

1 The Emergence of Masters Sport and the Rising Importance of Coaches

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Introduction

Kelly loves coaching. A lifelong swim coach, he first cut his teeth as a youth coach at the local YMCA before being recruited to his city's competitive club. There he inherited the junior development program and was eventually appointed head coach. He spent 12 years successfully guiding 20 swimmers to national junior teams, many more to collegiate careers, and one athlete onto the Olympic team. After many years in this high performance pipeline, he felt rewarded and identified with his vocation. Then, life circumstances changed – his wife received a promotion, prompting a cross-country move. Kelly no longer had his coveted role in a competitive swim club and was stirring for a new opportunity. A coach in his network surprised him with an unusual invitation – why not coach an established local Masters swim club? They had 65 dedicated swimmers, but were short on coaches, particularly experienced ones. His friend said they could use his expertise. Masters? Kelly only knew them as the older swimmers who passed him on the pool deck as he left practices. He was unsure how attractive this new role would be, or what others would think, but he went for it. He showed up to his first Masters practice and was given a leading role immediately by the club president. He was amazed at the verve of these swimmers, how they demanded information and asked questions never before broached by his younger athletes. They challenged him for tips, cornered him for strategies. Some were straightforward, some aloof, all different body shapes, different speeds, a mix of personalities. He was surprised by the complexity of this cohort, yet there was something uniformly remarkable about them. He was intrigued. He could not quite figure it, but had an epiphany – after years coaching youth, thinking he had coaching pretty much figured out, there were new coaching problems to solve and this new role turned him on to coaching in a new way. He was motivated to take the reins and develop this opportunity into the richest experience possible, for his swimmers and for himself. He dove right in! Kelly's tale is unique, yet also epitomizes the awakening of many coaches to new roles in the frontier of adult sport and in the growth of Masters sports of all sorts.

This book is for coaches like Kelly who embrace these new opportunities and wish to challenge their craft and competencies, appraise and refine their coaching qualities and enrich their approaches with Masters athletes. This book is also for coaches who know little about Masters athletes, but seek to know more about new perspectives on coaching adults that may differ from what works in the traditional high-performance pipeline. Ideally, we hope this book sensitizes coaches to the nature of Masters Sport, and offers unique conceptual and practical advice for coaches working with older athletes.

Masters Athletes and the Growth of Masters Sport

Who is a Masters athlete? This is an important question, for which a coherent response helps to identify the characteristics of participants or clients who may be targets of activity programming or recipients of coaching interventions. First, a Masters athlete (MA) is defined by their participation in competitions/organizations advertised for adults beyond a certain age. Typically, MAs participate in organized events that begin at 35 years of age, with many adults competing into their seventies and eighties. Although MAs is the most common term, senior athletes (who claim all the same characteristics as MAs) typically comprise sportspersons who are 55 and older. MAs were known as “veteran athletes” in some European countries, and for years, sports such as athletics referred to a transitional age grouping (e.g., 30–34-year-olds) as “sub-masters.” These verbal distinctions are disappearing as the title of MA becomes standardized.

Although much literature refers to 35 years of age as the commencement of Masters Sport, some sport federations have chosen an earlier debut than 35. For example, Masters swimming commonly begins at age 25, and Masters gymnastics and synchronized skating begin at age 19. Despite some variability, the age of commencement in Masters Sport is usually older than the age of peak performance in the high-performance trajectory for younger athletes. This does not mean MAs are not high-performers, only that they do not identify with the younger high-performance context. Instead, they identify with their own age-delimited category for adults.

The second criterion is that MAs take part in rule-governed activities that have an inherent degree of competition, which necessarily distinguishes these pursuits from exercise or fitness. Degrees of competitiveness vary widely among adult sportspersons from serious-minded to decidedly recreational. However, Masters Sport is predicated on organized competition, unlike other popular activities like bike touring and Nordic walking. Most Masters sports organize their competitions into age brackets, commonly in five-year groupings of competitors (i.e., aged 40–44 years, 45–49 years, 50–54 years, etc.), but this depends on the sport and the number of participants. The objective of these age brackets is to create competitive fairness by controlling for the slowing/impeding factor of age-related decline, thereby motivating continuous competition across the lifespan.

