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Contemporary Hot Topics in Applied Sport Psychology: Past, Present, and Future

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The purpose of this study was to investigate the contemporary hot topics in applied sport psychology as a sub-discipline of the broader domain of sport and exercise psychology. Based on a constructivist methodology and a qualitatively driven mixed-method design, the present study analyzed applied sport psychology research topics by evaluating multiple sources of data in three phases representing past, present, and future perspectives. Phase one focused on the categorization of historically published topics through a content analysis of exemplar texts. In phase two, journal content analyses were performed across a decade of published research. Finally, phase three consisted of survey-based research to investigate undergraduate and graduate students' perceptions of hot topics in the field of applied sport psychology. Generally, results showed leading themes were oriented toward applied sport psychology and social sport psychology where interventions, mental skills, and motivation were among the most salient topics being published. Results of the journal content analyses, as compared to the textbook analysis, revealed 13 emergent categories of contemporary topics (e.g., consulting and consultant effectiveness, family and relationships in sport, sport transition). Results of the student survey illustrated that while students' favorite topics emulate many of the popular research topics such as motivation and peak performance, they are interested in learning more about topics that were not as common in the published literature such as mental toughness and mindfulness. Future considerations for applied sport psychology research are discussed and emphasize greater attention should be placed on research for mindfulness, cultural diversity and inclusion, and virtual technologies.

Keywords: trends in applied sport psychology, evolution of applied sport psychology, temporal triangulation, mixed-method research design, qualitative content analyses, student perspectives

Sport psychology research has steadily evolved in scope and breadth throughout the last century (Vealey, 2006; Weiss & Gill, 2005). A potential consequence of our advancement as a field is perhaps best exemplified by applied sport psychology having been recognized as a sub-discipline of the broader field of sport psychology (Sly et al., 2020; Wylleman et al., 2009). An examination of the research embodying applied sport psychology is warranted given the recent claims that applied practitioners must obtain competence across microlevel and macrolevel processes in diverse settings (i.e., business, performing arts, military; Sly et al., 2020), as well as the need for more research-oriented educational experiences for applied

practitioners (Wylleman et al., 2009). To that end, our central question guiding this research was *what are the most prominent topics in the past, present, and future of applied sport psychology research?*

Evolution of Research in Sport Psychology

Coleman Griffith was among the first to express the need for more rigor in the design and collection of empirical evidence when studying athlete and sport performance. Griffith (1930) outlined a need for more experimental approaches to help establish the field of sport psychology, however this need was geared toward the research being conducted in his own sport psychology laboratory (i.e., the first established sport psychology lab in North America; Vealey, 2006). In the decades that followed Griffith's call, the developing field of sport psychology published literature that was largely focused on laboratory-based, experimental research that emulated the dominant trends in both psychology and kinesiology (Landers, 1995; Vealey, 2006). Though Yates (1943) was among the earliest authors of applied

research with athletes, the transition toward applied sport psychology was perhaps most influenced by Martens (1979) who encouraged sport psychology researchers to take off the lab "smocks" and begin conducting research directly with athletes in the field. As such, Martens' reflections (as outlined by the change in his own research practices) led to a shift in the paradigm from basic, laboratory-based experiments to applied, field-based research. Vealey (2006) described it best and stated: "the [paradigm] moved from positivism to what seems to now be a post-positivistic, modernist era with some movement toward constructivism" (p. 148).

Research Topics in Sport Psychology

When examining the evolution of sport psychology research within the broader domain of exercise and sport studies, it is important to note trends that have been observed from past to present. Weiss and Gill (2005) examined the trends in sport psychology research from 1930 to 2004 and identified several re-emerging themes (i.e., themes that were consistently studied over the last 75 years of research) and emergent themes (i.e., research that gained scholarly support within the last 25 years). See Table 1 for a list of the re-emerging and emergent themes as described by Weiss and Gill (2005).

Themes such as sportsmanship and moral development largely concentrated on topics related to character building while research on social development focused on socialization processes concerning the influential role of parents, coaches, and peers. Other popular topics included self-esteem, engagement and motivation of girls and women for sport and physical activity, the arousal-performance relationship, situational factors, and psychological skills. Interestingly, although gender roles were identified as a prominent theme, most of that research was produced within the domain of sport sociology rather than sport psychology (Weiss & Gill, 2005). Weiss and Gill's (2005) themes were expected to grow in popularity in the subsequent years. However, their suggestion was informed by an academic journal focused on the broader field of human movement, and the number of academic journals specific to sport psychology and applied sport psychology have since been established (Vealey, 2006).

In a more recent review of research journals rooted in sport and exercise psychology, Lindahl et al. (2015) discovered higher-order themes (and topics) such as motivation (e.g., self-determination theory, achievement goal theory); exercise and health (e.g., theory of planned behavior); perceptual, cognitive, and motor skills (e.g., attention, decision-making); emotion, stress, and coping (e.g., choking, burnout); leadership (e.g., coaching, social support); and development (e.g., talent development, positive youth development). Based on that large scale bibliometric review, themes such as mental skills (e.g., imagery, self-talk) and miscellaneous (e.g., sport psychology practitioners/consultants) were categorized as smaller higher-order themes and described some topics (e.g., mental toughness) as emerging in the broader field of sport psychology (Lindahl et al., 2015). These findings are important to consider as they represent the prior (Weiss & Gill, 2005) and more current (Lindahl et al., 2015) trends in sport psychology and informs the present study which aims to examine the current trends in applied sport psychology (i.e., a sub-discipline of the broader sport psychology field).

Student Perspectives of Applied Sport Psychology

As expressed by the Association of Applied Sport Psychology (AASP), "students make up about 40% of the total membership of the Association, but students are

Table 1. Re-emerging and Emergent Themes in Sport Psychology

Re-emerging Themes	Emerging Themes
Sportsmanship and moral development	Measurement development and validation
Social development and significant others	Physical activity, adoption, maintenance, and adherence
Self-perceptions	Multidisciplinary approaches to psychological issues
Attitudes and motivation	
Modeling and observational learning	
Emotions, arousal, and anxiety	
Competition, achievement orientations, and personality dispositions	
Gender roles	

100% of its future" (AASP, 2021, para. 1). Even though students have been seen as critical to the future of the field, research focusing on student perceptions about applied sport psychology have been largely unexplored. An exception to this exclusion was a series of studies that examined perceptions of current and future techniques, thoughts, and ideas across multiple cohorts of Swedish students (Johnson, 2006; Johnson & Anderson, 2019). The result of the first study revealed that the 1995 cohort perceived psychological skills training—namely, relaxation, motivation, goal setting, and positivity—as primary themes of sport psychology, which is consistent with the general topics from prior research (Lindahl et al., 2015; Weiss & Gill, 2005).

In a follow up study, Johnson and Anderson (2019) continued the assessment of student perceptions by comparing a more recent sample of students (i.e., 2015 cohort) to the prior 1995 and 2005 cohorts. Results revealed two unique themes in the 2015 cohort's visions for the future of applied sport psychology. First, students reported a desire to clarify and integrate health issues as a dominant component of sport psychology. Health and exercise were viewed as a central process in the broader sport community that warrants attention in the future (Johnson & Anderson, 2019). Second, students also reported the necessity to enhance visibility and understanding of cultural variations within applied sport psychology contexts. Students reported the effects of globalization must parallel the research and application of applied sport psychology to competently facilitate positive experiences in performance settings for individuals from an array of cultural backgrounds (Johnson & Anderson, 2019). These studies are among the few empirical investigations that examined student perspectives and provide important insights to how students—that is, the future members of our applied sport psychology society—bring a critical perspective that is underutilized in research. Therefore, our incorporation of student perceptions in the present study can provide a valuable perspective for a more complete review of the hot topics in applied sport psychology.

