much like purposive sampling techniques, we vetted relational perspectives in coaching research that particularly aligned with the findings from the extant research on coaching MAs. Through an exploration of published research, we noted three emerging perspectives: *interdependence theory*, *humanistic coaching*, and *andragogy*; these perspectives formed the boundaries of our conceptual review. Using SportDiscus, PsycInfo, and Google Scholar, we conducted a query of these relational terms to retrieve published, empirical, full-length articles in journals and book chapters. We limited our search to the English language and to publications between 1998 and 2018, which reflects the relatively new field of sport coaching research.

Our search pertaining to interdependence theory employed terms such as “interdependence and coaching,” “interdependence and sport,” and “interdependence and C–A relations,” which initially yielded 11 relevant results, followed by an iterative secondary search that yielded an additional 10 publications, for a total of 15 articles and six chapters. Our second search included “humanistic psychology and coaching,” “humanistic psychology and sport,” “humanistic coaching,” and similar combinations. This search yielded 29 results, and following a secondary iterative search, we gathered an additional seven publications for 30 articles and six chapters in total. Noticeably, none of the yielded publications in the first two searches pertained to adult sportspersons or MAs. Our final search included “andragogy and coaching,” “andragogy and sport,” and “andragogy and Masters athletes,” yielding 10 results, followed by an iterative search that uncovered an additional eight publications for 10 articles and eight chapters in total. Overall, 75 sport-specific publications were appraised. These publications were appraised for their application to the Masters coaching context. As will be noted in the subsequent sections, only andragogical conceptualizations have been previously examined in the Masters context. Careful reading of the publications, with a

focus on the key premises of interdependence, humanistic, and andragogical theories, readied us to discuss how various conceptual premises were reflected in the extant findings on coaching MAs. Insights on this literature will be examined in three sections regarding the relational elements of (a) interdependence theory, (b) HC, and (c) andragogy, as they relate to Masters sport. We make the case for each theory's utility in framing future research and finish with the case for how an andragogically informed model may afford further study of unique nuances on the topic.

Relational Elements of Interdependence Theory and Masters Sport

Interdependence theory examines mutuality and psychological dependency between individuals. It assumes that people are more likely to adhere to relationships if the rewards outweigh the costs (Rusbult & Van Lange, 2003; Thibaut & Kelley, 1959). It has framed investigations in the context of C–A relationships both qualitatively and quantitatively (e.g., Jowett & Carpenter, 2015; Jowett, Nicolas, & Yang, 2017; Woolliams, 2015). Interdependence within the C–A dyad shapes perceptions of the self, as well as how each member demonstrates their needs, thoughts, and motives in relation to one another. Greater interdependence is generally posited to associate with relational functioning and more positive views of the sporting context (Jowett, 2007).

Jowett et al. (e.g., Jowett & Felton, 2014; Jowett, Kanakoglou, & Passmore, 2012; Jowett, Paull, & Pensaard, 2005; Jowett & Poczwadowski, 2007) developed a 3+1Cs model of coaching effectiveness based on the way coaches and athletes feel, think, and behave in dyadic relationships. When a coach and athlete demonstrate mutual *closeness* (affect component), *commitment* (cognitive component), *complementarity* (behaviour component), and *co-orientation* (interconnected perceptions) in their relationship, both members of the dyad can benefit, resulting in enhanced skill development, performance, psychosocial development, and well-being (Jowett & Shanmugam, 2016). The 3+1Cs model of interdependence views interdependent C–A relationships as a critical aspect of a positive sport participation experience. The model has been investigated in diverse cohorts, such as male, female, and mixed C–A dyads within individual (Jowett & Carpenter, 2015) and team sports (Jowett et al., 2012), and C–A dyads at various competitive levels, including youth (Jowett et al., 2017), university (Jowett & Chaundy, 2004), and Olympic athletes (Jowett & Cockerill, 2003).

