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Human Kinetics
COMMENTARY

Reviewing Original Research Articles Published in the *International Sport Coaching Journal*

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The purpose of this commentary is to provide a broad overview of the empirical research-based articles published in the *International Sport Coaching Journal* from its inception in 2014 through 2020. Data from 101 publications were collected and analyzed using Arksey and O'Malley's six-stage framework for conducting scoping reviews. Data were extracted on the size and scope of research, populations and perspectives studied, and methodologies and data collection methods used. The results show that empirical research publications grew more prominent over time (i.e., 24.0% of 2014 publications vs. 58.1% of 2020 publications) compared with other publication types. The most commonly researched topics included coach development and coach behaviors. The participants most studied were male coaches, performance sport coaches, and adult sport coaches, featuring primarily European and North American coaches. The majority of studies used a qualitative methodology with the most common research designs being phenomenological and case studies. A variety of data collection methods were used that involved one-on-one interviews and questionnaires. Several recommendations are advanced to stakeholders, including strategies to promote racial and gender diversity and to collect and report demographic data on race and coaching experience.

Keywords: research methodology, research design, research trends

The present commentary, based on a scoping review, provides a summary of the nature of empirical research published in the *International Sport Coaching Journal (ISCJ)* from its inception in 2014 to 2020. We used a scoping review approach, which is "a form of knowledge synthesis that addresses an exploratory research question aimed at mapping key concepts, types of evidence, and gaps in research related to a defined area or field by systematically searching, selecting, and synthesizing existing knowledge" (Colquhoun et al., 2014, pp. 1293–1294). Moreover, a scoping review provides greater clarity about a topic, intended to guide more focused lines of research and provide an overview of the breadth rather than the depth of evidence (Davis et al., 2009).

Arksey and O'Malley (2005) highlighted four possible reasons why researchers undertake scoping reviews, which are to examine the extent and nature of a body of research, identify whether a systematic review is warranted, summarize and disseminate research findings, and/or identify research gaps within the extant literature. The present scoping review was conducted to inform *ISCJ* stakeholders on the extent and nature of empirical research-based articles and to identify areas in which *ISCJ* stakeholders can aim to shape the future of the journal. There are a number of stakeholders who can benefit from a summary of the empirical research-based publications in *ISCJ*, including consumers of the journal (e.g., What can I expect to gain from reading *ISCJ*?), researchers (e.g., What are the current publishing trends, and how does my research fit within *ISCJ*?), reviewers of *ISCJ* (e.g., What are the expectations in terms of high-quality writing?), *ISCJ* commentary board (e.g., How are current research trends aligning with the journal's mission?), publishers (e.g., Should a special issue be published to address critical but less researched topics?), and coach developers (What type of research is available to inform coach education efforts?).

The present scoping review addresses the following questions: (a) What was the size and scope of the empirical research in *ISCJ* between 2014 and 2020? (b) What populations and perspectives were examined? and (c) What methodologies and data collection methods were used? These questions align with previous reviews of coaching literature (e.g., Campbell et al., 2022; Gilbert & Trudel, 2004) and coaching-focused scoping reviews (e.g., Bentzen et al., 2021). It is also a way to inform stakeholders (Levac et al., 2010) of ways to advance coaching science in this journal.

Researcher Positioning

This commentary, based on a scoping review, is written by four individuals who have unique experiences working with the *ISCJ* yet have a common interest in the growth and development of the journal. The first author (Hirsch) is a doctoral student who studies leadership. She has primarily investigated the construct of athlete leadership and has utilized the *ISCJ* as an outlet to stay informed about advances concerning sport leadership and coaching. As such, she is a consumer of the journal so she can develop her understanding of the field of coaching science. The second author (Loughead) is an established academic who specializes in sport leadership, which includes conducting research on coaching and athlete leadership. His experiences with the *ISCJ* include as a consumer, reviewer, coach, and author. The third author (Bloom) is an academic who has conducted coaching science research for 30 years. He currently serves as an associate editor of the *ISCJ* and also engages with the journal as a consumer, author, reviewer, and coach. The fourth author (Gilbert) is an academic with 30 years of experience conducting coaching science research. His involvement

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with the *ISCJ* includes serving as the founding editor-in-chief as well as consumer, author, reviewer, and coach.

The present review was guided by a pragmatist paradigm, which assumes that reality is ever-changing, and pragmatists are, therefore, not tied or committed to any single view of reality (Kowalski et al., 2018). It is also rooted in the idea that multiple approaches to inquiry can help to answer the research questions (RQs; Onwuegbuzie & Leech, 2005). As such, the present review incorporates knowledge from two key sources: (a) articles contained in the review and (b) *ISCJ* stakeholders. Furthermore, multiple approaches to examining the data were used, including frequency analyses (e.g., sample size and demographics data) and themes (e.g., coaching areas of focus). Pragmatists do not claim to provide an absolute truth (Weaver, 2018); therefore, we acknowledge there are other ways to examine *ISCJ* articles and that our findings do not provide an absolute truth. Another key component of pragmatism is that knowledge creation can be used as a catalyst for change and improvement (Goldkuhl, 2012). Describing the composition of original research articles can serve as a catalyst for stakeholder reflection that can inform future research.

Scoping Review

The *ISCJ* published its inaugural issue in 2014 under the leadership of founding co-editor-in-chief, Dr. Wade Gilbert. He served as the editor-in-chief for 7 years until Dr. Bettina Callary accepted the invitation to serve as *ISCJ*'s second editor-in-chief. Dr. Wade Gilbert served from 2014 to 2019 when Volumes 1–6 were published and manuscripts for Volume 7 were submitted for review. Ultimately, Volume 7 was published in 2020 under the direction of Dr. Bettina Callary. Beginning in 2021, a new *ISCJ* commentary leadership group incorporated modifications that influenced the makeup of the journal, including updating the journal's mission to place greater emphasis on empirical coaching research, while still retaining space for practical advances and a continued priority on promoting a global perspective on coaching and coach development. Such changes resulted in an update to the classification of manuscript submissions (e.g., reducing the number of classifications). Given these changes, we have focused our scope of study to the empirical research published in the *ISCJ* from 2014 to 2020 in which the mission and makeup of the journal remained consistent.

This scoping review was conducted using the Arksey and O'Malley (2005) framework that involved six stages: (a) identifying RQ(s); (b) identifying relevant studies; (c) selecting studies for inclusion; (d) charting the data; (e) collating, summarizing, and reporting the findings; and (f) consulting with stakeholders. Arksey and O'Malley initially noted that the sixth stage was optional. However, researchers have since argued that consultation with stakeholders be a required component of an effective scoping review (Levac et al., 2010; Sabiston et al., 2022). As such, all six stages were conducted in the present study. In the current review, a description of Stage 1 can be found in the introduction, and descriptions of Stages 2–6 are described next. Consistent with Arksey and O'Malley's framework, these stages were completed in an iterative process.

Stages 2 and 3: Identifying Relevant Studies and Selecting Studies for Inclusion

The current review analyzed Volumes 1–7 that were published from 2014 to 2020. A manual search of *ISCJ* publications identified 287 total studies in Volumes 1–7, which were considered for potential inclusion into the scoping review.