MAs should also not be confused with “weekend warriors” or “beer league” participants. Several features are important in making this distinction (Young, 2011). MAs are formally registered for a sport to an identifiable venue or event, including a league, club, community race or *bonspiel*. This formal registration could also be to larger-scale inclusive festivals, often called “games” (e.g., Australian Masters Games) that welcome all comers of a certain age. Alternatively, MAs can register for exclusive “championships” (e.g., United States Masters Swim Championships) that require meeting performance criteria to enroll. Moreover, MAs acknowledge “preparing” to compete (Young, 2011), meaning that competitions will engender some form of practice routines. This criterion is where we begin to see the importance of MAs having coaches. Coaches are an integral part of many MAs’ preparations to improve, whether their motives are for competitive performances or self-improvement. Highly devoted MAs identify as “athletes” and refer to their preparatory routine as “training,” whereas recreational participants are reluctant to identify as athletes and to use the term training; however, a preparatory routine is common to all. In fact, researchers commonly screen for practice routines as a key characteristic in validating a sample of MAs (e.g., Hoffmann, Young, Rathwell, & Callary, 2019).

There is great variability in MAs’ practice regimens and sport involvement. Though exceptions do exist, practice amounts generally correspond to skill group, with international-level participants being heavily engaged compared to national, state/provincial, and local-level participants (Young & Medic, 2011). For example, international runners and swimmers in their mid-fifties average about 10.5 hours weekly, national-level runners average 7–9 hours per week, and regional (or local) level swimmers less than 6 hours weekly (Young & Medic, 2011). More serious-minded MAs also train more continuously with fewer breaks or off-season periods. In general, serious-minded athletes are the most skilled and often affiliate with international or national caliber championships. Serious-minded and skilled MAs may have quite different coaching needs compared to more recreational and local-level MAs, but both groups have motives that need to be considered and appropriately supported by coaches.

The rising number of adults investing time, energies, and monies in Masters Sport has been an emerging leisure trend since the 1970s. Grassroots organizations catering to older sportspersons’ interests first found traction in the 1970s, as alternatives to mainstream sport (i.e., younger and/or elite athletes). Swimming, athletics, and tennis were the earliest movements. AUSSI Masters Swimming (now Masters Swimming Australia), a non-profit organization for adult swimmers, was established in 1975 and by 2020 had over 6,500 members in more than 190 clubs. In Canada, the first World Masters Track and Field Championships were held in Toronto in 1975. Over 1,400 competitors from 34 countries took part in that weeklong festival, setting a precedent for a recurring event that continues to grow to this day. In 2019, the Canadian Masters Athletics Association reported 2,203 club-affiliated members, its highest number ever, of which 34 percent were female. Tennis “Vets” Australia (now Tennis Seniors Australia)

was established in 1970; in 2019, it boasted 3,522 players, with numbers bolstered by a dedicated Adult Participation Strategy rolled out by Tennis Australia in over 100 clubs throughout the country.

The family of Masters sports has also expanded. The 2021 summer World Masters Games (WMG) in Kansai, Japan, advertises 59 sport disciplines with an anticipated 50,000 participants. The International Masters Games Association, the representative body of sporting Masters worldwide, boasts 27 active sport disciplines and placeholders for an additional 24 sport disciplines that depend on available facilities and popularity with the host country of the WMG. Table 1.1 shows the inventory of Masters sports formally offered in contemporary WMG events. At a national level, the number of sport disciplines is astounding. The 2020 New Zealand Masters Games, for example, had over 60 sports and more than 300 separate event disciplines.

The initial growth of grassroots Masters organizations has given way to event-based growth. Over the past 20 years, large-scale multi-day events have been instrumental in promoting Masters Sport and energizing participation in countries around the world (Hastings, Cable, & Zahran, 2005; Young, Bennett, & Séguin, 2015). The “big three events” – the WMG, World Masters Athletics, and FINA (Fédération Internationale de Natation) World Masters Championships in five aquatics disciplines – have grown significantly in numbers of participants and in prestige (see Figure 1.1). Their growth parallels the aging demographics of many Westernized nations, and has tapped

Table 1.1 Sport disciplines at the Turino (2013), Auckland (2017), and Kansai (2021) summer World Masters Games and the Innsbruck (2020) winter edition

Alpine skiing	Floorball	Skateboard
Archery	Football (soccer)	Skating
Artistic swimming	Futsal	Ski jumping
Athletics	Gateball	Softball
Badminton	Golf	Squash
Baseball	Ice hockey	Swimming
Basketball	Judo	Table tennis
Biathlon	Karate	Taekwondo
Bowling	Lawn bowls	Tennis
Canoe/Kayak	Lifesaving (surf)	Touch (rugby)
Cross-country skiing	Netball	Triathlon
Curling	Orienteering	Tug of war
Cycling	Paddling	Ultimate frisbee
Dance sport	Rowing	Volleyball
Diving	Rugby	Water polo
Dragon boat	Sailing	Weightlifting
Field hockey	Shooting and rifle	