The Present Study

Although research topics and paradigms have been observed and documented throughout the evolution of sport psychology (Lindahl et al., 2015; Vealey, 2006; Weiss & Gill, 2005), little attention has been given to the examination of research topics within the sub-discipline of applied sport psychology. Further, examining current student perceptions of applied sport psychology is warranted to contrast our historical roots and modern-day research topics. Therefore, the purpose of the present study was to holistically review the hot topics in applied sport psychology through assessing multiple sources of data that represent past (foundational knowledge), present (contemporary research), and future (student perception) perspectives.

Methods

This research was conceptualized within the context of AASP's Student Delegate program in the 2017/2018 academic year. Chairing the Best Practices in Research and Undergraduate Connections initiatives, the three authors established a partnership to learn more about the most prominent research topics in applied sport psychology. We grounded this research in a constructivist methodology in the pursuit of this goal. Constructivism is a research paradigm that asserts knowledge is socially constructed, subject to interpretation, and the construction of meaning is built on both individual experiences and collective social interactions (Creswell, 2014; Denzin & Lincoln, 2013; Teddlie & Tashakkori, 2009). To that end, we believe that the very nature of this research is not only constructed upon prior research (i.e., topics) but is also subject to our collective interpretation to approach the appropriate answer to our research question.

The present study is best represented by a qualitatively driven mixed-method design that was sequential in nature (Teddlie & Tashakkori, 2009). Within three phases of the study, two methods were employed: qualitative content analyses (for phase one and two) and a survey-based questionnaire (for phase three). Using multiple methods in qualitative research can be an important design strategy for the purpose of triangulation and to gain insight about various aspects of a phenomena (Maxwell, 2013). In particular, the use of qualitative content analyses in mixed-method research can aid the development, initiation, and expansion of a study, as well as support complementarity and triangulation (Kansteiner & König, 2020). As triangulation provides an opportunity to enhance the dependability of data representation (Creswell & Poth, 2018), data were examined in three phases to achieve temporal triangulation between: (a) foundational knowledge in sport psychology, (b) contemporary research being published in AASP journals, and (c) students' perceptions of hot topics in applied sport psychology. The following sections provide a deeper description of the data extraction and coding procedures used for each of the three phases of analysis.

Phase One: Textbook Content Analysis

The purpose of phase one was to determine a set of a priori codes that appropriately represent the topics studied and taught in sport psychology/applied sport psychology. Thus, a textbook content analysis was conducted to discover general topics that the foundational literature in sport psychology considers exemplary. Put differently, textbooks represent the past topics that are fundamental to the field and are often the resources students initially use to learn about topics in applied sport psychology. Logan and Eggleston (2015) identified six commonly used sport and exercise psychology textbooks for the sport psychology classroom and three were selected for our analysis: *Foundations of Sport and Exercise Psychology* (Weinberg & Gould, 2015), *Sport Psychology: From Theory to Practice* (Anshel, 2012), and *Applied Sport Psychology Personal Growth to Peak Performance* (Williams & Krane, 2015). These textbooks were selected because they were readily available to the authors and encompass varying theory-to-practice components for learning sport psychology. Further, the adoption of three textbooks enhanced the potential to reach saturation through triangulation of multiple data sources to capture a more robust depiction of the data (Creswell & Poth, 2018).

A total of 63 chapter titles were identified. These data were extracted in the fall of 2018. All chapter titles were compared to each other through four sequential iterations of coding. Each iteration was analyzed using a two-cycle coding scheme (Saldaña, 2016), and each iteration comprised a single round of coding. See Table 2 for a description of the coding scheme. The four rounds of coding consisted of: (a) 100% similarity of terms across all three texts using in vivo coding, (b) 66% similarity of terms across at least two of the texts using in vivo coding, (c) holistic coding to combine chapter titles that were similar based on content area, and (d) axial coding to either remove the chapter topic(s) from the scheme or merge the chapter topic(s) into another category already listed as a topic from the first three rounds. The topics that emerged from the textbook analysis were used as base codes representing the most applicable topics from the foundational literature (i.e., past) and were subsequently used in phase two.

Phase Two: Journal Content Analyses

Following the textbook analysis, the authors used the set of a priori codes to assess applied sport psychology topics from two journals: *The Journal of Applied Sport Psychology (JASP)* and the *Journal of Sport Psychology in Action (JSPA)*. These two journals were selected because they were sponsored by AASP, fit the scope of our roles as AASP Student Delegate leaders, and incorporated a variety of topics ranging from practitioner-oriented best practices (i.e., *JSPA*) to original research articles in applied sport psychology (i.e., *JASP*).

In total, 1,247 topics were discovered. For *JSPA*, members of the research team recorded verbatim topics labeled as key words identified by the author(s) during the publication process. Key words were extracted from a total of 121 articles (topics *n* = 399) ranging between 2010–2017. For *JASP*, members of the research team were responsible for retrieving information on the participants, type of research, methods, and the topics for each article. Retrieval of *JASP* topics were delegated and at least two members of the research team independently extracted information from each article. A total of 327 articles (topics *n* = 848) were collected between 2008–2017.

Table 2. Type of Coding and Definitions for the Coding Scheme

Type of Coding	Code Name	Code Definition
First Cycle	In Vivo Coding	*In Vivo coding* is otherwise known as "verbatim" coding and represents the exact or actual words or phrases found in the data.
First Cycle	Holistic Coding	*Holistic coding* uses a "clumping" style of coding, where we create or adapt a general category by clumping similar topics together.
Second Cycle	Focused Coding	*Focused coding* discovers the most frequent or significant codes to develop more salient groupings of the data.
Second Cycle	Axial Coding	*Axial coding* helps reorganize data by determining which codes in the data are more or less important/applicable.

Note. Type of coding, code name, and definitions are derived from Saldaña (2016).

Procedures for Journal Content Analyses

Journal data extractions concluded in the fall of 2018 and data analyses continued through the summer of 2019. The authors meticulously analyzed the 1,247 topics derived from *JASP* and *JSPA* across five cycles of explicit coding analyses. The purpose of conducting multiple iterations was to build trustworthiness in a way that could not be demonstrated by traditional forms of inter-rater reliability. Consensus coding was adopted to categorize the topics. The consensus process has been recognized as an integral component in qualitative research (Hill et al., 2005), and helps researchers: (a) utilize multiple perspectives, (b) assess and become more aware of individual biases and expectations, (c) resolve disagreements, and (d) create an open, honest work environment with collective involvement and power among the team (Hill & Knox, 2021; Hill et al., 2005). Within the context of the present study, consensus coding represents a process where each topic was compared to the set of a priori codes and each code was subsequently examined by the authors until 100% agreement was established. An iterative multi-cycle coding scheme was created by combining consensus coding with Saldaña's (2016) two-cycle coding framework as performed in the textbook analyses (i.e., macrocycle one). The purpose of combining consensus coding and the iterative approach for the journal content analyses was to refine the set of a priori codes to discover additional codes outside the scope of the textbook analyses and to group together codes into broader themes. Two macrocycles were added to the overall scheme for the assessment of topics within the journal content analyses. See Table 3 for an overview of the structure of our iterative multi-cycle coding scheme.