Until 2021, *ISCJ* categorized manuscripts into one of seven types that included *original research* (i.e., empirical data-based studies examining coaching and coach education), *best practices* (i.e., evidence-based approaches to enhance coaching performance), *coaching in* (i.e., descriptions of coaching and coach education in a specific country), *insights* (i.e., position papers on issues or approaches to coaching and coach education), *digest* (i.e., a summary of the articles in the issue), *resource review* (i.e., brief summaries of sources for coaches and coach educators), and *commentarys*. Along with the first and second authors, a research assistant screened the articles within the *ISCJ* to identify manuscripts containing empirical-based data. From this search, original research ($n = 101$) was the only manuscript type that required empirical data, thereby excluding best practices ($n = 34$), coaching in ($n = 24$), insights ($n = 58$), digest ($n = 21$), resource review ($n = 41$), and commentarys ($n = 8$) articles from the current review. Figure 1 contains of a flowchart of the screening process.

Stages 4 and 5: Charting the Data and Collating, Summarizing, and Reporting the Data

Stages 4 and 5 were conducted as a collaboration between the first and second authors and then critically reviewed by the third and fourth authors. The purpose statement, RQs, and method section of all manuscripts were assessed by extracting data pertaining to each RQ. Data were extracted and recorded in an iterative process. For example, participant demographics were initially recorded as

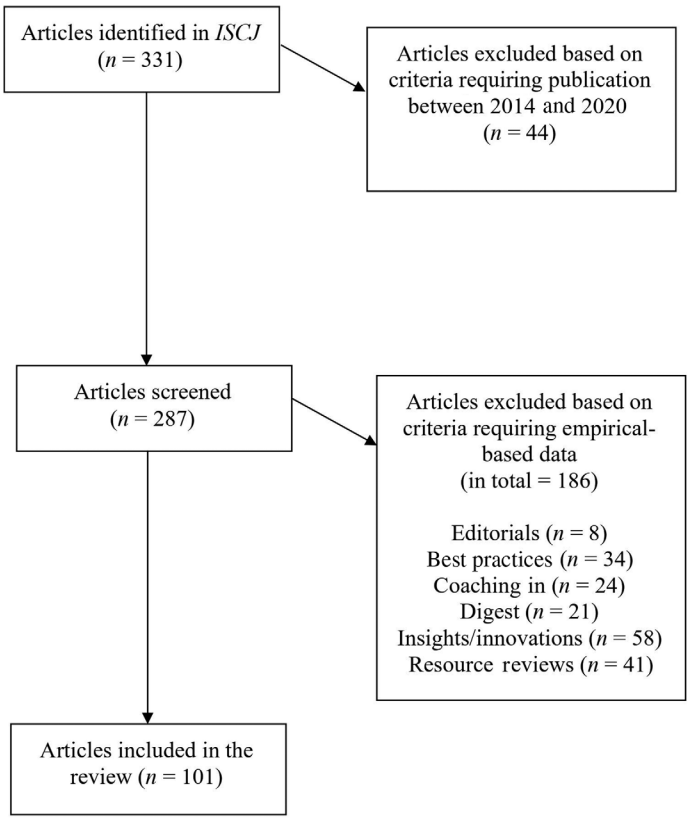

Figure 1 — Flow diagram of screening process. *ISCJ* = *International Sport Coaching Journal*.

gender and participant type (e.g., coach, athlete). Following the assessment of several articles, the first and second authors noted discrepancies between articles in terms of how certain demographic data were reported and how coaching samples differed across studies. As a result, a decision was made to also record information on the race and coaching experience of participants (i.e., coaching experience inclusion criteria and sample's coaching experience) so that a clearer picture of the participants could be described to individuals who are looking to engage with the *ISCJ* (e.g., using these data to determine whether the journal has published research on their population of interest). All previously assessed articles were then reassessed to include race and coaching experience data.

The data were then organized into a table detailing study characteristics (see the Supplementary Material [available online]). As Arksey and O'Malley (2005) stated, decisions for how to analyze and report the data should align with the RQs and priorities of the researchers. Specifically, the size and scope of the empirical data (i.e., RQ1) was investigated by calculating the number of original research articles in each *ISCJ* issue and identifying the coaching areas of focus addressed in each manuscript. The populations and perspectives (i.e., RQ2) were assessed by examining the participant demographics, sample size, coaching experience, and sporting context. Participant demographics were coded by participant type (e.g., coach, athlete, and administrator), gender, race, and the country of the sporting context. Coaching experience was coded by the reported inclusion criteria for coaching experience (e.g., participants must be coaches who have five or more years of coaching experience) and the coaching experience of the study sample (e.g., the average years of coaching experience of the sample). Inclusion criteria data included the context and length of the coaching experience required to participate, if reported. Data pertaining to the study sample's coaching experience included the coaching context as well as range and average length of coaching, if reported. Studies that included non-coach samples (e.g., athletes) or provided reviews of the literature were not coded for inclusion criteria for coaching experience or sample coaching experience. The sporting context was coded by competition context and sport. We coded the competition context as athletes being <18 years old (youth) or 18+ years old (adult) as well as the level of competition (participation vs. performance; Lyle, 2002). The research design used (i.e., RQ3) was first categorized by the methodology (qualitative, quantitative, or mixed methods). If the study was categorized as qualitative, the design was then coded as either ethnography, grounded theory, narrative, phenomenology, or document analysis (cf. Creswell & Creswell, 2018). If the study was categorized as quantitative, the design was then coded as experimental with randomized groups, experimental with nonrandomized groups, preexperimental, or nonexperimental (Kowalski et al., 2018). If the study was categorized as mixed methods, the design then was coded as convergent, exploratory, explanatory, or case study mixed methods research (Creswell & Creswell, 2018). Each study was further categorized according to data collection methods (e.g., interviews and questionnaire), timing of data collection (cross-sectional vs. longitudinal), and whether a research paradigm was reported (yes vs. no). The data are reported in a series of tables in accordance with the applicable RQ. Specifically, findings pertaining to the size and scope of the research are reported in Table 1 (summary of study characteristics) and Table 2 (summary of coaching areas of focus). Findings related to the populations and perspectives examined are reported in Table 1 (summary of study characteristics). The findings pertaining to the methodologies and data collection methods used are reported in Table 3 (summary of study methods) and Table 4 (summary of paradigm reporting by methodology).

Stage 6: Consultation With Stakeholders

Key stakeholders approached for consultation included the current *ISCJ* editor-in-chief and one associate editor who served during Dr. Gilbert's tenure. Both stakeholders were provided with a draft report of the findings to solicit their feedback (Keown et al., 2008; Sabiston et al., 2022). They were asked to share their reflections concerning how the findings aligned with the mission of *ISCJ* and areas for future research and to identify which findings from the scoping review were informative for their roles as researchers, editors, and consumers of the journal. The stakeholders shared feedback pertaining to findings such as the diversity of research samples and country of the sporting context (e.g., does the international representation in the present review reflect an international journal such as *ISCJ*?) as well as commentary on how these findings aligned with the current *ISCJ* mission statement. The stakeholders' feedback was integral in shaping the discussion and informed the display of findings in the "Results" section.

Results

A summary of the 101 original research articles can be found in the Supplementary Material (available online). Articles were published between 2014 and 2020 with 59.4% of the articles published between 2018 and 2020, demonstrating a substantial increase of empirical-based research published in the *ISCJ* in recent years. Specifically, the proportion of original research articles (compared with the other types of manuscripts published in *ISCJ*) within each volume increased, starting with 15.2% of articles in Volume 1, 24.0% in Volume 2, 25.5% in Volume 3, 27.3% in Volume 4, 53.1% in Volume 5, 47.3% in Volume 6, and 58.1% in Volume 7.

Characteristics of Empirical Studies

Descriptive statistics for study characteristics are reported in Table 1. This information includes participant demographics (i.e., participant type, gender, race, and country of the sporting context), sample size, coaching experience (i.e., reported inclusion criteria for coaching experience and coaching experience of the study sample), and the sporting context (i.e., level of competition and sport type).