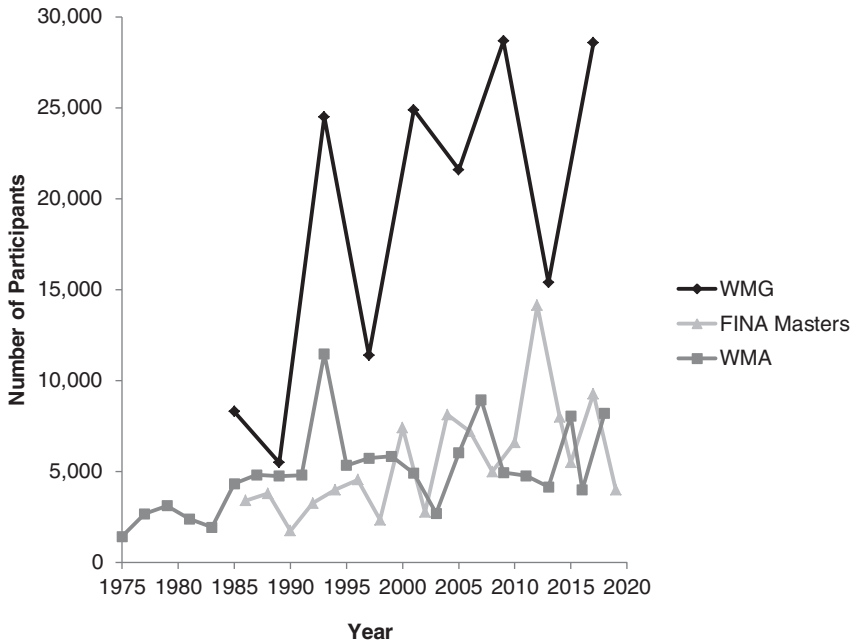


Figure 1.1 Growth of participants at the summer World Masters Games (WMG), FINA World Masters Championships, and the World Masters Athletics (WMA) championships

into the enlarged middle-class Baby Boomer cohort who have disposable monies for recreation. Simultaneously, consumer forces have resulted in the increasing commodification of Masters Sport, and large-scale events have become markets for adults' expenditures on sport as serious leisure and forms of sport tourism (Hastings et al., 2005). These events draw significant masses from around the world, make an impact on host cities, particularly because they promote "sport for life" and an "active healthy aging" agenda (Young et al., 2015).

Many international and continental events are expensive, demanding travel and accommodations costs, and registration and event-related costs that are prohibitive. Thus, international/continental events have been critiqued as being inaccessible for many and being the domain of the socio-economically privileged (Dionigi & Litchfield, 2018). On the other hand, regional-level events provide opportunities to adult sportspersons closer to home. These events can cater to serious-minded individuals who may not have the wherewithal to qualify for and travel to international/continental events, while also attracting newcomers and enthusiasts who wish to engage in community-level events.

Scholars have also called for greater attention to activities at the community level. For example, Henderson, Casper, Wilson, and Dern (2012) presented the

case of the North Carolina Seniors Games as both organizing and synergizing year-round sporting and recreational activities in the state. Sport was “one way to introduce older adults to other community options” (p. 32). Dionigi (2016) advocated that Masters Sport be viewed as a community construct, calling for much more attention to “sport participation among older people at the local level” (p. 58). Renewed focus at the local level is likely to facilitate more inclusive recruitment to adult sport, afford a greater sense of community in the Masters context, and should implicate greater roles for adults in assessing and planning their community’s sport programming. As the reader will see in this book, coaches of MAs are specifically implicated in these community sport roles – their roles are wide-spanning, formal and informal, non-traditional, and integral to the structure, energy, growth and retention of sportspersons in many communities.

The Landscape of Empirical Work on Masters Sport

MAs represent a unique cohort for scientific investigation in sport sciences, including in physiology, motor development, psychology, sociology, motor behavior, and sport management. Literature in these disciplines pertaining to MAs has become more prominent, but has only recently extended to coaching science.