Macrocycle two contained three microcycles, and these three microcycles used in vivo, holistic, and focused coding procedures, respectively. The first microcycle consisted of each author independently comparing all topics to the set of a priori codes by assessing the topics verbatim. For example, the topics of achievement motivation or motivational climate are exactly matched with the code "motivation." At the conclusion of the independent comparisons, a virtual meeting between the three authors was held and each topic was examined until consensus was established for each relevant topic that was coded during microcycle one. Any topic that was not coded through in vivo procedures were placed in the "other" category. Microcycle two involved holistic coding and represented the grouping of topics based on similarity of content. For example, topics such as attentional focus or choking were coded as "concentration" because those topics are best represented by that specific domain of applied sport psychology content. At the conclusion of independent and collaborative coding procedures (i.e., individual coding and consensus coding), all topics not categorized under an a priori code after in vivo or holistic coding procedures were again placed in the "other" category. The third microcycle consisted of focused coding and primarily assessed topics that remained within the "other" category but presented general likeness or showed likenesses as sub-categories after categorization from the first two microcycles. For example, the a priori code labeled "psychological skills training" was modified, and the code evolved into "interventions" which then contained two sub-codes labeled "psychological skills training" and "consulting and consultant effectiveness." After consensus was reached for focus coding, the authors developed a set of

Table 3. Structure of the Iterative Multi-Cycle Coding Scheme

	Textbook Analysis	Journal Content Analyses	
Microcycles	Macrocycle One	Macrocycle Two	Macrocycle Three
Microcycle One	In Vivo Coding (100%)	In Vivo Coding	Holistic Coding
Microcycle Two	In Vivo Coding (66%)	Holistic Coding	Axial Coding
Microcycle Three	Holistic Coding	Focused Coding	
Microcycle Four	Axial Coding		

Note. Each cycle of coding (i.e., in vivo, holistic, focused, or axial) for the macrocycles represent the multiple iterations of consensus coding where 100% agreement was confirmed for each topic before moving to the next microcycle.

initial themes which contained the adapted codes from macrocycle two. The rationale for incorporating multiple macro and microcycles was to ensure consensus that the codes and themes best represented the topics and led to the appropriate placement of each topic. However, if a discrepancy regarding the placement of a topic surfaced, an ad hoc meeting was conducted to discuss the theoretical nature of the specific topic. If a disagreement persisted, the topic was placed in the "other" category. The finalized coding structure (i.e., added themes and modified codes) for macrocycle two can be seen in Table 4.

The refinement of codes and development of themes were the main goals for macrocycle two. Thereafter, the purpose of macrocycle three was to verify and further refine the structure of the themes and codes from macrocycle two. This verification and refinement process involved a final series of coding using our iterative multi-cycle coding scheme. The two coding procedures (i.e., microcycles) in macrocycle three consisted of holistic coding and axial coding. As a final attempt to situate the topics more accurately within categories based on their theoretical or conceptual underpinnings (i.e., holistic coding), all topics within each code were re-evaluated and modified accordingly. For example, the codes "group dynamics and team cohesion" and "cultural competence" were changed to "group and organizational systems" and "cultural diversity and inclusion" to better encapsulate the range of research topics that were included within each category. Other categories such as "character and moral development" and "sport transition" were formed during this process of categorization. Each author memoed possible adaptions to each code, and codes were only modified or created, again, when 100% consensus was reached. Disagreements regarding an adaption of a code resulted in no change to the code. Finally, an axial coding procedure was performed to reorganize or drop topics. A total of 51 topics were found that did not appropriately fit under their designated codes after all prior coding procedures. During this final microcycle, the authors revisited each article from the topics to determine the best classification of the topic. After consensus was reached, some items remained in their original category while others were relocated, but only one topic was deleted from the final list. See Table 4 for the progression of codes and themes through all three macrocycles.

Phase Three: Student Perception Survey

During phase three, faculty members of applied sport psychology and related academic disciplines were contacted via email and asked to share a link to an online survey with their students. Participants were also recruited through AASP student social media outlets. The student survey concluded in the fall of 2018. The survey consisted of demographics and three specific questions regarding their perception of today's hot topics in applied sport psychology, their favorite applied sport psychology topics, and the applied sport psychology topics they are interested in for future learning. Participants selected their answers from predetermined lists for each question. Specifically, predetermined answers were developed from independent examinations of sport psychology textbooks followed by collaborative peer debriefing among the research team (i.e., AASP student delegates). The two student representatives from the AASP Executive Board were also included to further support the credibility of the topics being investigated through an expert check approach to increase trustworthiness of the identified topics (Sparkes & Smith, 2014). A total of 40 topics were identified (e.g., attentional focus, cultural competence, imagery, leadership, self-confidence) and implemented as answers to the three main questions as well as a fill in option (i.e., other) to self-report a topic not listed. Participants were instructed to select their top three choices for each question.

Student Participants

Participants included students (N = 78) pursuing a bachelor's (n = 24), master's (n = 35), or doctoral (n = 19) degree. Over 85% of the participants indicated an interest in pursuing the AASP Certified Mental Performance Consultant (CMPC®) certification (n = 67), though only 42% were current student members of AASP (n = 33). Participants reported their current degrees were within academic disciplines including sport and exercise psychology (n = 56), kinesiology (n = 8), counseling psychology (n = 1), clinical psychology (n = 1), sport and exercise science (n = 1), as well as others who did not fit under the presented descriptions (n = 6) and undergraduate students who did not yet have a degree specification (n = 5). Participants were female (n = 47) and male (n = 31) with an age range between 18 to 41 (M = 24). Due to a technical issue when gathering information regarding ethnicity and nationality, self-identifications were clustered into unconventional categories. Without an appropriate avenue to clarify, contextualize, or represent the ethnic identities represented in our student data (Morris, 2007), we can only justifiably disclose that the participants who took the survey were studying sport psychology/applied sport psychology in North America.