Within Masters sport, there exists a mutuality of dependence, where the coach and the MA rely on each other. For example, an MA might depend on a coach for the development of a training program; conversely, a coach's role might not exist if it were not for the MA's interest in having a coach. Indeed, many serious-minded MAs hold a “paying to play” perspective on their sport involvement (Rathwell et al., 2015, p. 77): because they have invested their monies and limited free time, they believe that a coach's approach should depend on their needs and requests.

Research on Masters sport reveals instances of affective *closeness*. Many MAs describe how they wish to have coaches who are relatable, friendly, honest, positive, and encouraging (Callary et al., 2015b). Not all MAs agree, but a certain profile of socially oriented MAs expect their coach will interact with them at social events (Rathwell et al., 2015). Many MAs also like coaches who show interest in them as people with lives outside of sport (Callary et al., 2017).

There is another interesting phenomenon of “mutual and reciprocal loyalty” (Callary et al., 2015b, p. 7) evident in many interactions within the coached Masters sport context that exemplifies *commitment* and *complementarity*. MAs prefer coaches who are wholly involved and display an immersive loyalty to their program (i.e., an “all-in” approach, involving substantial personal investments). MAs claim they are more willing to commit more to their coach and (behaviourally) invest more in the program after viewing such displays from their coach (Callary et al., 2015b). In turn, Callary et al. (2017) described how Masters coaches invest more effort into planning their coaching practice when they perceive that their MAs’ behaviours demonstrate consistent commitment to the program. In quantitative studies, Masters swimmers who reported higher support from their coach had higher voluntary commitment to the sport (Santi et al., 2014; Young & Medic, 2011), which may be associated with increased training (Santi et al., 2014).

Complementarity is embodied in corresponding behaviors between coaches and MAs. There is evidence showing that, when coaches enact certain strategies, MAs respond with better effort. For example, Callary et al. (2015b) described how Masters swimmers believed they gave more effort when their coaches planned challenging and variable practices, held them accountable for their workout, structured the workout to make efficient use of limited pool time, and provided individualized feedback that did not expose them to public scrutiny. In turn, coaches who modeled enthusiastic and attentive engagement during a workout felt that their MAs would respond with the same accountability and commitment (Callary et al., 2017).

The literature also indicates that coaches and MAs sometimes have trouble with complementarity. For example, when MAs demand a weekly schedule of optional workouts with a great deal of flexibility, some coaches deem it too flexible and disruptive to the continuity of their planning; in such cases, the coaches do not receive the satisfaction that comes with working collaboratively with the same athletes over time (Callary et al., 2017). From the MAs’ perspective, when coaches enact strategies to direct their athletes by exercising coach control, this does not complement, and is sometimes very incongruent with, their preferences for self-directedness; this can result in frustration on the part of each member (Callary et al., 2017). In such a situation, we suggest that Masters coaches actively capitalize on opportunities to build a C–A relationship by communicating with MAs individually to better understand the extent of each MA’s preferences for control/self-direction, which might allow coaches to develop adaptable and dynamic training plans. By taking a relational approach to problem-solving in this way, a coach is better equipped to accommodate her/his MAs without deviating from preconceived practice plans, and MAs are more satisfied in having their concerns heard and vetted.

Co-orientation is apparent in the emerging research on the coached Masters context. Studies of MAs’ perceptions (Callary et al., 2015b; MacLellan et al., 2018) have concluded that many positive outcomes characterizing a quality sport experience depend on the congruency with which coaches’ approaches match MAs’ wants, needs, and preferences. Case studies have shown the positive nature of having a coach tailor coaching strategies to the preferences and unique attributes of MAs (Callary, MacLellan, Rathwell, & Young, 2015; MacLellan et al., 2019). Positive C–A relationships in Masters sport appear to adopt more joint control (MacLellan et al., 2019), where a coach and athlete agree to coordinate, collaborate, and complementarily influence one

another’s outcomes, rather than one member assuming dominant authority.