Initial studies of MAs were physiological in nature, or done to estimate age-related changes in physical capacities. This research represented a patchwork of lifespan motor development (or motor retention) studies (see Stones, 2009, for a review). For example, early studies documented “trainability” in response to exercise protocol to infer the role of high-level training in the physical capacities of older adults (see Spirduso, Francis, & MacRae, 2005, for a review). A line of research plotted Masters’ performance records to model age-related trends in functional capacity (Lehmann, 1953), for example, related to running (e.g., Stones & Kozma, 1980) and other sporting events (Schulz & Curnow, 1988). This early research conveyed that MAs represented the “barometer” of what was physiologically or physically possible among aging cohorts.

Topics later evolved around two queries. First, how were MAs’ performance declines related to their physical capacities and continued training? For example, Stones and Kozma (1982) contended that recent generations were encouraged to be more active and this secular trend served to moderate decline along with an individual’s training. Longitudinal plots of MAs’ records, which reflected training effects over the decades, showed far less decline than cross-sectional plots of records taken from the same cohorts (e.g., Starkes, Weir, & Young, 2003). Second, following from the establishment of such training effects, what were the motivational or social psychological correlates underpinning MAs’ performances and commitment to training? Studies proliferated on determinants of sport commitment and passion, and the participatory, achievement, and social motives of MAs that supported their activity (see Young, 2011; Young & Medic, 2012, for reviews).

A rich emerging body of research describes the “experiences” of people in Masters Sport. This literature could be characterized as sociological or socio-cultural; it is integral in describing the lived experiences of MAs (e.g., Stevenson, 2002), the phenomena around the management of aging (e.g., Partington, Partington, Fishwick, & Allin, 2005), and societal impressions of this growing cohort (see Dionigi, 2016, for a review). Dionigi (2002) established a lineage of studies portraying the competitive nuances of MAs and initiated discourse around whether they “resist or reinforce” ageing stereotypes (see Dionigi, 2008). The “serious leisure” perspective (e.g., Siegenthaler & O’Dell, 2003) has increasingly been applied to characterize the remarkable identification that MAs have with their sports, and the unique ethos associated with their pursuits. Notably, beginning with Rudman (1986), a line of critical works on how older sportspersons may exemplify successful aging has been explored (e.g., Geard, Reaburn, Rebar, & Dionigi, 2017), describing benefits and psychosocial outcomes from adult sport (e.g., Gayman, Fraser-Thomas, Dionigi, Horton, & Baker, 2017). Many studies on MAs contextualize their work within successful aging, that is, they justify the focus on adult sport because sport is a conduit for achieving necessary physical activity that aids in functionality and the absence of disability/disease, in expressing oneself in a social and productive activity, and in maintaining cognitive acuteness.

Young, Callary, and Rathwell’s (2018) comprehensive review of psychosocial research on older sportspersons charted new areas of interest regarding MAs, including social identity, the value of social motivation models, and the underestimated role of social agents (e.g., peers, family, and community). For the first time, a section was dedicated to the role of the coach in older sportspersons’ experiences, identifying coaches as important social agents and resources that MAs use to motivate themselves to train and to enrich their sport experiences.

Coaching research related to middle-aged and older sportspersons has only arisen in the past decade. Certainly, dedicated coaches and sport programmers exist who have maintained blogs and personal websites with links to information about MAs. However, in terms of peer-reviewed, evidence-based research, we are only now seeing the rise of empiricism. To illustrate, we performed a search of research with the keyword “Masters athletes” in Google Scholar since 2000 and then vetted each result to ensure it was drawn from an English peer-reviewed scientific journal or book, and to determine its disciplinary area. Figure 1.2 shows the number of these publications per year from three categories of science: biophysical sciences, including physiology, biomechanics, plus epidemiology; sociocultural and psychological studies; and coaching science.

While noting the emergence of evidence-based knowledge related to coaching Masters, it is important to recognize how this topic sits at the nexus of multi-disciplinary dialogue. The main implication is that coaches of MAs may need to understand many disciplines to frame their understandings of