Table 4. The Progression of Codes and Themes Through Each Macrocycle of Coding

Initial Codes from Textbook Content Analysis (Macrocycle One)	Themes and Codes from Journal Content Analyses (Macrocycle Two)	Themes and Codes from Journal Content Analyses (Macrocycle Three)
1. Sport Psychology (Overview, History)	**General Sport Psychology**	**General Sport Psychology**
2. Exercise Psychology	1. Sport Psychology	1. Sport Psychology
3. Leadership	**Applied Sport Psychology**	• [b]Student Training & Mentoring
4. Communication	2. Interventions	• [b]Methodological Considerations
5. Group (Team Dynamics/ Cohesion)	• Psychological Skills Training	**Applied Sport Psychology**
6. Motivation	• [a]Consulting & Consulting Effectiveness	2. Interventions
7. Stress, Anxiety, Arousal	3. [a]Mental Skills	• Psychological Skills Training
8. Psychological Skills Training (Interventions)	• Stress, Anxiety, & Arousal	• [a]Consulting & Consulting Effectiveness
9. Personality	• Imagery	3. [a]Mental Skills
10. Imagery	• Goal Setting	• Stress, Anxiety, & Arousal
11. Goal Setting	• Concentration	• Imagery
12. Children	• Confidence	• Goal Setting
13. Concentration	• [a]Self-Talk	• Concentration
14. Injury	**Social Sport Psychology**	• Confidence
15. Aggression	4. Leadership	• [a]Self-Talk
16. Burnout	5. Communication	**Social Sport Psychology**
17. Confidence	6. Group Dynamics & Team Cohesion	4. Leadership
18. Unhealthy Behavior	7. Motivation	5. Communication
19. Effective Coaching	8. Effective Coaching	6. [b]Group & Organizational Systems
20. Peak Performance	**Clinical Perspectives**	7. Motivation
21. Socio-Cultural Components	9. Injury	8. Effective Coaching
22. Other	10. Aggression	9. [b]Family & Relationships in Sport
	11. Unhealthy Behavior	**Clinical Perspectives**
	12. Burnout	10. Injury
	13. Personality	11. Aggression
	Developmental Perspectives	12. Unhealthy & [b]Maladaptive Behavior
	14. Children, Youth, & Adolescents	13. Burnout
	15. [a]Motor Learning & Training	14. Personality & [b]Affective States
	Peak Performance	**Developmental Perspectives**
	16. Peak Performance	15. Children, Youth, & Adolescents
	17. [a]Self-Regulation	16. [a]Motor Learning & Training
	Cultural Perspectives	17. [b]Character & Moral Development
	18. [a]Cultural Competence	18. [bc]Sport Transition
	Exercise Psychology	**Peak Performance**
	19. Exercise Psychology	19. Peak Performance
	Other	20. [a]Self-Regulation
	20. Other	**Cultural Perspectives**
		21. [b]Cultural Diversity & Inclusion
		Exercise Psychology
		22. Exercise Psychology
		Other
		23. Other

Note. Themes are outlined in bold. Numbers represent codes and bullet points represent sub-codes. [a]Codes added after generating themes via macrocycle two. [b]Codes added after verification and refinement of themes via macrocycle three. [c]Code that returned after being deleted from textbook analysis via macrocycle three.

Results

Phase One: Textbook Content Analysis

The textbook content analysis (i.e., macrocycle one), which took place in four sequential iterations (i.e., microcycles) of consensus coding, revealed a total of 22 initial codes. See Table 4 to view the list of initial codes from the textbook content analysis under the macrocycle one column. The first microcycle found eight codes: overview and history of sport psychology; exercise psychology; leadership; communication; groups in sport through team dynamics and cohesion; motivation; stress, anxiety, and arousal; and psychological skills training as interventions in sport psychology. Microcycle two identified 10 codes and consisted of topics centered on personality, imagery, goal setting, children, concentration, injury, aggression, burnout, confidence, and unhealthy behavior. The third microcycle clumped chapter titles together based on the similarity of content, and the three codes that surfaced during this iteration were effective coaching, peak performance, and socio-cultural components. Finally, the fourth microcycle took the remaining chapters and removed or merged them with already existing codes from the prior microcycles. Specifically, a chapter regarding career transition was removed because it had no clear connection to the other set of codes, a chapter on referring athletes for counseling was merged into psychological skills training, a chapter on competition and cooperation was merged into team dynamics and cohesion, and two chapters that focused on attributions and feedback for intrinsic motivation were merged into motivation. One additional code labeled as other was created for topics outside the scope of the initial 21 codes derived from the textbook content analysis.

Phase Two: Journal Content Analyses

Macrocycle Two Modifications

After conducting three iterations of analyses assessing the pool of topics generated from JASP and JSPA, broader themes were developed. Nine themes were established: general sport psychology, applied sport psychology, social sport psychology, clinical perspectives, developmental perspectives, peak performance, cultural perspectives, exercise psychology, and other. After the creation of these broader themes, modifications to the initial codes were warranted. Specifically, we made six deliberate adjustments to the codes by re-arranging codes and creating new codes. All changes can be viewed in Table 4 under the macrocycle two column.

The overarching code from the textbook analysis "psychological skills training" was examined and reconsidered because the topics were grouping in distinctly different ways. The code was changed to "interventions" which then contained sub-codes described as "psychological skills training" (i.e., the training program) and "consulting and consultant effectiveness" (i.e., the person implementing the program). Further, because of the important role of interventions in applied sport psychology, the code "mental skills" was created as an equal-level code to "interventions" to highlight the difference between skills and approaches. Therefore, the code "mental skills" contained the sub-codes "stress, anxiety, and arousal," "imagery," "goal setting," "concentration," and "confidence" as derived from the textbook analyses. The code "self-talk" was created due to the important role of verbal and non-verbal self-dialogue described in texts from macrocycle one. For example, in the Williams and Krane (2015) text, Williams et al. (2015) outlined that self-talk has an important role for physical skills learning, changing habits, honing attention, creating and changing emotion and mood, controlling effort, and building self-efficacy, although self-talk was not directly stated in the title of the chapter.

Similarly, two additional codes were created. The codes "motor learning and training" and "self-regulation" were developed based on contextualization and generalization. The code "motor learning and training" was created for the research articles that focused on learning sport skills outside the scope of the code "effective coaching." The code "self-regulation" was created to broadly capture topics that are geared toward the adaptive use of psychological mechanisms for performance enhancement (see review by Crews et al., 2001). The last change during this series of iterations was modifying "socio-cultural components" to "cultural competence." This change was made to reflect how scholars have recently been debating cultural sport psychology terms, therefore we selected cultural competence as the most appropriate term to represent applied sport psychology (see Schinke et al., 2016).

Macrocycle Three Modifications

While themes were not modified during macrocycle three, coding procedures from the two final microcycles produced nine changes to the codes. First, the code "general sport psychology" was broken down into two sub-codes labeled "student training and mentoring" and "methodological considerations." Further, during these final iterations of coding, several changes were

made to the overall code name for the purpose of a broader integration of topics into a code. Four codes were slightly modified: the code "group dynamics and team cohesion" changed to "group and organizational systems;" the code "cultural competence" changed to "cultural diversity and inclusion;" the code "unhealthy behavior" changed to "unhealthy and maladaptive behavior;" and the code "personality" was changed to "personality and affective states."

One additional code was created and labeled "character and moral development." This new code reflects the growing body of literature focused on life skills development comprised of skills and values that enable successful integration into the contexts that are occupied (see Danish et al., 1996; Holt, 2016). Finally, a code returned after being taken out earlier in the coding process. Due to the number of articles that were geared toward sport and career transitions (e.g., youth sport transitions, transition into college, transition out of sport), the code "sport transition" was reexamined after being deleted during the textbook analysis and reestablished. The new code was then positioned under developmental perspectives due to the topics generally emphasizing developmental changes one may experience.

Hot Topics from Final Themes and Codes

See Table 5 for a summary of the frequency and percentage of themes and codes across *JASP*, *JSPA*, and the combined total. When examined together, the most frequently published themes over the ten-year span included social sport psychology (27.3%) and applied sport psychology (24.9%), and together accounted for more topics than the other seven themes combined. A comparatively equal number of topics were published under developmental perspectives (11.5%), peak performance (11.2%), and clinical perspectives (11%). The least published themes included cultural perspectives (5.6%), exercise psychology (3.4%), other (2.8%), as well as general sport psychology (2.4%).

The following section identifies the most salient topics derived from the journal content analyses as outlined by the themes and codes. The topics listed below consisted of both verbatim topics as well as categories (e.g., coaches) of verbatim topics (e.g., coach behavior). The most frequently published topic under general sport psychology included the verbatim term sport psychology (f = 9), but also included topics such as graduate training (f = 3), sport psychology training (f = 2), supervision (f = 2), and evaluation (f = 2).