In sum, the 3+1Cs model derived from interdependence theory would be interesting to explicitly explore within Masters sport, as the research from young adult contexts shows its suitability to understanding nuances in adult-to-adult relationships and notions of complementarity and power between adults. We consider that the coached Masters context, because of its particular emphasis on social relations and mutual reciprocity between coach and MA, is a rich venue for understanding elements of interdependence. For example, future research could examine co-orientation between asynchronous-aged coaches and athletes and as a function of sex (e.g., younger female coach with older male athletes). At the broadest level, the 3+1Cs model of interdependence frames C–A relationships as a critical aspect of a quality adult sport experience. In light of how well the emergent findings from the coached Masters context are framed by this model, we conclude that this relational model is a prime candidate for further examinations of mutual dependency between coaches and MAs.

Relational Elements of Humanistic Coaching and Masters Sport

Humanistic psychology proposes that individuals are motivated to grow, improve, and strive for autonomy (Maslow, 1954; Rogers, 1969). HC empowers athletes and promotes their personal growth and development through positive interpersonal C–A relationships (Lombardo, 1987; Lyle, 2002). The pivotal role of the coach is emphasized for facilitating a setting in which athletes can flourish, self-discover, and satisfy their growth needs for achievement, self-esteem, and belonging (Coulter, Gilchrist, Mallett, & Carey, 2016). HC takes an athlete-centered approach (Lombardo, 1987 as cited in Lyle, 2002), specifically that coaches (a) are responsive to change, (b) assist in developing authentic freedom for athletes, (c) set clear goals that focus on athletes’ personal growth and development, (d) gradually relinquish control and foster independence, (e) provide opportunities for athletes to solve problems and make decisions, and (f) individualize the coaching process. Lyle (2002) posited that HC activities engender key qualities of self-determination, self-control, and individuality in athletes.

There have been different interpretations of HC, with increasing efforts to clarify and consider its application in various contexts within youth and elite sport coaching (e.g., Cassidy, 2010; Gregory & Levy, 2013; Preston, Kerr, & Stirling, 2015; Solana-Sánchez, Lara-Bercial, & Solana-Sánchez, 2016). Falcão, Bloom, and Bennie (2017) described an HC workshop with adolescents where coaches believed HC principles enriched their practice sessions, yet required additional effort and time for implementation. They reported that coaches’ use of thought-provoking questions, enabling athletes to find solutions, including athletes in decisions, and soliciting athletes’ feedback to refine practices and drills, were essential methods for developing athletes’ autonomy. Each of these strategies has the potential to be applied within Masters sport.

Lyle (2002) asserted that, while humanism has been a prevailing ideology in youth sport, there is some uncertainty as to the extent that the ideology is based on evidence-based effective practice and whether it can be suitably applied beyond participatory streams of sport (i.e., to performance sport). Nelson, Cushion, Potrac, and Groom (2014) acknowledged “that adult learners differ from children because of a need to negotiate their values, meanings and purposes” (p. 516). However, adult learners’ needs have not

been explored within HC, except in Preston et al.'s (2015) study of retired Olympic athletes (age range = 27–38 years). HC strategies have yet to be assessed within the scope of Masters sport, but there is reason to believe that humanistic strategies might be particularly relevant in the context of coaching MAs.

The humanistic principle that asks the coach to *individualize the coaching process*, which fits with Coulter et al.'s (2016) suggestion for coaches to know and accept the person, also fits with the facets evident in descriptive research on Masters coaches (Callary et al., 2015b, 2017). For example, some coaches perceived their MAs' motives to be more ranging in nature than younger athletes, and endeavoured to tailor their approaches to match each MA's goal orientation for learning (Callary et al., 2017). Young and Callary (2018) also discussed the importance of sport programming that caters to each MA's personal motives or perceived involvement opportunities. Additionally, the delivery of private/public or critical/constructive information depended on a coach knowing each MA's preference and addressing each MA diplomatically (Callary et al., 2015b, 2017).