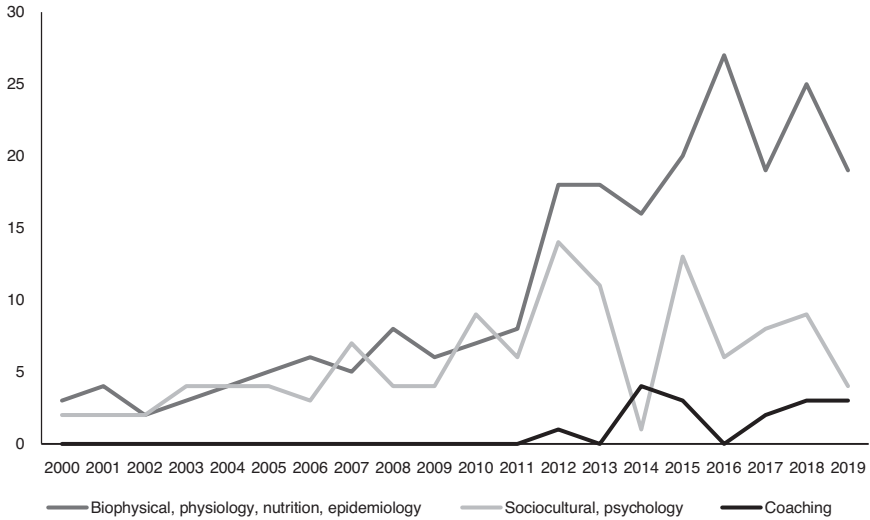


Figure 1.2 Trends in research in Masters Sport over the past 20 years in three disciplinary areas
Note: Numbers on the y-axis represent annual publications as journal articles or books.

how to work with middle-aged and older athletes. Not only do studies of MAs benefit from perspectives informed by multiple disciplines, questions related to MAs are provoking new insights and new meanings for multiple disciplines. For example, interrogating how older sportspersons devote considerable time to sport while negotiating other responsibilities and duties of adulthood reveals new understandings on motivational psychology that might not be gleaned from younger athletes. Interrogating how older sportspersons strategically practice and recruit resources to retain their performance might reveal new understandings on optimizing and compensating for age decline, which is an integral topic in developmental psychology. Scrutinizing how adult sportspersons wish to portray their roles and capacities in competitive activities might reveal their perceptions on aging, which has implications for gerontology. Examining how adult sportspersons share leadership roles and convey directions to each other may reveal new conceptualizations of organizational behavior and group management. Interrogating how adult sportspersons wish to carry out conversations and receive feedback from their instructors reveals new understandings in the education discipline, and particularly the domain of adult learning. We hope that various chapters of this book will convey to the reader how coaching Masters implicates an appreciation of multidisciplinary scholarship.

The Growing Prominence of Masters Coaches

It is difficult to ascertain how many MAs have personal coaches and the extent to which coaches enhance their athletes' experiences. This is partly because audits of Masters sports, including personnel and resources, are insufficient in that we cannot catalog numbers based on certifications in formalized programs, as happens with youth coaches. Moreover, different sports have different demands, and not every Masters sport has reached a degree of specialization or technical maturity that offers regular, structured coaching. To be sure, as Masters sports rapidly become more scientific and systematic in their approaches, and as long as there are competitive athletes seeking to get an edge, there will be increasing demands for coaches.

We have witnessed coaches becoming increasingly more prominent and valued in some Masters sports, especially individual sports like swimming, athletics, triathlon, alpine and Nordic skiing, canoe/kayak, cycling, and golf. In these sports, MAs see their coaches as crucial for improving their skills, helping them manage their training routines, planning and preparing for competitions, and holding them accountable for working hard. As will become evident in this book, many MAs view having a good Masters coach as validating their committed sport pursuit.

MAs report strategically using coaches to motivate themselves and to maintain motivation during lapses (Medic, 2009). This is the case for approximately 70 percent of international-level Masters swimmers and track and field athletes who report having a coach (Young & Medic, 2011).

Unlike many youth sports where a coach's presence is institutionalized, this is not always the case in Masters Sport. In some scenarios, a Masters coach can be frequently present, yet in other contexts, the coach is an intermittent resource who attends to, and is consulted by MAs. For example, in a sample of predominantly North American swimmers and track athletes in community clubs, 67 percent reported being coached by a designated person (Hoffmann et al., 2019). Those who reported being coached trained 4.2–4.7 times per week, of which they were coached 1.5–2.9 times weekly. Hoffmann et al. (2019) reported that “coached MAs” spent 67 percent of the time they trained with a coach. Individuals who claimed they were only “moderately-coached” were with a coach for 32 percent of their training time. Individuals who said they did not have a coach still spent about 3 percent of their training time with one. The frequency may depend on several characteristics, including the availability of the coach, the credibility of the coach, and coach-athlete rapport. Interestingly, many MAs will decide how much and when to use a coach, sometimes with a shopper's mentality, and this decision will be predicated on the perceived contribution of the coach and whether their needs are being met (Callary, Rathwell, & Young, 2015). Thus, if coaches are looking to retain and grow their MA clientele, it is incumbent on them to ensure they are knowledgeable and impactful on how to coach in this context, including a depth of understanding on how to cater to the needs of their MAs. Conveying these understandings is the intention of this book.