The applied sport psychology theme was partitioned by mental skills (f = 8) and interventions (f = 6), and the most frequent verbatim topic for mental skills included imagery (f = 20) with a variety of imagery related sub-sets observed (e.g., imagery speed, visualization, PETTLEP). Other popular topics were anxiety (f = 17), attentional focus, attention, and/or focus (f = 13), and goal setting (f = 8). Among the intervention topics, equal frequencies were found between consulting (f = 6), sport psychology consulting (f = 6), and psychological/mental skills training (f = 6), which were then followed by mental training (f = 4), consultant effectiveness (f = 3), and mindfulness (f = 3).

Within the theme of social sport psychology, motivation topped the chart with the highest frequency as a standalone verbatim topic (f = 25). Other topics such as self-efficacy (f = 15), self-determination theory (f = 14), motivational climate (f = 14), and enjoyment (f = 8) were among the most frequent sub-sets of motivation. Of the social agents and significant others, the most frequent topics concerned coaches (f = 45; e.g., coach behavior, coach-athlete relationship), teams (f = 32; e.g., team cohesion, team building), parents (f = 18; e.g., parent behavior, parent involvement), and peers (f = 6; e.g., peer leadership, peer mentoring).

The most frequent topic within clinical perspectives was centered on emotion (f = 20; e.g., emotional abuse, emotional intelligence). On the abnormal/maladaptive side of clinical perspectives, eating disorders (f = 9), burnout (f = 6), substance use (f = 5; alcohol, marijuana), anger (f = 5), and risk-taking behavior (f = 3) were among the most frequently studied. Positive/adaptive topics such as empathy (f = 4), well-being (f = 3), gratitude (f = 2), self-concept (f = 2), and self-esteem (f = 2) were not as frequently studied.

The most frequently published topic under the theme of developmental perspectives was youth sport (f = 18) which was followed by specific topics such as positive youth development (f = 11) and life skills (f = 7). Regarding sport transitions, the main topics focused on transitions between sports or youth-to-elite transitions (f = 7), transitioning out of sport (f = 5), and transitioning into a career post sport (f = 10). Other topics consisted of transfer (f = 4), motor skill acquisition (f = 3), and skill development (f = 2).

The theme of peak performance included a large variety of performance-oriented topics (f = 53; e.g., expert performance, Olympic performance, performance accomplishments, performance challenges) while other specific topics consisted of coping (f = 17; e.g., coping

Table 5. Frequency and Percent of Hot Topics from JASP and JSPA by Themes and Codes

Themes and Codes	JASP (n = 848)		JSPA (n = 399)		Total (N = 1247)	
	Frequency	%	Frequency	%	Frequency	%
General Sport Psychology	**10**	**1.2**	**20**	**5.0**	**30**	**2.4**
Sport Psychology	4	0.5	9	2.3	13	1.0
Student Training & Mentoring	5	0.6	5	1.3	10	0.8
Methodological Considerations	1	0.1	6	1.5	7	0.6
Applied Sport Psychology	**171**	**20.2**	**139**	**34.8**	**310**	**24.9**
Interventions	6	0.7	27	6.8	33	2.6
Psychological Skills Training	19	2.2	13	3.3	32	2.6
Consulting & Consulting Effectiveness	20	2.4	41	10.3	61	4.9
Mental Skills	10	1.2	10	2.5	20	1.6
Stress, Anxiety, & Arousal	38	4.5	18	4.5	56	4.5
Imagery	25	2.9	10	2.5	35	2.8
Goal Setting	10	1.2	9	2.3	19	1.5
Concentration	26	3.1	7	1.8	33	2.6
Confidence	9	1.1	0	0	9	0.7
Self-Talk	8	0.9	4	1.0	12	1.0
Social Sport Psychology	**265**	**31.3**	**75**	**18.8**	**340**	**27.3**
Leadership	21	2.5	6	1.5	27	2.2
Communication	3	0.4	2	0.5	5	0.4
Group & Organizational Systems	39	4.6	17	4.3	56	4.5
Motivation	149	17.6	15	3.8	164	13.2
Effective Coaching	31	3.7	24	6.0	55	4.4
Family & Relationships in Sport	22	2.6	11	2.8	33	2.6
Clinical Perspectives	**116**	**13.7**	**21**	**5.3**	**137**	**11.0**
Injury	7	0.8	3	0.8	10	0.8
Aggression	8	0.9	4	1.0	12	1.0
Unhealthy & Maladaptive Behavior	30	3.5	5	1.3	35	2.8
Burnout	9	1.1	0	0	9	0.7
Personality & Affective States	62	7.3	9	2.3	71	5.7
Developmental Perspectives	**88**	**10.4**	**55**	**13.8**	**143**	**11.5**
Children, Youth, & Adolescents	19	2.2	25	6.3	44	3.5
Motor Learning & Training	22	2.6	9	2.3	31	2.5
Character & Moral Development	27	3.2	11	2.8	38	3.0
Sport Transition	20	2.4	10	2.5	30	2.4
Peak Performance	**98**	**11.6**	**42**	**10.5**	**140**	**11.2**
Peak Performance	53	6.3	28	7.0	81	6.5
Self-Regulation	45	5.3	14	3.5	59	4.7
Cultural Perspectives	**45**	**5.3**	**25**	**6.3**	**70**	**5.6**
Exercise Psychology	**35**	**4.1**	**7**	**1.8**	**42**	**3.4**
Other	**20**	**2.4**	**15**	**3.8**	**35**	**2.8**

Note. Themes are outlined in bold.

skills, coping strategies), self-regulation (f = 11; e.g., emotional regulation, self-regulated learning), mental toughness (f = 9), decision-making (f = 7), flow (f = 4), grit (f = 3), and resilience (f = 3).

The most popular topics under cultural perspectives included gender (f = 14; e.g., gender differences, gender identity), disabilities (f = 9; e.g., Paralympics, ADHD, ASD), athletic identity (f = 7), and body image (f = 5). Exercise psychology-oriented topics included physical activity (f = 7), physical education (f = 5), and exercise (f = 5), but also included other general topics such as fitness (f = 4; e.g., fitness interventions, fitness program experiences) and health (f = 4; e.g., healthy lifestyle, obesity). Topics described as other were much less frequent, but the most popular topics involved referees (f = 5; e.g., decision-making, officiating excellence), videogames/video technology (f = 5), and music (f = 3). Other unique topics with a frequency of one included media, military, and outreach activities.

Phase Three: Student Perception Survey

Overall, students who completed the questionnaire reported that they were more interested in employment opportunities with a focus on applied work as compared to research. Specifically, students indicated they were moderately (n = 9), very (n = 16), or extremely (n = 41) interested in pursuing applied sport psychology whereas students were moderately (n = 13), very (n = 26), or extremely (n = 8) interested in research as a pathway for their future career.

Results were centered on student responses to three questions exploring their perceptions of hot topics in applied sport psychology today, their favorite applied sport psychology topics, and which applied sport psychology topics they are most interested to learn more about in the future. The top five most reported topics they perceived to be the most prevalent today were mental toughness/resiliency (f = 23), anxiety (f = 20), flow/peak performance (f = 19), mindfulness (f = 17), and a tie between coaching effectiveness and injury (f = 15) for fifth place. The top five favorite topics were injury (f = 19), athletic identity (f = 17), a tie between anxiety and motivation (f = 14) for third, youth development (f = 13), and mindfulness (f = 12). Finally, the top five topics selected for future learning were mental toughness/resiliency (f = 18), counseling (f = 17), athletic identity (f = 16), mindfulness (f = 14), and flow/peak performance (f = 12). Notably, there was a three-way tie for future learning between injury, coaching effectiveness, and cultural competence (f = 10) for sixth place.