Two other HC principles appear to be highly aligned with the findings related to coaching in Masters sport: the coach should *gradually relinquish control and foster independence* and should *assist in developing authentic freedom*. Young et al. (2014) acknowledged the need for coaches to tailor their environment to key aspects of MAs' self-concept, including a need for self-directedness. Rathwell et al. (2015) described how Masters swimmers thought it was important for their coaches to share leadership to foster self-direction. As evidence of the coach relinquishing control and dispersing power more equally, Ferrari et al. (2016) found that MAs wanted coaches who would work *with* them. In MacLellan and colleagues' (2018) case study, adolescents described how their coach gave them opportunities to direct their own practice activities. However, these activities were not completely self-directed because the youth always felt they were being monitored. MAs who trained with the same coach described how they were afforded more explicit, unmonitored opportunities for self-directedness (MacLellan et al., 2018). Although relinquishing coach control was important for MAs, the execution of such a humanistic principle left some Masters coaches uncomfortable, vulnerable, or worried that the integrity of their planned workout may be compromised (Callary et al., 2017). The findings suggest that coaches' openness to afford greater independence to MAs is intertwined with notions of age and maturity, implying that adults have humanistic needs to feel rewarded by autonomous opportunities.

There is one aspect in which HC ideology may not fit with Masters sport. Based on the findings emerging from studies of the coached Masters sport context, there are equivocal findings supporting the principle that asks a coach to strategically engage in efforts to facilitate personal growth and development outcomes in his/her athletes. Callary et al. (2015b) asked Masters swimmers about the benefits they wished to accrue from their interactions with coaches. Beyond technical and tactical skill improvement, only a few swimmers anticipated developing assets and habits from their coaches that they could translate beyond the sport setting. A greater number of swimmers denied a direct role for coaches in facilitating growth and developmental outcomes *outside of sport*. It is possible that coaches facilitate adults' development of assets that transcend sport, but that such growth assets are unique to their adult life stage and have yet to be well articulated (Baker et al., 2017). Future research is needed to explore the nuances and constraints in expecting to fulfill transcendent growth and development among

MAs (cf., Liffiton, Weir, Horton, & Baker, 2012) and Masters coaches' role in this regard.

Relational Elements of Andragogy and Masters Sport as Related to Interdependence Theory and Humanistic Coaching

At the start of this paper, we identified research that examined Knowles et al.'s (2012) APM as a fit with Masters sport. The purpose of this section is to underscore that both interdependence and HC models may be used on their own or in conjunction with the APM in studies of coached Masters sport. Here we have outlined the relational connections between andragogy in Masters sport and interdependence theory and, more specifically, Jowett's (2007) 3+1Cs model. MacLellan et al. (2018) noted the importance of the bidirectional nature of conversations between coaches and MAs, where coaches and MAs both engage in asking questions and transmitting information. These behaviours link to andragogical principles, including coaches helping MAs understand why they are learning something through a back-and-forth conversation (i.e., addressing adults' *need to know*; see Principle 1 in Figure 1), and taking into account the *prior experiences of learners* (Principle 3 in Figure 1) when conversing with them. These conversations also lead to closeness and complementarity, two of Jowett's 3+1Cs constructs, as the coach and MA come to know one another better and feel comfortable engaging in mutual conversation.

Commitment to one another can be heightened when coaches engage in a problem-based *orientation to learning* (Principle 5 in Figure 1), where the MAs feel that their learning is tailored to their personalized goal orientations. The coaches in Callary et al.'s (2017) study took into account MAs' *self-concept* to be self-directed learners (Principle 2 in Figure 1), taking explicit steps to discover their MAs' personal goals in order to cater to their interests and to build athlete commitment. Callary et al. (2017, p. 186) described interactions as cyclical, in that "the coaches' approaches influenced their MAs' readiness to train and their MAs' readiness to train influenced the coaching approach." For example, one coach changed her feedback delivery to a more personalized/private approach when she noticed an MA felt criticized when she gave him feedback in front of the whole group. On account of this change, the MA demonstrated greater *readiness to learn* (Principle 4 in Figure 1): he was more willing to listen to and implement this feedback in subsequent learning situations. This complementary behaviour enabled the coach and MA to mutually gain from the relationship. Interestingly, Callary et al. (2017) found that not all coaches took into account their MAs' readiness to learn, and resultantly, sometimes felt frustrated by a lack of complementary behaviours from their MAs. When coaches did not take steps to understand the MAs' motives and readiness to learn in terms of their other life priorities and obligations, they appeared to lack closeness, and co-orientation suffered.