Various sport organizations are slowly beginning to acknowledge the value and prominence of coaches in Masters Sport. For example, United States Masters Swimming lists coaching as one of the nine benefits associated with membership in their program. They describe how coaches provide organized workouts and support and that members will receive technical advice and personal attention from coaches in practices. Likewise, Masters Swimming Canada has coaching as a central component within their organizational vision, which is “to promote involvement and lifelong engagement in the Masters swimming community through programs, competition, *coaching*, and strategic partnerships.” In light of the valued contribution of quality coaching, Masters Swimming Canada has even launched a Masters Coaching Module to help support coaches working with adult swimmers. Beyond what we have witnessed in swimming, we have also noted increasing evidence of Masters coaches in team sports, as well as highly technical or choreographed sports, such as (artistic) synchronized figure skating.

Despite these trends, there are interesting tensions in the organizational context around Masters sports. On the one hand, many organizations are excited by the importance of addressing this growing cohort and spend time considering how to attune themselves to the realities of middle-aged and older adults. Simultaneously, many of these same organizations are wary of attributing too much time, energy or resources to Masters, fearing this will draw them away from younger elite development pathways in their sport. For many, they see matters in the younger high-performance context as more prestigious and worthwhile to sport and to their own advancement. In certain cases, some sport organizations have acknowledged an interest in MAs, especially with regards to the economic value in adult sport participation, yet at the same time they neglect/dismiss the importance of coaching in this context. One could speculate on reasons – from scarce resources that cannot be allocated to a new frontier of sport services, to ageist conceptions, or simply not knowing enough about MAs to warrant significant changes in policy, programs or training. Throughout this book, we explore these issues and inspire coaches to see their own value in Masters Sport.

Hopefully, the prospect of coaching Masters stimulates the reader to ponder non-traditional or even unconventional coaching approaches that may not be aligned with their coach training. This book equips coaches working with MAs, or who may be interested in working with MAs, to gain sport science knowledge and add specific psychological and biophysical information to their toolbox of coaching aging athletes, to consider distinctive psychosocial issues that differentiate the Masters context from other sport coaching contexts, and to think through their own personal and coach development.

A Coach’s Account: Peter Niedre (Director of Education Partnerships, Coaching Association of Canada)

I have had the fortunate opportunity, in either a professional or volunteer role, to coach, work with, and develop and implement programming for participants at every stage of development in sport, including MAs. MAs, a growing cohort and

known as “competitive or active for life” participants, bring a truly unique role and community to the sport system. MAs can bring a wide range of motivations and personal experience, from beginner to lifelong continuing athlete, that lead them to compete in their sport. The realities that MAs bring are what makes coaches really challenge their coaching practices, and at the same time, realize so many different definitions of “success” of their athletes.

The ultimate role of the coach is to enhance and foster the experiences of their athletes through an athlete-focused approach. The primary avenue to adopt an athlete-focused, inclusive approach to coaching is to ultimately “know your athlete.” What does “know your athlete” mean in coaching MAs? In this opening chapter, we quickly learn the variation in time and interaction of MAs who are involved with their coach. This provides a stark reminder of the importance of “knowing your Masters athlete,” and the significant impact coaches can have on their experience, enjoyment and performance. The role and ultimate success of the Masters coach depend on truly understanding the motivation of their athletes for being in their sport, while also understanding the many competing priorities their personal lives face with just being able to train and compete. Working with MAs comes with so many opportunities and implicates so many factors, which may lead Masters coaches to change or adapt the way they coach.

Côté and Gilbert (2009) have defined coaching as the consistent application of integrated professional, interpersonal, and intrapersonal knowledge/behaviors to improve participants’ competence, confidence, connection, and character in specific coaching contexts. Within the context of coaching MAs, few reference resources or specific coach education sources exist to support coaches in pursuing this knowledge and these behaviors. This current book is therefore a much-needed resource that will surely aid in developing interpersonal and certain professional knowledge in Masters coaches, and perhaps trigger more discussion about MAs in the sport ecosystem.

As with coaching in any context, self-reflection, critical thinking, and problem-solving skills are the foundations of intrapersonal knowledge. In order to have a stronger understanding of the context within which one coaches, specifically with respect to MAs, Masters coaches need to reflect, and challenge themselves more regarding how they think about coaching their middle-aged and older adult athletes. Masters coaches need to utilize their underpinning skills in intrapersonal knowledge as they engage in program planning (practices, microcycles, yearly training programs), interacting with their athletes, and searching for ways to get the most of their athletes to reach their competitive and training objectives in their limited time.