Further, when student participants were separated by degree being pursued (i.e., bachelor, master, doctoral), the most frequently selected topic was assessed relative to the three main questions outlined above. Undergraduate student participants considered both anxiety and mental toughness/resiliency (f = 9) as hot topics today, anxiety (f = 8) as their favorite, and mental toughness/ resiliency and mindfulness (f = 5) as the future topics to learn. Master-level student participants considered flow/peak performance (f = 12) as today's hot topic, injury (f = 12) as their favorite, and athletic identity (f = 9) as a future topic to learn. Finally, doctoral-level student participants considered mindfulness (f = 7) as today's hot topic, athletic identity (f = 6) as their favorite, and cultural competence (f = 7) as a topic for future learning.

Discussion

The present study assessed the past, present, and future dimensions of applied sport psychology research to identify the current trends in applied sport psychology topics. In so doing, the present study adopted a qualitatively driven mixed-method approach (i.e., iterative multi-cycle coding scheme) situated in the analysis of exemplar texts, AASP research journals, and students' perceptions and interests. These data were temporally triangulated to determine the contemporary hot topics in applied sport psychology. Twenty-two initial codes were discovered from the textbook analysis which informed the development of themes and codes from the journal content analyses. Through multiple iterations of coding, nine overarching themes were found (see Table 4). Of all the codes (23 total) and sub-codes (10 total), 13 emergent codes were distinct from the textbook analysis and consisted of: student training and mentoring, methodological considerations, consulting and consulting effectiveness, mental skills, self-talk, group and organizational systems, family and relationships in sport, maladaptive behavior, affective states, motor learning and training, character and moral development, self-regulation, and cultural diversity and inclusion. Notably, only one code (i.e., sport transition) re-emerged from the initial textbook analysis.

Prior research has identified several re-emergent and emergent themes regarding sport psychology research (Lindahl et al., 2015; Weiss & Gill, 2005). Themes such as sportsmanship and moral development, social development and significant others, and attitudes and motivation were expected to increase in popularity (Weiss & Gill, 2005), and more recent research has confirmed topics such as motivation, leadership, and

youth development have remained popular (Lindahl et al., 2015). The present study supports some, but not all, of these trends within applied sport psychology research. Generally, the theme social sport psychology yielded 27% of the total topics in our analysis and showed that the most popular topics were motivation, coaching, emotion, and youth sport (e.g., positive youth development). Our findings are in alignment with prior reviews (Lindahl et al., 2015; Weiss & Gill, 2005), apart from sportsmanship and moral development. To that end, instead of sportsmanship (or, what is now more commonly known as sportspersonship; Vallerand et al., 1997) and moral development being re-emergent themes within the broader area of developmental perspectives, applied sport psychology appears to have taken a larger interest in topics such as sport transitions and the development and transfer of life skills through sport participation.

When considering the primary differences between modern-day applied sport psychology topics and the general themes of sport psychology's past, topics in our study categorized under interventions and mental skills—codes that represented 25% of the published topics—appear to be a key emergent theme as compared to prior reviews in sport psychology (Lindahl et al., 2015; Weiss & Gill, 2005). For example, Lindahl et al. (2015) categorized research topics such as mental skills and sport psychology practitioners/consultants as smaller higher-order themes. Our current results of hot topics in applied sport psychology research represent slightly different trends compared to reviews focused more broadly on sport psychology research (Lindahl et al., 2015; Weiss & Gill, 2005). Put differently, the differences between the trends reported in sport psychology as compared to our applied sport psychology research reinforces previous claims that applied sport psychology represents a notable sub-discipline of sport psychology (Sly et al., 2020; Wylleman et al., 2009).

Of Weiss and Gill's (2005) emergent topics (e.g., issues surrounding measurement and exercise adherence), our review did not support or reflect the expected trend relative to measurement development and validation and interest in the adoption, maintenance, and adherence for physical activity within the AASP sponsored literature. Evidence for this is grounded in our results where the methodological considerations code and exercise psychology theme only accounted for 0.6% and 3.4% of the applied sport psychology topics, respectively. Though the field of sport psychology is now commonly known and accepted to be sport and exercise psychology, our results indicate that the emphasis in applied sport psychology is much more focused on sport rather than exercise. This finding is consistent with Lindahl et al. (2015) as they suggested research in the domain of sport psychology is highly skewed (i.e., approximately a 3:1 ratio) toward sport rather than exercise research. The lack of measurement-oriented and exercise-oriented topics may be related to publishing biases. That is, psychometric and exercise researchers may be publishing their work in other outlets that are more focused on including measurement and exercise psychology as opposed to the two AASP journals analyzed in the current study.

Student participants in the present study reported an interest in re-emerging topics consistent with the topics discovered in the journal content analyses (e.g., motivation, flow/peak performance), but also revealed a high degree of interest in pursuing careers in applied work. Johnson's prior empirical investigations have illustrated similar interests among Swedish students (Johnson, 2006; Johnson & Anderson, 2019). The students from three cohorts in 1995, 2005, and 2015 were also interested in motivation and other topics related to psychological skills training. However, students in the 2015 cohort were interested in health issues and exercise within the broader sport community (Johnson & Anderson, 2019), which was not reflected in the present study.

Even though student participants in the present study did not indicate interests within physical health issues, our findings do suggest they have interests in mental health issues. Specifically, student participants identified that counseling was a topic they would like to learn more about in the future, but verbatim topics in applied sport psychology research related to counseling were sparse. This finding parallels the rich discussion surrounding the need for practitioners to develop competencies in psychotherapy to effectively work in applied sport psychology (Sly et al., 2020). Previously, students have claimed applied sport psychology is strictly for elite athletes (Johnson, 2006), who are more at risk for developing mental health deficits such as depression and anxiety (Sly et al., 2020). A lack of counseling-oriented topics from the journal content analyses suggests more research is needed to further examine counseling competencies required so that applied sport psychology practitioners can ethically and competently adapt to the contextual complexities of applied settings (Sly et al., 2020).

Future Considerations for Applied Sport Psychology Research

Though variations were observed in applied sport psychology research compared to sport psychology research trends, it is important to consider topics that warrant future consideration to develop emergent empirical investigation in applied sport psychology research. First, despite frequently appearing as a topic in AASP conferences and other applied sport psychology-oriented platforms, mindfulness appeared only a few times in our review. In stark contrast, students rated mindfulness as a top five topic in all categories, which makes it one of the most popular student topics. It is important to note that mindfulness in sport is perhaps published more in other outlets for empirical research (e.g., Goodman et al., 2014) and reviews (e.g., Gardner & Moore, 2012) that would otherwise promote the popularity of mindfulness for applied sport psychology. Given the high student interest and the relative fit within the scope and mission of AASP research journals, mindfulness will likely become an emergent topic in applied sport psychology research. For example, a special issue on the application of mindfulness for performance enhancement in sport has been recently published (see review by Zhang & Baltzell, 2019). Therefore, future research should continue to investigate mindfulness and sport performance as an emerging hot topic for applied sport psychology research.