We also see andragogy fitting well with HC. There are strong congruencies between the notions of autonomy, independence, and facilitating opportunities for learners to make decisions (Rowley & Lester, 2016) with the andragogical principle of considering *adults' self-concept* and learning through self-direction (Principle 2 in Figure 1). Coaches typically believed MAs would find self-directed learning rewarding and took steps to encourage athletes' ownership over aspects of training by giving them choice in activities, providing information so they could work on skills independently,

and affording unmonitored practice opportunities (Callary et al., 2017; MacLellan et al., 2019).

Probably the closest link between HC and andragogy is the importance that Masters coaches place on individualizing the coaching process for their MAs, linking to the idea of providing individualized coaching in which MAs feel intrinsic *motivation to learn* (Principle 6 in Figure 1). For example, Morris-Eyton (2008) described a coach's andragogical approach, in which Masters swimmers recognized the coach as a facilitator, as opposed to a directive coach, and the coach discussed taking a flexible approach, specifically mentioning that her strategy was based on the individual and the situation.

Examining Relational Coaching Using an Andragogically-Informed Model

The parallels between andragogy, interdependence theory, and HC in the coached Masters sport context are notable. Each perspective brings a slightly different focus to research questions and data analysis. While we have outlined some of the similarities of these models, we do feel they each offer uniqueness in informing new understandings of Masters coaching and thus do not recommend an integrated heuristic. In this section, we have noted how conceptualizations from the APM offer unique perspectives that are not necessarily framed by interdependence and HC perspectives. Using an andragogically informed model (MacLellan et al., 2018), we are able to see nuances to coaching that may be overlooked within different theoretical perspectives. For example, the coach in MacLellan et al.'s (2018, 2019) studies emailed training plans to both her youth and MAs. On the surface, this may appear as the coach exhibiting commitment to all her athletes (interdependence theory), or setting clear goals with all her athletes that focus on personal growth and development (HC). However, when explored through the lens of andragogy, MacLellan et al. noted that she did this for different reasons. For the youth, she expected them to organize their lives around her plan. For MAs, she expected they would choose when to attend or would inspect this plan to negotiate their own readiness to train, permitting them the self-directedness to schedule it in around their other life obligations. Thus, what would appear to be the same coaching approach, in fact, had very different meanings. This was uncovered because MacLellan et al. noted the coaches' alternative perspectives within the andragogical principle of readying athletes to learn. Using the APM for exploring, interpreting, and analyzing Masters coaching approaches thus adds to our understanding of the C–A relationship and learning within Masters sport.

Callary et al. (2017) and MacLellan et al. (2019) found additional features in exploring adult learning in the motor domain that differed from considerations attributed to the APM, which had been derived from teachers and learners in the verbal–cognitive domain. For example, coaches needed to take into account prior physical abilities in the sport, as well as the competitive strivings of MAs. MacLellan et al. suggested additions to the APM's outer rings (i.e., psychosocial considerations that indirectly influence the application of the central principles) to make it suitable for adult sport, specifically, to include *learning for competitive goals and purposes* and *age-related coach expectancies* (see Figure 1). Neither of these facets had been considered in the educational domain as outer ring influences. Yet both of these features impacted the way in which the adult learning principles were utilized by coaches and reflected the nuances of the Masters sport context. MacLellan et al. also noted ageist assumptions of the coach

who was substantially younger than her MAs. The coach seemed to discount their physical capabilities and prior physical prowess, and she did not aim to move them all into higher competitive levels, as she did with her youth athletes. Overall, the authors' proposition was that the extent that MAs hold an orientation to learn for competitive purposes and the extent to which a coach responds to or encourages it has an important bearing in how the various core APM principles are implemented. Furthermore, it was proposed that coaches may hold preconceptions on what MAs are supposed to do or are not supposed to do and that these notions constrain how the core principles are applied by coaches. These propositions require further study in the Masters sport context.