Participant Demographics

From the 101 original research manuscripts, a total of 24,991 participants were sampled. Most participants were coaches (78.3%; e.g., Rathwell et al., 2014), followed by athletes (17.8%; e.g., Rottensteiner et al., 2015), other sport professionals (5.7%; e.g., administrators, Vinson et al., 2016), and non-sport-related adults (3.3%; e.g., general population; Al-Emadi et al., 2018). Male participants were most commonly assessed across studies (63.2%). More specifically, males accounted for 64.3% of coaches, 57.2% of athletes, 43.2% of other sport professionals, and 49.6% of non-sport-related adults. Four studies examined female-only samples (e.g., Knust & Fisher, 2015) in comparison with 20 studies examining male-only samples (e.g., Urquhart et al., 2020). The studies containing female-only samples investigated the experiences of female coaches and athletes, whereas male-only samples were used to investigate coaches in general. There were no studies that examined nonbinary, gender-fluid, two-spirit, or transgender individuals. Race was rarely reported within participant demographics

Table 1 Summary of Study Characteristics

Characteristic	*n*	Percentage of total sample
Number of participants		
≤10	29	28.71
Qualitative	26	25.74
Quantitative	0	0
Mixed methods	3	2.97
11–20	25	24.75
Qualitative	21	20.79
Quantitative	2	1.98
Mixed methods	2	1.98
≥21	42	41.58
Qualitative	14	13.86
Quantitative	16	15.84
Mixed methods	12	11.88
Team-based data, individual participants not reported	2	1.98
Qualitative	2	1.98
Quantitative	0	0.00
Mixed methods	0	0.00
Review	3	2.97
Gender		
Coach	9,279	63.16
Male	5,970	40.64
Female	3,066	20.87
Participant did not report	154	1.05
Not reported in article	89	0.60
Athlete	4,455	30.32
Male	2,548	17.34
Female	1,850	12.59
Participant did not report	13	0.08
Not reported in article	44	0.30
Other sport professional (e.g., administrator) gender	134	0.91
Male	58	0.39
Female	39	0.27
Not reported in article	37	0.25
Nonsport adults	823	5.60
Male	408	2.78
Female	413	2.81
Participant did not report	2	0.01
Sport		
Alpine skiing	1	0.99
Basketball	4	3.96
Canoe slalom	1	0.99
Curling	1	0.99
Field hockey	1	0.99
Football	3	2.97
Gaelic football	1	0.99
Golf	3	2.97
Ice hockey	1	0.99
Lacrosse	1	0.99
Rugby	3	2.97
Soccer	13	12.87
Surfing	1	0.99
Swimming	4	3.96

(continued)

Table 1 *(continued)*

Characteristic	*n*	Percentage of total sample
Tennis	2	1.98
Track and field	3	2.97
Triathlon	1	0.99
Wheelchair curling	1	0.99
Wrestling	1	0.99
Multiple sports	42	41.58
Nonsport sample	1	0.99
Not reported	8	7.92
Not applicable (e.g., review and academic setting)	4	2.96
Level		
Participation	16	15.84
Youth	10	9.90
Adult	5	4.95
Youth and adult	1	0.99
Unspecified	0	0.00
Performance	50	49.50
Youth	10	9.90
Adult	32	31.68
Youth and adult	6	5.94
Unspecified	2	1.98
Participation and performance	17	16.83
Youth	5	4.95
Adult	3	2.97
Youth and adult	8	7.92
Unspecified	1	0.99
Participation and performance youth, performance adult	1	0.99
Participation youth, performance adult	1	0.99
Not reported level, youth	2	1.98
Not reported level or age group	8	7.98
Not applicable (e.g., review, nonsport sample)	6	5.94
Race and/or ethnicity		
White	3	2.97
Multi	10	9.90
Not reported	88	87.13
Coaching experience criteria in years (or current professional role)		
Yes	24	23.76
General or unspecified coaching/profession requirement	6	5.94
Sport-specific coaching requirement	1	0.99
Current level, not sport-specific requirement	9	8.91
Current level and sport-specific requirement	5	4.95
Current team/athlete coaching requirement	3	2.97
No	12	11.88
Not specified	61	60.40
Not applicable (e.g., review)	7	6.93
Coaching experience in years (or current professional role)		
Yes	74	73.27
General or unspecified coaching/profession	36	35.64
Sport-specific coaching	12	11.88
Current level, not sport specific	8	7.92
Current level and sport specific	7	6.93
Current team/athlete coaching	11	10.89

Table 1 *(continued)*

Demographic	*n*	Percentage of total sample
Not specified	20	19.80
Not applicable (e.g., review)	7	6.93
Sport country[a]		
Africa	2	1.69
South Africa	1	0.85
Swaziland	1	0.85
Asia	8	6.78
Asia—unspecified	1	0.85
China/Hong Kong	2	1.69
Israel	1	0.85
Philippines	1	0.85
Qatar	1	0.85
Singapore	2	1.69
Europe	54	45.76
Belgium	1	0.85
Europe—unspecified	1	0.85
Finland	2	1.69
France	4	3.39
Germany	2	1.69
Italy	1	0.85
The Netherlands	1	0.85
Norway	4	3.39
Portugal	4	3.39
Scandinavia—unspecified	1	0.85
Serbia	1	0.85
Spain	1	0.85
Sweden	2	1.69
Switzerland	1	0.85
United Kingdom	28	23.73
Oceania	7	5.93
Australia	4	3.39
Fiji	1	0.85
New Zealand	2	1.69
North America	48	40.68
Canada	29	24.58
North America—unspecified	1	0.85
United States	18	15.25
South America	2	1.69
Brazil	1	0.85
South America—unspecified	1	0.85
Not reported	4	3.39

[a]The frequencies are counted based on the number of studies in which a country was examined.

with 87.1% of articles reporting no information on the race of participants. However, the country where the sample was drawn from was commonly reported with nearly 90% of participants coming from either European (45.8%; e.g., Chroni et al., 2019) or North American countries (40.7%; e.g., Urquhart et al., 2020). The most represented countries by number of publications in Europe were the United Kingdom (23.7%; e.g., Adams et al., 2016), France (e.g., Garner & Hill, 2017), Norway (e.g., Bentzen et al., 2017), and Portugal (e.g., Santos et al., 2017), each of which were represented in 3.4% of all articles. In North America, Canada was represented 24.6% (e.g., Falcão et al., 2017) and the United States 15.3% of the time (e.g., Knust & Fisher, 2015).

Sample Size

In regard to the number of participants per manuscript, 28.7% had 10 or fewer participants (qualitative = 25.7%, e.g., Kerr et al., 2020; mixed methods = 3.0%, e.g., Prophet et al., 2017), 24.8% had

Table 2 Summary of Study Topics

Topic	Number of studies	Percentage of total sample
Coach development	41	34.75
Coach behaviors	35	29.66
Coach knowledge	9	7.63
Outcomes of coaching	9	7.63
Coach relationships	8	6.78
Coaching philosophy	5	4.24
Coach burnout/well-being	4	3.39
Coach role	4	3.39
Coach characteristics	3	2.54

Note. The frequencies of the topics are counted per time mentioned.