A second finding that was not prevalent in applied sport psychology research involved cultural diversity and inclusion. The several modifications to this code during the multiple iterations of analysis reflect the growing debate in applied sport psychology regarding the appropriate terminology that describes cultural competence (e.g., Schinke et al., 2016). That said, most of the topics found under cultural diversity and inclusion were related to gender, disability, athletic identity, and body image. Only two papers focused on gender and sexual minorities (Mattey et al., 2014; Morris & Van Raalte, 2016). Relatedly, only one paper focused on racial identity (Kamphoff et al., 2010). While Kamphoff and colleagues (2010) focused on racial identities, the study broadly examined cultural diversity from abstract submissions across AASP conferences. Further, athletic identity and body image were coded under cultural diversity and inclusion due to their respective focus on one's perceived self and its connection to cultural identity (Kudryavtsev, 2016). This was also reflected in our analysis as the advanced students were interested in athletic identities (i.e., as a future topic to learn for master-level students; favorite topic for doctoral-level

students) and cultural competence (i.e., as a future topic to learn for doctoral-level students). Therefore, we suggest future research should aim to incorporate more research on athletic and cultural identities in applied sport psychology.

Expanding on our findings that there is an overall lack of research on cultural diversity and inclusion but holds a large degree of student interest, Johnson and Anderson's (2019) students reported a need to conduct research across cultural variations to comprehend how to provide prosocial sport and exercise experiences for diverse individuals. Our finding that cultural diversity and inclusion is largely missing from applied sport psychology research is consistent with earlier examinations of the broader field of sport psychology research (Lindahl et al., 2015; Weiss & Gill, 2005). Given that current events related to racial inequalities in the United States and COVID-19 worldwide have sparked several instances of athlete activism and league-wide policy shifts, applied sport psychology as a field should consider the important role of research to support these social justice initiatives in sport. Therefore, researchers should continue to explore the intersections of cultural diversity and inclusion within applied sport psychology research.

Among the topics that did not fit broader themes and codes (i.e., other), the most salient were technology oriented. Perhaps this may be an indication of an emergent theme in applied sport psychology research as virtual technologies may be necessary moving forward due to the impact of the COVID-19 pandemic. For example, the trend has been generally recognized from Weinberg and Gould's (2019) textbook in that major changes between the sixth and seventh edition were based on the integration and use of technology in sport psychology (cf. Weinberg & Gould, 2015). That is, the most recent edition of the textbook (published after data analysis of the present study) discussed the important role of technology in applied sport psychology and featured research studies using technology in sport. Though research tools such as eye tracking technologies that assess gaze fixation (i.e., quiet eye; Vickers, 1996, 2016) and the NeuroTracker that assesses the efficacy to enhance perceptual-cognitive skills (Faubert & Sidebottom, 2012) are not new approaches to applied research, the virtual platform may be a new topic for empirical research regarding the application of technology to applied sport psychology research. The onset of research focused on virtual reality for sport and exercise appears to be a line of inquiry that is grant fundable (e.g., Feltz et al., 2014) and connected

to increases in performance and enjoyment (Murray et al., 2016). Applied sport psychology researchers should consider the impact of virtual consultations as compared to traditional face-to-face formats and the effectiveness of learning management systems for athlete learning and performance (e.g., Weinberg et al., 2012).

Strengths and Limitations

The current study adopted temporal triangulation to identify the evolution of hot topics in applied sport psychology from past (e.g., exemplar texts) to present (e.g., scholarly publications) while taking into consideration future perspectives (e.g., student perceptions). A strength to the design was the incorporation of our iterative multi-cycle coding scheme along with consensus coding to assess evidence derived from multiple sources of data. In doing so, threats to validity were reduced (e.g., researcher bias and reactivity; Maxwell, 2013). *JASP* and *JSPA* were the two journals used to represent the topics being published in applied sport psychology, and this decision was made due to the rigor of our coding procedures and how the two journals embody the nature of applied work. To that end, our study was limited in that we only incorporated topics from these two journals and caution is warranted for generalizing these findings outside the scope of North American applied sport psychology research. To address this limitation, future research should incorporate more applied sport psychology-oriented journals as they would expand the breadth of the topics being researched and published nationally and internationally.

Our study was further limited as the themes, codes, and sub-codes from phases one and two were not directly incorporated into phase three of the study. Though the predetermined set of topics within the student survey were generated through multiple iterations by the members of the research team, the design of phase three would have been strengthened if the topics were in direct alignment to the preceding phases to assess student perceptions. Nevertheless, due to the comprehensive nature of our qualitatively driven mixed-method approach, it is recommended that future research utilize the themes, codes, and sub-codes from the present study as base codes for future investigations. Altogether, researchers could expand upon the present study by using other applied sport psychology-oriented journals and explore other research designs that could be used to uncover hot topics in applied sport psychology (e.g., a quantitatively driven mixed-method approach).

Conclusion

The current study extended previous trends in sport psychology (Lindahl et al., 2015; Weiss & Gill, 2005) by discovering contemporary hot topics in applied sport psychology research derived from multiple data sources (i.e., textbooks, contemporary research, and student perceptions). Specifically, this research represents a step toward a more holistic understanding of the popular topics in applied sport psychology research. Educators and practitioners are informed through consuming knowledge generated within applied sport psychology research to better engage in applied sport psychology practices. To that end, our results hold the potential to inform all stakeholders (e.g., practitioners, educators, and students) within the applied profession and can be used as a framework to better understand the evolution of empirical research and interests within applied sport psychology.

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References

Association for Applied Sport Psychology (2021). *Students' Center*. Association for Applied Sport Psychology. https://appliedsportpsych.org/students-center/

Creswell, J. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th ed.). SAGE Publications.

Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry and research design: Choosing among five approaches*. (4th ed.). SAGE Publications.

Crews, D. J., Lochbaum, M. R., & Karoly, P. (2001). Self-regulation: Concepts, methods, and strategies in sport and exercise. In R. Singer, H. Hausenblas, & C. Janelle (Eds.), Handbook of sport psychology (2nd ed., pp. 556-581). Wiley.

Danish, S. J., Nellen, V. C., & Owens, S. S. (1996). Teaching life skills through sport: Community-based programs for adolescents. In J. L. Van Raalte & B. W. Brewer (Eds.), *Exploring sport and exercise psychology* (pp. 205-225). American Psychological Association. https://doi.org/10.1037/10186-009

Denzin, N.K. & Lincoln, Y. (2013). *The landscape of qualitative research* (4th ed.). SAGE Publications.

Faubert, J., & Sidebottom, L. (2012). Perceptual-cognitive training of athletes. *Journal of Clinical Sport Psychology, 6*, 85-102. https://doi.org/10.1123/jcsp.6.1.85

Feltz, D. L., Forlenza, S. T., Winn, B., & Kerr, N. L. (2014). CyberBuddy is better than no buddy: A test of the Köhler motivation effect in exergames. *Games for Health Journal*, *3*(2), 98-105. https://doi.org/10.1089/g4h.2013.0088

Gardner, F. L., & Moore, Z. E. (2012). Mindfulness and acceptance models in sport psychology: A decade of basic and applied scientific advancements. *Canadian Psychology/Psychologie canadienne, 53*(4), 309-318. https://doi.org/10.1037/a0030220

Goodman, F. R., Kashdan, T. B., Mallard, T. T., & Schumann, M. (2014). A brief mindfulness and yoga intervention with an entire NCAA Division I athletic team: An initial investigation. *Psychology of Consciousness: Theory, Research, and Practice, 1*(4), 339-356. https://doi.org/10.1037/cns0000022

Griffith, C. R. (1930). A laboratory for research in athletics. *The Research Quarterly, 1*(3), 34-40.