While andragogy appears highly suitable for considering how coaches may effectively coach adults in sport, it has its limitations. The focus of much andragogical research has been on the inner ring (central six principles), with insufficient consideration of how social, situational, and social–cultural or environmental factors may be at play within coached Masters sport. For example, there are a number of social issues that have been largely ignored. This inexhaustive list includes the nature of adults' social identities; other obligations adults have and must negotiate outside of sport that may bear on their sport experience; gender or generational norms for both coaches and athletes; and inequitable access to coaching resources due to fees and other discretionary costs. These important outer ring influences could have significant influence on situational learning and/or C–A transactions and relationships. Indeed, Knowles et al. (2012) noted that andragogy has been criticized for lacking a critical social agenda and focusing solely on the individual within the learning principles. This is where it is important to understand how the model is individualized and can reflect social situations, norms/stereotypes, and important contextual variables. Our insight into this area encourages us to push for more researchers to explore Masters coaching approaches through the psychological factors of the APM to provide a better understanding of the coach's approach to using adult learning principles within the constraints, boundaries, limits, and variances of the individual, the situation, the subject matter, the organization, and even the social–cultural norms within which the coach and MAs relate to one another. Indeed, the APM may be akin to an ecological model of adult-oriented coaching and could be explored through interdisciplinary research studies, but has not yet been explored sufficiently in this manner. We suggest that neither the propositions of interdependence theory nor HC allow for such considerations. We recognize that the APM is not a model that will encompass all the complexities of learning in Masters sport, and cannot, in its own right, explain *the* most effective ways for coaches to approach working with the MAs. Nonetheless, we still note that andragogy has a special place alongside other C–A relational perspectives because it offers a model uniquely tailored to adult learning.

Conclusion

We are aware that a great number of coaching researchers are only now realizing that the prospect of adult sport coaching is at hand, and they may not be fully informed about the extant findings. Even for seasoned researchers in this area, insights about the differences and similarities of theoretical models are worth considering with regard to their applicability to Masters sport research. With this insight paper, we aspired to create empirical dialogue on C–A interactions in adult sport. The congruencies between interdependence, humanistic, and andragogical perspectives do not portray the *best* coaching methods, but rather may be considered

as frameworks to be applied in contexts where C–A interrelations could enhance the efficacy, learning, and development of MAs. The connections between interdependence theory, HC, and the APM make sense—andragogy is based in a relational context, stems from humanism, and holds C–A interdependence at its core (Knowles et al., 2012). While HC is a global ideology for coaching that has yet to be studied with coaches of MAs, andragogy provides a more tangible set of principles that have been shown to be effective, specifically with adults. Likewise, Jowett's (2007) 3+1Cs model has undergone extensive study and has stood the test of time in understanding the C–A relationship; but andragogy enables coaches to know what approaches to take with MAs to enhance those 3+1Cs. Masters sport houses a diverse population of athletes in terms of individual experiences, expectations, motivations, and goals within the same teams or clubs, all coached simultaneously (Callary et al., 2018). We need relational perspectives, like interdependence theory and HC, to be applied to Masters sport, to complement androgogically informed perspectives that have proven similarly suitable and relevant to adult sport coaching. Indeed, coach practitioners, as well as researchers, may benefit from understanding the importance of utilizing relational approaches in coaching MAs. Thus, we suggest that, depending on the lens used and the research question asked, these models may be used independently or in parallel in further advancing our understanding of Masters sport coaching. This review is timely because it demonstrates the prime conceptualizations that can be employed to best frame our understandings of coaching MAs, charting the landscape for future researchers in this field.

Acknowledgments

This research was supported by the Social Sciences and Humanities Research Council of Canada. There is no conflict of interest to disclose.

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