11–20 participants (qualitative = 20.8%, e.g., Blackett et al., 2018; quantitative = 2.0%, e.g., Kramers et al., 2020; and mixed methods = 2.0%, e.g., Willmott & Collins, 2017), 41.6% had 21 or more participants (qualitative = 13.9%, e.g., Camiré, 2015; quantitative = 15.8%, e.g., Newland et al., 2019; and mixed methods = 11.9%, e.g., North et al., 2020), and approximately 5.0% did not report the number of individual participants (e.g., provided team-level data, review).

Coaching Experience

Inclusion criteria regarding participants' coaching experience varied with 3.0% of studies requiring experience with a current team or athlete (e.g., head coaches of current team for 5+ years; Westfall, 2020), 5.0% requiring sport- and level-specific experience (e.g., coaches at a soccer academy for 3+ years; Price et al., 2020), 8.9% requiring only level-specific experience (e.g., national/international-level coaches; Szedlak et al., 2020), 1.0% requiring only sport-specific experience (e.g., surfing coaches; Correia & Bertram, 2018), and 5.9% requiring general or unspecified amount of coaching experience (Camiré, 2015). The remaining publications included studies that did not require coaching experience (11.9%; e.g., Ryom et al., 2020), that did not mention inclusion criteria (60.4%; e.g., Sleeman & Ronkainen, 2020), or in which coaching experience was not applicable (6.9%; e.g., athlete-only sample, Spink & Fesser, 2018).

It was common for studies to report the sample's coaching experience (73.3% of all studies). Specifically, 10.9% of studies reported experience with a current team or athlete (e.g., coach–athlete dyad experience, Mueller et al., 2018), 6.9% reported sport- and level-specific experience (e.g., Olympic swimming, Sarkar & Hilton, 2020), 7.9% reported only level-specific experience (e.g., high school coaching, Camiré et al., 2018), 11.9% reported only sport-specific experience (e.g., golf, Paquette et al., 2019), 35.6% reported general or unspecified coaching experience (e.g., McNeill et al., 2018), 19.8% did not report coaching experience (Vealey et al., 2020), and coaching experience was not applicable to 6.9% of studies (e.g., review, athlete-only sample; e.g., Olusoga et al., 2019).

Sporting Context

The context examined was primarily performance-only sport (49.5%; Forlenza et al., 2018), followed by a combination of participation and performance sport contexts (16.8%; Huysmans et al., 2018), participation only (15.8%; e.g., Falcão et al., 2017), studies that did not report the level of competition (8.0%; Driska, 2018), and study designs that were not applicable (5.9%; Al-Emadi et al., 2018). The most targeted age groups were performance adults (31.7%; Prophet et al., 2017), performance youth (9.9%; Newland et al., 2019), and participation youth (9.9%; Søvik et al., 2017). Regarding sport type, 41.6% of studies examined multiple sports (e.g., Willmott & Collins, 2017). Of the single-sport studies, the most examined sports were soccer (12.9%; e.g., Santos et al., 2017), basketball (4.0%; e.g., Koh et al., 2015), and swimming (4.0%; e.g., Callary et al., 2017). In addition, two studies examined parasport (2.0%; e.g., Duarte et al., 2020). Eight studies (7.9%) did not specify the sport context under examination (e.g., Mallett & Coulter, 2016).

Research Design

The results for the research design used are reported in Table 3. The studies are further displayed in Table 4 to highlight the frequencies in which studies reported and did not report the paradigm for each research methodology over the years.

Regarding methodology, most studies were qualitative (62.4%; e.g., Collins & Durand-Bush, 2016), followed by quantitative (17.8%; e.g., Rylander, 2016) and mixed methods (16.8%; e.g., Lara-Bercial & Mallett, 2016). The most common qualitative research designs were phenomenological (34.7%; e.g., Huysmans et al., 2018) and case studies (16.8%; e.g., Price et al., 2020). For quantitative research, the most common design was nonexperimental (14.9%; e.g., Vealey et al., 2020). For mixed methods designs, the most common were convergent (8.9%; e.g., Gurgis et al., 2020) and case study (5.9%; e.g., Mueller et al., 2018).

In regard to data collection, the most common study designs were cross-sectional qualitative studies (40.6%; e.g., Santos et al., 2017), longitudinal qualitative studies (16.8%; e.g., Harvey et al., 2015), cross-sectional mixed methods (11.9%; e.g., Stoszkowski & Collins, 2018), and cross-sectional quantitative studies (10.9%; e.g., Rodgers et al., 2015). It was common for studies to use multiple methods (i.e., mixed methods, multiple quantitative methods, multiple qualitative methods) with 41 studies (40.6%) using multiple methods (e.g., Paquette & Trudel, 2018). Studies that used one data collection method primarily used one-on-one interviews (31.7%; e.g., Rathwell & Young, 2018) or questionnaires (20.8%; e.g., Hall et al., 2019).

A majority of studies did not report the research paradigm (56.4%; e.g., Norman, 2015). However, as the journal evolved, it was more common for studies to report the research paradigm with the numbers as follows: 0 studies in Volume 1 reporting a paradigm, 8.3% in Volume 2, 41.7% in Volume 3, 33.3% in Volume 4,

Table 3 Summary of Study Methods

Method	Number of studies	Percentage of total sample
Design		
Qualitative	63	62.38
Case study	17	16.83
Document analysis	1	0.99
Ethnography	3	2.97
Grounded theory	3	2.97
Narrative	4	3.96
Phenomenology	35	34.65
Quantitative	18	17.82
Experiment—randomized conditions	1	0.99
Experiment—nonrandomized conditions	1	0.99
Preexperiment	1	0.99
Nonexperiment	15	14.85
Mixed methods	17	16.83
Convergent	9	8.91
Explanatory	2	1.98
Case study	6	5.94
Review	3	2.97
Research paradigm		
Reported	44	43.56
Not reported	57	56.44
Methodology		
Qualitative	63	62.38
Cross-sectional	41	40.59
Longitudinal	17	16.83
Cross-sectional and longitudinal	5	4.95
Quantitative	18	17.82
Cross-sectional	11	10.89
Longitudinal	6	5.94
Cross-sectional and longitudinal	1	0.99
Mixed methods	17	16.83
Cross-sectional	12	11.88
Longitudinal	3	2.97
Qualitative longitudinal, quantitative cross-sectional	1	1.98
Qualitative cross-sectional, quantitative longitudinal	1	1.98
Review	3	2.97
Data		
One-on-one interviews	31	30.69
Focus group interviews	2	1.98
Document analysis	1	0.99
Observation	0	0.00
Questionnaire	21	20.79
Journal/blog	1	0.99
Articles for review	3	2.97
Multiple methods	42	41.58

Table 4 Paradigm by Methodology and Volume

	Qualitative		Mixed methods		Review		Total			
Volume	PR (%)	NPR (%)	PR (%)	NPR (%)	PR (%)	NPR (%)	PR (%)	NPR (%)	PR (%)	NPR (%)
1	0 (0.0%)	4 (100.0%)	—	—	0 (0.0%)	1 (100.0%)	—	—	0 (0.0%)	5 (100.0%)
2	1 (14.3%)	6 (85.7%)	0 (0.0%)	4 (100.0%)	0 (0.0%)	1 (100.0%)	—	—	1 (8.3%)	11 (91.7%)
3	3 (42.9%)	4 (57.1%)	0 (0.0%)	3 (100.0%)	2 (100.0%)	0 (0.0%)	—	—	5 (41.7%)	7 (58.3%)
4	4 (57.1%)	3 (42.9%)	0 (0.0%)	1 (100.0%)	0 (0.0%)	4 (100.0%)	—	—	4 (33.3%)	8 (66.7%)
5	6 (54.5%)	5 (45.5%)	0 (0.0%)	4 (100.0%)	1 (50.0%)	1 (50.0%)	—	—	7 (41.2%)	10 (58.8%)
6	7 (77.8%)	2 (22.2%)	0 (0.0%)	3 (100.0%)	2 (50.0%)	2 (50.0%)	1 (50.0%)	1 (50.0%)	10 (55.6%)	8 (44.4%)
7	14 (77.8%)	4 (22.2%)	1 (33.3%)	2 (66.7%)	2 (33.3%)	1 (66.7%)	0 (0.0%)	1 (100.0%)	17 (68.0%)	8 (32.0%)
Total	35 (55.6%)	28 (45.2%)	2 (5.6%)	17 (94.4%)	7 (41.2%)	10 (58.8%)	1 (33.3%)	2 (66.7%)	44 (43.6%)	57 (56.4%)

Note. PR = research paradigm was reported in the article; NPR = research paradigm was not reported in the article.