Masters coaches will quickly learn that coaching MAs is truly a partnership, facilitating training and performance. Understanding some of the contextual nuances and considerations will help coaches truly recognize what is different in coaching MAs and excel in building these partnerships. This will truly help coaches of MAs in their abilities to “know their athlete.”

Parting Words from the Start Line

The commentary from our coach (who is also a Coach Education Director), underscores the real possibilities and challenges in developing new understandings of intrapersonal, interpersonal and professional knowledge in coaching MAs. Our aim is that this book will serve the reader on each of these fronts, giving rich perspectives on what coaching MAs means for the self with implications for how a coach influences and is influenced by adult sportspersons. The book also specifically addresses informal and increasingly formal avenues by which Masters coaches can accrue professional knowledge in working with MAs. Most notably, it is our hope that this book will provide a contemporary and provocative look at what it means to understand your middle-aged and older athletes, particularly through a social, relational and social psychological lens.

The fulfilling and poignant nature of coaching Masters has been recognized by coaches and sport organizations alike. We believe that a testimonial from a coach on Masters Swimming Canada's website (2020) appropriately captures the challenge and rewards of interacting, guiding, and leading the remarkable mix of MAs:

Coaching a group of Masters swimmers is a uniquely rewarding, albeit demanding, responsibility ... The diversity of the typical Masters group, in age, skill, experience and motivation, guarantees that the coach's ingenuity will be stretched to the max. They have chosen to join you and if you are able to rise to the challenge of meeting their diverse needs, will reward you with a constant show of appreciation. Coaching Masters can be the most rewarding challenge you, as a coach, can undertake.

We believe these words resonate with Kelly's tale at the start of this chapter, and the revelations and excitement he experienced in taking on the challenge of coaching a brand new adult cohort. To our readers, we invite you to read on, to challenge yourself to reflect and appraise perspectives in this book, and to consider how you may use new insights to "know your Masters athletes," to improve your coaching craft, and fully engage in the charter of coaching MAs.

References

- Callary, B., Rathwell, S., & Young, B. W. (2015). Masters swimmers' experiences with coaches: What they want, what they need, what they get. *SAGE Open*, 5(2), 1–14. doi:10.1177/2158244015588960.
- Côté, J. & Gilbert, W. (2009). An integrative definition of coaching effectiveness and expertise. *International Journal of Sports Science & Coaching*, 4, 307–323.
- Dionigi, R. A. (2002). Leisure and identity management in later life: Understanding competitive sport participation among older adults. *World Leisure Journal*, 44, 4–15. doi:10.1080/04419057.2002.9674274.