41.2% in Volume 5, 55.5% in Volume 6, and 68.0% in Volume 7. The research paradigm guiding the study methodology was also more commonly reported in qualitative studies (55.6%), followed by mixed methods (41.2%) and quantitative studies (5.6%).

Coaching Area of Focus

Descriptive statistics for the coaching area of focus are reported in Table 2. Given that some studies examined multiple topics, the frequency of topics addressed was determined based on the total number of times each topic was examined across studies. The most commonly investigated topics were coach development (34.8%; e.g., coach education programs, Santos et al., 2019; mentorship, Grant et al., 2020) and coach behaviors (29.7%; e.g., athletes' preferred coach behaviors, Norman, 2015; turning a team into a winning program, Westfall, 2020), followed by coach knowledge (7.6%; e.g., sport-related concussion knowledge, Kerr et al., 2020; knowledge of athletes' traits, Tedesqui & Young, 2020), outcomes of coaching (7.6%; e.g., athletes' self-efficacy, McMullen et al., 2020; athlete empowerment, Solstad et al., 2018), coach relationships (6.8%; e.g., relationships with assistant coaches, Rathwell et al., 2014; coach–athlete relationships, Callary et al., 2018), coaching philosophy (4.2%; Sleeman & Ronkainen, 2020), coach role (3.4%; e.g., experiences as a teacher coach, Camiré, 2015; role of high school coaches, Barnson, 2014), coach burnout/well-being (3.4%; e.g., Bentzen et al., 2017), and coach characteristics (2.5%; e.g., resilience, Sarkar & Hilton, 2020; successful coaches' personalities, Mallett & Coulter, 2016).

Conclusions and Implications for Stakeholders

Question 1: Size and Scope

Relative to the number of other types of papers published in the *ISCJ*, there was an increase over time in the number of original research studies published across this review period. In fact, Volumes 5–7 averaged over 50% of the content devoted to original research (i.e., 53.1% in Volume 5, 47.3% in Volume 6, and 58.1% in Volume 7). Given the increased focus on empirical-based research in recent years, researchers conducting empirical-based research on coaching topics can utilize the *ISCJ* as an outlet for publication. Regarding the scope of topics addressed in the *ISCJ*, coaching development and coaching behaviors were the most investigated topics. With the continued worldwide professionalization of sport coaching, it is anticipated that there will be a steady production of research focused on coaching behaviors and coaching development. This type of research by *ISCJ* authors is needed to meet the demand from the sport governing bodies and coach educators who design and deliver coach education.

Although research on coaching behaviors and coaching development will likely continue to account for a large amount of published coaching research, results of the present scoping review showed a growing interest in other areas of coaching science, such as outcomes of coaching, coaching knowledge, and coach relationships. One area that, perhaps surprisingly, has not been well represented in the research articles published in the *ISCJ* is coach well-being (burnout and mental health). Currently, issues of athlete mental health are receiving large amounts of attention by both researchers and practitioners. It is well documented that high-performance coaches must also cope with significant pressures and demands (e.g., Carson et al., 2018). *ISCJ* is an ideal outlet for researchers to share study findings on coach mental health.

Question 2: Coaching Populations and Perspectives

Results showed a need for authors submitting to *ISCJ* to target new populations for coaching research in an attempt to diversify the scope of what is known about coaching research. In regard to sport type, the findings indicated a scarcity of research examining parasport coaching contexts. In recent years, there has been a call from parasport coaching science researchers to provide more information on how to acquire and effectively implement disability-specific coaching information (e.g., Fairhurst et al., 2017; Lepage et al., 2020). In regard to gender, findings from the present study highlight the need for research on coaches who identify as female or gender minorities (i.e., nonbinary, transgender, gender fluid, and two spirit). Typically, male-only samples were used to generalize to all coaches, whereas female-only samples were designed specifically to examine female coaches' unique experiences. As a result, it appears that the male coach experience dominates coaching science despite research supporting that female coaches and gender minorities have unique coaching experiences (Kavoura & Kokkonen, 2021; LaVoi & Dutove, 2012). Therefore, we challenge researchers to ensure that their sample is representative of the coaching population of interest, investigate coaches who identify as female and gender minorities, and explore how one's gender may intersect with other personal characteristics (e.g., race) in coaching contexts (Kavoura &

Kokkonen, 2021). These types of research findings will facilitate a better understanding of different types of coaches and also increase visibility and respect for all coaches. Regarding participant race, it is recommended that researchers seeking to publish in the *ISCJ* ensure that they are collecting and reporting data on participant race. In articles in which race is not reported, readers of *ISCJ* cannot determine whose experiences are being shared.

Researchers who publish in *ISCJ* should also report data pertaining to coaching experience. Given that situational factors, such as sport type and level of competition, impact coach behaviors and experiences (Smoll & Smith, 1989), it is critical that future studies published in *ISCJ* specify the level and sport that the coaching experience is referencing as well as share the inclusion criteria for coaching experience so readers can identify the coaching population of interest. This could also inform a coach of whether a study's findings can be appropriately applied to their own coaching context.

Question 3: Methodologies and Methods

Regarding data collection methods, qualitative methods were used most frequently (62.4%). This proportion of qualitative studies in *ISCJ* is larger than the portion of qualitative studies commonly seen in sport and exercise psychology journals (18.3%; McGannon et al., 2021). Findings from this scoping review demonstrate that the *ISCJ* is a prime outlet for publishing in-depth experiences of coaches that are provided in qualitative research. However, quantitative researchers should also be encouraged to publish their findings in the *ISCJ* as these types of studies help to answer different RQs.

To conclude, the present scoping review provides a summary highlighting the nature of the empirical research published from 2014 to 2020 in the *ISCJ*. Recommendations are suggested both to advance the scope of research published in the *ISCJ* as well as to increase stakeholder awareness of the profile of research historically published in the *ISCJ*. We believe this information will be helpful both for those who conduct coaching research and those who consume it while continuing to position the *ISCJ* as a leading outlet for high-impact coaching research.

Author Biographies

Katherine E. Hirsch is a PhD candidate studying sport and exercise psychology in the Department of Kinesiology at the University of Windsor in Windsor, ON, Canada. Her research is largely focused on creating healthy and positive sport experiences for team sport athletes. She conducts research that examines the role of athlete leaders and coaches in promoting positive group dynamics. This research explores leader fairness constructs and outcomes of fair treatment and unfair treatment, including group cohesion and athlete satisfaction. She also investigates body image and disordered eating in female athletes. Collectively, her research strives to foster safe sport environments so that athletes can focus on the benefits that sport participation has to offer.

Dr. Todd M. Loughead is co-director of the Sport Psychology and Physical Activity Research Collaborative at the University of Windsor. Dr. Loughead's research uses a group dynamics perspective to examine human behavior. Specifically, his interests are investigating athlete leadership and coaching and how these two sources of leadership impact team functioning. As well, he is interested in athletes and coaches mentoring their peers and its associated benefits. He is also interested in team cohesion and how this contributes to an enhanced team environment. His research also examines various aspects of team building interventions. Dr. Loughead consults with coaches, sport teams, and individual athletes, including local, provincial, Olympic, and professional teams/athletes. Dr. Loughead is a member of the Canadian Sport Psychology Association, Association of Applied Sport Psychology, Canadian Society for Psychomotor Learning and Sport Psychology, and North American Society for the Psychology of Sport and Physical Activity. Outside of academia, he enjoys coaching hockey and soccer.

Dr. Gordon A. Bloom is a professor and director of the Sport Psychology Research Laboratory (https://www.mcgill.ca/sportpsych/) in the Department of Kinesiology and Physical Education at McGill University. Dr. Bloom has developed an internationally recognized research program related to the knowledge, strategies, and behaviors employed by coaches in terms of leadership practices, mentoring, and team building that are designed to develop successful and well-balanced athletes.

Dr. Wade D. Gilbert is a professor in the Department of Kinesiology at California State University—Fresno. He is author of the highly acclaimed book *Coaching Better Every Season* and editor emeritus of the *International Sport Coaching Journal*. Gilbert is a long-time advisor to the United States Olympic and Paralympic Committee Coach Education Department, the lead author of the *United States Olympic and Paralympic Committee Quality Coaching Framework*, and the primary coach education consultant for U.S. Football. Most recently, Gilbert served as the mental performance coach for the 2020 Tokyo Olympics medal winning Canadian women's softball team.

References

Adams, D., Cropley, B., & Mullen, R. (2016). Developing specialised youth soccer coaching qualifications: An exploratory study of course content and delivery mechanisms. *International Sport Coaching Journal, 3*(1), 31–45. https://doi.org/10.1123/iscj.2014-0148

Arksey, H., & O'Malley, L. (2005). Scoping studies: Towards a methodological framework. *International Journal of Social Research Methodology, 8*(1), 19–32. https://doi.org/10.1080/1364557032000119616

Al-Emadi, A. Theodorakis, N.D., Pastore, D., Sellami, A., & Diop, A. (2018). Attitudes toward the coaching profession: Evidence from a nation-wide study in Qatar. *International Sport Coaching Journal, 5*(1), 37–46. https://doi.org/10.1123/iscj.2017-0034

Barnson, S.C. (2014). The authentic coaching model: A grounded theory of coaching. *International Sport Coaching Journal, 1*(2), 61–74. https://doi.org/10.1123/iscj.2013-0021

Bentzen, M., Alexander, D., Bloom, G.A., & Kenttä, G. (2021). What do we know about research on parasport coaches? A scoping review. *Adapted Physical Activity Quarterly, 38*(1), 109–137. https://doi.org/10.1123/apaq.2019-0147

Bentzen, M., Lemyre, N., & Kenttä, G. (2017). A comparison of high-performance football coaches experiencing high versus low-burnout symptoms across a season of play: Quality of motivation and recovery matters. *International Sport Coaching Journal, 4*(2), 133–146. https://doi.org/10.1123/iscj.2016-0045

Blackett, A.D., Evans, A.B., & Piggott, D. (2018). "Active" and "passive" coach pathways: Elite athletes' entry routes into high-performance coaching roles. *International Sport Coaching Journal, 5*(3), 213–226. https://doi.org/10.1123/iscj.2017-0053

Callary, B., Rathwell, S., & Young, B.W. (2017). Alignment of Masters swim coaches' approaches with the andragogy in practice model. *International Sport Coaching Journal, 4*(2), 177–190. https://doi.org/10.1123/iscj.2016-0102

Callary, B., Rathwell, S., & Young, B.W. (2018). Coach education and learning sources for coaches of Masters swimmers. *International*

Sport Coaching Journal, 5(1), 47–59. https://doi.org/10.1123/iscj.2017-0056

Camiré, M. (2015). Examining high school teacher-coaches' perspective on relationship building with student-athletes. *International Sport Coaching Journal, 2*(2), 125–136. https://doi.org/10.1123/iscj.2014-0098

Camiré, M., Kendellen, K., Rathwell, S., & Charbonneau, E.F. (2018). Evaluation of the pilot implementation of the coaching for life skills program. *International Sport Coaching Journal, 5*(3), 227–236. https://doi.org/10.1123/iscj.2018-0006

Campbell, S., Mills, J., Atkinson, O., Gearity, B., Kuklick, C., & McCullick, B. (2022). Engaging in paradigmatic dialogue: A bibliometric analysis of coaching scholarship from 1970–2020. *International Sport Coaching Journal*. Advance online publication. https://doi.org/10.1123/iscj.2021-0045

Carson, F., Walsh, J., Main, L.C., & Kremer, P. (2018). High performance coaches' mental health and wellbeing: Applying the areas of work life model. *International Sport Coaching Journal, 5*(3), 293–300. https://doi.org/10.1123/iscj.2017-0078

Chroni, S.A., Abrahamsen, F., Skille, E., & Hemmestad, L. (2019). Sport federation officials' practices and national team coaches' stress. *International Sport Coaching Journal, 6*(1), 63–73. https://doi.org/10.1123/iscj.2017-0086

Collins, J., & Durand-Bush, N. (2016). Coaching strategies to optimize team functioning in high performance curling. *International Sport Coaching Journal, 3*(3), 240–256. https://doi.org/10.1123/iscj.2016-0073

Colquhoun, H.L., Levac, D., O'Brien, K.K., Straus, S., Tricco, A.C., Perrier, L., Kastner, M., & Moher, D. (2014). Scoping reviews: Time for clarity in definition, methods, and reporting. *Journal of Clinical Epidemiology, 67*(12), 1291–1294. https://doi.org/10.1016/j.jclinepi.2014.03.013

Correia, M.C.E.E., & Bertram, R. (2018). The surfing coaching: Sources of knowledge acquisition. *International Sport Coaching Journal, 5*(1), 14–23. https://doi.org /10.1123/iscj.2017-0083

Creswell, J.W., & Creswell, J.D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). SAGE Publications.

Davis, K., Drey, N., & Gould, D. (2009). What are scoping studies? A review of the nursing literature. *International Journal of Nursing Studies, 46*(10), 1386–1400. https://doi.org/10.1016/j.ijnurstu.2009.02.010

Driska, A.P. (2018). A formative, utilization-focused evaluation of USA swimming's nationwide online coach education program. *International Sport Coaching Journal, 5*(3), 261–272. https://doi.org/10.1123/iscj.2017-0096

Duarte, T., Culver, D.M., & Paquette, K. (2020). Mapping Canadian wheelchair curling coaches' development: A landscape metaphor for a systems approach. *International Sport Coaching Journal, 7*(2), 117–126. https://doi.org/10.1123/iscj.2018-0099

Fairhurst, K.E., Bloom, G.A., & Harvey, W.J. (2017). The learning and mentoring experiences of Paralympic coaches. *Disability and Health Journal, 10*(2), 240–246. https://doi.org/10.1016/j.dhjo.2016.10.007

Falcão, W.R., Bloom, G.A., & Bennie, A. (2017). Coaches' experiences learning and applying the content of a humanistic coaching workshop in youth sport settings. *International Sport Coaching Journal, 4*(3), 279–290. https://doi.org/10.1123/iscj.2017-0027