- Dionigi, R. A. (2008). *Competing for life: Older people, sport and ageing*. Saarbrücken, Germany: VDM Verlag.
- Dionigi, R. A. (2016). The competitive older athlete: A review of psychosocial and sociological issues. *Topics in Geriatric Rehabilitation*, 32, 55–62. doi:10.1097/TGR.0000000000000091.
- Dionigi, R. A., & Litchfield, C. (2018). The mid-life ‘market’ and the creation of sporting subcultures. In R. A. Dionigi & M. Gard (Eds.), *Sport and physical activity across the lifespan: Critical perspectives* (pp. 283–300). London: Palgrave Macmillan.
- Gayman, A. M., Fraser-Thomas, J., Dionigi, R. A., Horton, S., & Baker, J. (2017). Is sport good for older adults? A systematic review of psychosocial outcomes of older adults’ sport participation. *International Review of Sport & Exercise Psychology*, 10, 164–185.
- Geard, D., Reaburn, P., Rebar, A., & Dionigi, R. (2017). Masters athletes: Exemplars of successful aging? *Journal of Aging & Physical Activity*, 25, 490–500. doi:10.1123/japa.2016-0050.
- Hastings, D. W., Cable, S., & Zahran, S. (2005). The globalization of a minor sport: The diffusion and commodification of masters swimming. *Sociological Spectrum*, 25, 133–154. doi:10.1080/02732170590883924.
- Henderson, K. A., Casper J., Wilson, B., & Dern, L. (2012). Behaviors, reasons, and outcomes perceived by senior games participants. *Journal of Parks & Recreation Administration*, 30, 19–35.
- Hoffmann, M. D., Young, B. W., Rathwell, S., & Callary, B. (2019). Comparing groups of Masters athletes with varying degrees of coaching for psychological need satisfaction and thwarting. *International Journal of Sports Science & Coaching*, 5(1), 5–8. doi:10.1177/1747954119887300.
- Lehmann, H. C. (1953). *Age and achievement*. Princeton, NJ: Princeton University Press.
- Masters Swimming Canada. (2020). The rewards of masters coaching. Retrieved from: www.mastersswimmingcanada.ca/WP/en/for-coaches/coaches-program/hints-for-coaching-masters/ (accessed April 13, 2020).
- Medic, N. (2009). Understanding masters athletes’ motivation for sport. In J. Baker, S. Horton, & P. Weir (Eds.), *The masters athlete: Understanding the role of sport and exercise in optimizing aging* (pp. 105–121). New York: Routledge.
- Partington, E., Partington, S., Fishwick, L., & Allin, L. (2005). Mid-life nuances and negotiations: Narrative maps and the social construction of mid-life in sport and physical activity. *Sport, Education & Society*, 10, 85–99. doi:10.1080/135733205200098820.
- Rudman, W. J. (1986). Sport as a part of successful aging. *American Behavioral Scientist*, 29, 453–470.
- Schulz, R., & Curnow, C. (1988). Peak performance and age among superathletes: Track and field, swimming, baseball, tennis and golf. *Journal of Gerontology: Psychological Sciences*, 43, 113–120.
- Siegenthaler, K. L. & O’Dell, I. (2003). Older golfers: Serious leisure and successful aging. *World Leisure Journal*, 45, 45–52. doi:10.1080/04419057.2003.9674304.
- Spiriduso, W., Francis, K., & MacRae, P. (2005). *Physical dimensions of aging* (2nd ed.). Champaign, IL: Human Kinetics.
- Starkes, J. L., Weir, P. L., & Young, B. W. (2003). What does it take for older athletes to continue to excel? In J. L. Starkes & K. A. Ericsson (Eds.), *Expert performance in sports: Advances in research on sport expertise* (pp. 251–272). Champaign, IL: Human Kinetics.

- Stevenson, C. L. (2002). Seeking identities: Towards an understanding of the athletic careers of masters swimmers. *International Review for the Sociology of Sport*, 37, 131–146.
- Stones, M. J. (2009). Statistical modeling of age trends in masters athletes. In J. Baker, S. Horton, & P. Weir (Eds.), *The masters athlete: Understanding the role of sport and exercise in optimizing sport* (pp. 15–38). New York: Routledge.
- Stones, M. J. & Kozma, A. (1980). Adult age trends in record running performances. *Experimental Aging Research*, 6, 407–416.
- Stones, M. J. & Kozma, A. (1982). Cross-sectional, longitudinal, and secular age trends in athletic performance. *Experimental Aging Research*, 8, 185–188.
- Young, B. W. (2011). Psycho-social perspectives on the motivation and commitment of Masters athletes. In N. L. Holt & M. Talbot (Eds.), *Lifelong engagement in sport and physical activity* (pp. 125–138). London: Routledge & ICSSPE.
- Young, B. W., Bennett, A., & Séguin, B. (2015). Masters sport perspectives. In M. M. Parent & J-L. Chappelet (Eds.), *Routledge handbook of sports event management: A stakeholder approach* (pp. 136–162). London: Routledge.
- Young, B. W., Callary, B., & Rathwell, S. (2018). Psychological considerations for the older athlete. In O. Braddick, F. Cheung, M. Hogg, J. Peiro, S. Scott, A. Steptoe, C. von Hofsten, & T. Wykes (Eds.), *Oxford research encyclopedia of psychology* (pp. 1–26). New York: Oxford University Press. doi:10.1093/acrefore/9780190236557.013.180.
- Young, B. W., & Medic, N. (2011). Veteraaniurheilijat: tutkimuksia merkittävästä panostuksesta, motivaatiosta ja mahdollisuuksista [Masters athletes: Studies on remarkable investments, motives, and opportunities]. In Finnish Veterans' Athletic Association (Ed.), *Erilainen tapa vanheta* [Different ways of aging in sport] (pp. 45–58). Lappeenranta, Finland: KS-Paino.
- Young, B. W., & Medic, N. (2012). Expert masters sport performers: Perspectives on age-related processes, skill retention mechanisms, and motives. In S. Murphy (Ed.), *Oxford handbook on sport and performance psychology* (pp. 493–512). New York: Oxford University Press.