Forlenza, S.T., Pierce, S., Vealey, R.S., & Mackersie, J. (2018). Coaching behaviors that enhance confidence in athletes and teams. *International Sport Coaching Journal, 5*(3), 205–212. https://doi.org/10.1123/iscj.2017-0040

Garner, P., & Hill, D.M. (2017). Cultivating a community of practice to enable coach development in alpine ski coaches. *International Sport Coaching Journal, 4*(1), 63–75. https://doi.org/10.1123/iscj.2016-0076

Gilbert, W.D., & Trudel, P. (2004). Analysis of coaching science research published from 1970–2001. *Research Quarterly for Exercise and Sport, 75*(4), 388–399. https://doi.org/10.1080/02701367.2004.10609172

Goldkuhl, G. (2012). Pragmatism vs interpretivism in qualitative information systems research. *European Journal of Information Systems, 21*(2), 135–146. https://doi.org/10.1057/ejis.2011.54

Grant, M.A., Bloom, G.A., & Lefebvre, J.S. (2020). Lessons learned: Coaches' perceptions of a pilot e-mentoring programme. *International Sport Coaching Journal, 7*(1), 22–30. https://doi.org/10.1123/iscj.2018-0058

Gurgis, J.J., Kerr, G.A., & Stirling, A.E. (2020). Investigating the barriers and facilitators to achieving coaching certification. *International Sport Coaching Journal, 7*(2), 189–199. https://doi.org/10.1123/iscj.2019-0043

Hall, A.J., Jones, L., & Martindale, R.J. (2019). The talent development environment questionnaire as a tool to drive excellence in elite sport environments. *International Sport Coaching Journal, 6*(2), 187–198. https://doi.org/10.1123/iscj.2018-0041

Harvey, S., Lyle, J.W.B., & Muir, B. (2015). Naturalistic decision making in high performance team sport coaching. *International Sport Coaching Journal, 2*(2), 152–168. https://doi.org/10.1123/iscj.2014-0118

Huysmans, Z., Clement, D., Hilliard, R., & Hansell, A. (2018). Exploring the coach's role in youth life skills development in Southern Africa. *International Sport Coaching Journal, 5*(3), 237–250. https://doi.org/10.1123/iscj.2017-0097

Kavoura, A., & Kokkonen, M. (2021). What do we know about the sporting experiences of gender and sexual minority athletes and coaches? A scoping review. *International Review of Sport and Exercise Psychology, 14*(1), 1–27. https://doi.org/10.1080/1750984X.2020.1723123

Keown, K., Van Eerd, D., & Irvin, E. (2008). Stakeholder engagement opportunities in systematic reviews: Knowledge transfer for policy and practice. *Journal of Continuing Education in the Health Professions, 28*(2), 67–72. https://doi.org/10.1002/chp.159

Kerr, S.H., Vargas, T.M., Nakajima, M., & Becker, J. (2020). Examining youth American football coaches' knowledge of, and attitudes toward, sport concussions. *International Sport Coaching Journal, 7*(1), 31–38. https://doi.org/10.1123/iscj.2018-0030

Knust, S.K., & Fisher, L.A. (2015). NCAA division I female head coaches' experiences of exemplary care within coaching. *International Sport Coaching Journal, 2*(2), 94–107. https://doi.org/10.1123/iscj.2013-0045

Koh, K.T., Mallett, C.J., Camiré, M., & Wang, C.K.J. (2015). A guided reflection intervention for high performance basketball coaches. *International Sport Coaching Journal, 2*(3), 273–284. https://doi.org/10.1123/iscj.2014-0135

Kowalski, K.C., McHugh, T.L.F., Ferguson, L., & Sabiston, C. (2018). *Research methods in kinesiology*. Oxford University Press.

Kramers, S., Camiré, M., & Bean, C. (2020). Examining program quality in a national junior golf development program. *International Sport Coaching Journal, 7*(2), 139–150. https://doi.org/10.1123/iscj.2019-0025

Lara-Bercial, S., & Mallett, C.J. (2016). The practices and developmental pathways of professional and Olympic serial winning coaches. *International Sport Coaching Journal, 3*(3), 221–239. https://doi.org/10.1123/iscj.2016-0083

LaVoi, N.M., & Dutove, J.K. (2012). Barriers and supports for female coaches: An ecological model. *Sports Coaching Review, 1*(1), 17–37. https://doi.org/10.1080/21640629.2012.695891

Lepage, P., Bloom, G.A., & Falcão, W.R. (2020). Development and acquisition of knowledge of youth parasport coaches. *Adapted*

Physical Activity Quarterly, 37(1), 72–89. https://doi.org/10.1123/apaq.2019-0017

Levac, D., Colquhoun, H., & O'Brien, K.K. (2010). Scoping studies: Advancing the methodology. *Implementation Science, 5*(1), 69. https://doi.org/10.1186/1748-5908-5-69

Lyle, J. (2002). *Sports coaching concepts: A framework for coaches' behaviour*. Routledge.

Mallett, C.J., & Coulter, T.J. (2016). The anatomy of a successful Olympic coach: Actor, agent, and author. *International Sport Coaching Journal, 3*(2), 113–127. https://doi.org/10.1123/iscj.2015-0069

McGannon, K.R., Smith, B., Kendellen, K., & Gonsalves, C.A. (2021). Qualitative research in six sport and exercise psychology journals between 2010 and 2017: An updated and expanded review of trends and interpretations. *International Journal of Sport and Exercise Psychology, 19*(3), 359–379. https://doi.org/10.1080/1612197X.2019.1655779

McMullen, B., Henderson, H.L., Ziegenfuss, D.H., & Newton, M. (2020). Coaching behaviors as sources of relation-inferred self-efficacy (RISE) in American male high school athletes. *International Sport Coaching Journal, 7*(1), 52–60. https://doi.org/10.1123/iscj.2018-0089

McNeill, K., Durand-Bush, N., & Lemyre, P.N. (2018). Thriving, depleted, and at-risk Canadian coaches: Profiles of psychological functioning linked to self-regulation and stress. *International Sport Coaching Journal, 5*(2), 145–155. https://doi.org/10.1123/iscj.2017-0042

Mueller, S., Ruiz, M.C., & Chroni, S.A. (2018). Coaches' perceptions of athletes' psychobiosocial states: The case of three tennis coach-athlete dyads. *International Sport Coaching Journal, 5*(2), 156–168. https://doi.org/10.1123/iscj.2017-0045

Newland, A., Newton, M., Moore, E.W.G., & Legg, W.E. (2019). Transformational leadership and positive youth development in basketball. *International Sport Coaching Journal, 6*(1), 30–41. https://doi.org/10.1123/iscj.2018-0002

Norman, L. (2015). The coaching needs of high performance female athletes within the coach-athlete dyad. *International Sport Coaching Journal, 2*(1), 15–28. https://doi.org/10.1123/iscj.2013-0037

North, J., Piggott, D., Rankin-Wright, A., & Ashford, M. (2020). An empirical examination of UK coaches' issues and problems, and their support and advice networks. *International Sport Coaching Journal, 7*(3), 283–294. https://doi.org/10.1123/iscj.2019-0049

Olusoga, P., Bentzen, M., & Kentta, G. (2019). Coach burnout: A scoping review. *International Sport Coaching Journal, 6*(1), 42–62. https://doi.org/10.1123/iscj.2017-0094

Onwuegbuzie, A.J., & Leech, N.L. (2005). On becoming a pragmatic researcher: The importance of combining quantitative and qualitative research methodologies. *Journal of Social Research Methodology, 8*(5), 375–387. https://doi.org/10.1080/13645570500402447

Paquette, K., & Trudel, P. (2018). The evolution and learner-centered status of a coach education program. *International Sport Coaching Journal, 5*(1), 24–36. https://doi.org/10.1123/iscj.2017-0038

Paquette, K., Trudel, P., Duarte, T., & Cundari, G. (2019). Participating in a learner-centered coach education program: Composite vignettes of coaches' and coach educators' experiences. *International Sport Coaching Journal, 6*(3), 274–284. https://doi.org/10.1123/iscj.2018-0085

Price, A., Collins, D., Stoszkowski, J., & Pill, S. (2020). Strategic understandings: An investigation of professional academy youth soccer coaches' interpretation, knowledge, and application of game strategies. *International Sport Coaching Journal, 7*(2), 151–162. https://doi.org/10.1123/iscj.2019-0022

Prophet, T., Singer, J., Martin, I., & Coulter, T.J. (2017). Getting to know your athletes: Strengthening the coach-athlete dyad using an integrative personality framework. *International Sport Coaching Journal, 4*(3), 291–304. https://doi.org/10.1123/iscj.2017-0009

Rathwell, S., Bloom, G.A., & Loughead, T.M. (2014). Head coaches' perceptions on the roles, selection, and development of the assistant coach. *International Sport Coaching Journal, 1*(1), 5–16. https://doi.org/10.1123/iscj.2013-0008

Rathwell, S., & Young, B.W. (2018). Coaches' perspectives on personal and psychosocial development in university sport. *International Sport Coaching Journal, 5*(1), 1–13. https://doi.org/10.1123/iscj.2017-0018

Rodgers, W.M., Knight, C.J., Selzler, A.M., Reade, I.L., & Ryan, G.F. (2015). Influence of performance enhancement and administrative tasks on coaches' stress and intentions to continue. *International Sport Coaching Journal, 2*(3), 261–272. https://doi.org/10.1123/iscj.2014-0112

Rottensteiner, C., Konttinen, N., & Laakso, L. (2015). Sustained participation in youth sports related to coach-athlete relationship and coach-created motivational climate. *International Sport Coaching Journal, 2*(1), 29–38. https://doi.org/10.1123/iscj.2014-0060

Rylander, P. (2016). Coaches' bases of power and coaching effectiveness in team sports. *International Sport Coaching Journal, 3*(2), 128–144. https://doi.org/10.1123/iscj.2015-0046

Ryom, K., Ravn, M., Düring, R., & Henriksen, K. (2020). Talent development in football—A holistic perspective: The case of KRC Genk. *International Sport Coaching Journal, 7*(3), 360–369. https://doi.org/10.1123/iscj.2019-0045

Sabiston, C.M., Vani, M., de Jonge, M., & Nesbitt, A. (2022). Scoping reviews and rapid reviews. *International Review of Sport and Exercise Psychology, 15*(1), 91–119. https://doi.org/10.1080/1750984X.2021.1964095

Santos, F., Camiré, M., MacDonald, D.J., Campos, H., Conceição, M., & Silva, A. (2019). Process and outcome evaluation of a positive youth development-focused online coach education course. *International Sport Coaching Journal, 6*(1), 1–12. https://doi.org/10.1123/iscj.2017-0101

Santos, F., Corte-Real, N., Regueiras, L., Strachan, L., Dias, C., & Fonseca, A. (2017). Portuguese football coaches' role in facilitating positive development within high performance contexts: Is positive development relevant? *International Sport Coaching Journal, 4*(2), 147–161. https://doi.org/10.1123/iscj.2016-0009

Sarkar, M., & Hilton, N.K. (2020). Psychological resilience in Olympic medal–winning coaches: A longitudinal qualitative study. *International Sport Coaching Journal, 7*(2), 209–219. https://doi.org/10.1123/iscj.2019-0075

Sleeman, E.J., & Ronkainen, N.J. (2020). The professionalization of women's football in England and its impact on coaches' philosophy of practice. *International Sport Coaching Journal, 7*(3), 326–334. https://doi.org/10.1123/iscj.2019-0018

Smoll, F.L., & Smith, R.E. (1989). Leadership behaviors in sport: A theoretical model and research paradigm. *Journal of Applied Social Psychology, 19*(18), 1522–1551. https://doi.org/10.1111/j.1559-1816.1989.tb01462.x

Solstad, B.E., Ivarsson, A., Haug, E.M., & Ommundsen, Y. (2018). Youth sport coaches' well-being across the season: The psychological costs and benefits of giving empowering and disempowering sports coaching to athletes. *International Sport Coaching Journal, 5*(2), 124–135. https://doi.org/10.1123/iscj.2017-0026

Søvik, M.L., Larsen, T., Tjomsland, H.E., Samdal, O., & Wold, B. (2017). Barriers in implementing coach education in grassroots youth football in Norway. *International Sport Coaching Journal, 4*(2), 162–176. https://doi.org/10.1123/iscj.2016-0106

Spink, K.S., & Fesser, K. (2018). Correcting player mistakes: Effects of coach and player social influence on increasing player intention to intervene with teammates. *International Sport Coaching Journal, 5*(2), 116–123. https://doi.org/10.1123/iscj.2017-0054

Stoszkowski, J., & Collins, D. (2018). The agony and the ecstasy: Student-coaches' perceptions of a heutagogical approach to coach development. *International Sport Coaching Journal, 5*(2), 136–144. https://doi.org/10.1123/iscj.2017-0077

Szedlak, C., Smith, M.J., Callary, B., & Day, M.C. (2020). Examining how elite S&C coaches develop coaching practice using reflection stimulated by video vignettes. *International Sport Coaching Journal, 7*(3), 295–305. https://doi.org/10.1123/iscj.2019-0059

Tedesqui, R.A., & Young, B.W. (2020). How coaches see conscientiousness-related traits and their impact on athletes' training and expertise development. *International Sport Coaching Journal, 7*(2), 127–138. https://doi.org/10.1123/iscj.2018-0074

Urquhart, D.A., Bloom, G.A., & Loughead, T.M. (2020). The development, articulation, and implementation of a coaching vision of multiple championship-winning university ice hockey coaches. *International Sport Coaching Journal, 7*(3), 335–346. https://doi.org/10.1123/iscj.2019-0096

Vealey, R.S., Martin, E., Coppola, A., Ward, R.M., & Chamberlin, J. (2020). The slippery slope: Can motivation and perfectionism lead to burnout in coaches? *International Sport Coaching Journal, 7*(1), 1–10. https://doi.org/10.1123/iscj.2018-0043

Vinson, D., Christian, P., Jones, V., Williams, C., & Peters, D.M. (2016). Exploring how well UK coach education meets the needs of women sports coaches. *International Sport Coaching Journal, 3*(3), 287–302. https://doi.org/10.1123/iscj.2016-0004

Weaver, K. (2018). Pragmatic paradigm. In B.B. Frey (Ed.), *The SAGE encyclopedia of educational research, measurement, and evaluation* (pp. 1287–1288). Sage Publications.

Westfall, S. (2020). Worst to first: Turnaround leadership through the lens of successful high school football coaches. *International Sport Coaching Journal, 7*(2), 163–174. https://doi.org/10.1123/iscj.2019-0076

Willmott, T., & Collins, D. (2017). A retrospective analysis of trick progression in elite freeskiing and snowboarding. *International Sport Coaching Journal, 4*(1), 1–12. https://doi.org/10.1123/iscj.2016-0003