Hill, C. E., & Knox, S. (2021). *Essentials of consensual qualitative research*. American Psychological Association. https://doi.org/10.1037/0000215-000

Hill, C. E., Knox, S., Thompson, B. J., Williams, E. N., Hess, S. A., & Ladany, N. (2005). Consensual qualitative research: An update. *Journal of Counseling Psychology, 52*(2), 196-205. https://doi.org/10.1037/0022-0167.52.2.196

Holt, N. L. (2016). *Positive youth development through sport* (2nd ed.). Routledge.

Johnson, U. (2006). Sport psychology–past, present and future: The perceptions of Swedish sport psychology students. *Athletic Insight, 8*(3), 64-78. http://www.novapublishers.org/catalog/product_info.php?products_id=7805

Johnson, U., & Andersen, M. (2019). On the Swedish road to becoming a professional practitioner in sport and exercise psychology: Students' views, hopes, dreams, and worries. *The Sport Psychologist, 33*(1), 75-83. https://doi.org/10.1123/tsp.2017-0137

Kamphoff, C. S., Gill, D. L., Araki, K., & Hammond, C. C. (2010). A content analysis of cultural diversity in the Association for Applied Sport Psychology's conference programs. *Journal of Applied Sport Psychology, 22*(2), 231-245. https://doi.org/10.1080/10413201003673153

Kansteiner, K., & König, S. (2020). The role(s) of qualitative content analysis in mixed methods research designs. Forum: *Qualitative Social Research, 21*(1). https://doi.org/10.17169/fqs-21.1.3412

Kudryavtsev, V. T. (2016). Culture as self-perception. *Cultural-Historical Psychology, 12*(3), 113-128. https://doi.org/10.17759/chp.2016120307

Landers, D. M. (1995) Sport psychology: The formative years, 1950-1980. *The Sport Psychologist, 9*(4), 406-417. https://doi.org/10.1123/tsp.9.4.406

Lefebvre, J. S., Bloom, G. A., & Loughead, T. M. (2020). A citation network analysis of career mentoring across disciplines: A roadmap for mentoring research in sport. *Psychology of Sport and Exercise, 49*, 1-11. https://doi.org/10.1016/j.psychsport.2020.101676

Lindahl, J., Stenling, A., Lindwall, M., & Colliander, C. (2015). Trends and knowledge base in sport and exercise psychology research: A bibliometric review study. *International Review of Sport and Exercise Psychology, 8*(1), 71-94. https://doi.org/10.1080/1750984X.2015.1019540

Martens, R., (1979). About smocks and jocks. *Journal of Sport Psychology, 1*(2), 94-99. https://doi.org/10.1123/jsp.1.2.94

Mattey, E., McCloughlan, L. J., & Hanrahan, S. J. (2014). Anti-vilification programs in adolescent sport. *Journal of Sport Psychology in Action, 5*(3), 135-146. https://doi.org/10.1080/21520704.2014.925528

Maxwell, J. A. (2013). *Qualitative research design: An interactive approach* (3rd ed.). SAGE Publications.

Morris, E. W. (2007). Researching race: Identifying a social construction through qualitative methods and an interactionist perspective. *Symbolic Interaction, 30*(3), 409-425. https://doi.org/10.1525/si.2007.30.3.409

Morris, J. F., & Van Raalte, J. L. (2016). Transgender and gender non-conforming athletes: Creating safe spaces for all. *Journal of Sport Psychology in Action, 7*(2), 121-132. https://doi.org/10.1080/21520704.2016.1184732

Murray, E. G., Neumann, D. L., Moffitt, R. L., & Thomas, P. R. (2016). The effects of the presence of others during a rowing exercise in a virtual reality environment. *Psychology of Sport and Exercise, 22*, 328-336. https://doi.org/10.1016/j.psychsport.2015.09.007

Schinke, R. J., Fisher, L. A., Kamphoff, C., Gould, D. R., & Oglesby, C. (2016). Certified consultants' attempts at cultural inclusiveness: An examination of four tales through the lens of the International Society of Sport Psychology Position Stand on Cultural Competence. *International Journal of Sport and Exercise Psychology, 14*(4), 353-368. https://doi.org/10.1080/1612197X.2015.1041544

Sly, D., Mellalieu, S. D., & Wagstaff, C. R. (2020). "It's psychology Jim, but not as we know it!": The changing face of applied sport psychology. *Sport, Exercise, and Performance Psychology, 9*(1), 87-101. https://doi/10.1037/spy0000163

Sparkes, A. C., & Smith, B. (2014). *Qualitative research methods in sport, exercise and health.* Routledge.

Teddlie, C., & Tashakkori, A. (2009). *Foundations of mixed methods research: Integrating quantitative and qualitative approaches in the social and behavioral sciences.* SAGE Publications.

Vallerand, R. J., Brière, N. M., Blanchard, C., & Provencher, P. (1997). Development and validation of the Multidimensional Sportspersonship Orientation Scale (MSOS). *Journal of Sport & Exercise Psychology, 19, 197-206*. https://doi.org/10.1123/jsep.19.2.197

Vealey, R., (2006). Smocks and jocks outside the box: The paradigmatic evolution of sport and exercise psychology. *Quest, 58*(1), 128-159. https://doi.org/10.1080/00336297.2006.10491876

Vickers, J. N. (1996). Visual control when aiming at a far target. *Journal of Experimental Psychology: Human Perception and Performance, 22*, 342-354. https://doi.org/10.1037/0096-1523.22.2.342

Vickers, J. N. (2016). The quiet eye: Origins, controversies, and future directions. *Kinesiology Review, 5*, 119-128. http://dx.doi.org/10.1123/kr.2016-0005

Weinberg, R. S., & Gould, D. (2015). *Foundations of sport and exercise psychology* (6th ed.). Human Kinetics.

Weinberg, R. S., & Gould, D. (2019). *Foundations of sport and exercise psychology* (7th ed.). Human Kinetics.

Weinberg, R., Neff, R., & Jurica, B. (2012). Online mental training: Making it available for the masses. *Journal of Sport Psychology in Action, 3*(3), 182-192. https://doi.org/10.1080/21520704.2012.656833

Weiss, M. R., & Gill, D. L. (2005). What goes around comes around: Re-emerging themes in sport and exercise psychology. *Research Quarterly for Exercise and Sport, 76*(2 Suppl), S71-S87. https://doi.org/10.1080/02701367.2005.10599291

Williams, J. M., & Krane, V. (Eds.). (2015). *Applied sport psychology: Personal growth to peak performance* (7th ed.). McGraw-Hill.

Williams, J. M., Zinsser, N., & Bunker, L. (2015). Cognitive techniques for building confidence and enhancing performance. In J. M. Williams & V. Krane (Eds.), *Applied sport psychology: Personal growth to peak performance* (7th ed., pp. 274-303). McGraw-Hill Education.

Wylleman, P., Harwood, C. G., Elbe, A. M., Reints, A., & de Caluwé, D. (2009). A perspective on education and professional development in applied sport psychology. *Psychology of Sport and Exercise, 10*(4), 435-446. https://doi.org/10.1016/j.psychsport.2009.03.008

Yates, D. H. (1943). A practical method of using set. *Journal of Applied Psychology, 27*(6), 512-519. https://doi.org/10.1037/h0053629

Zhang, C-Q., & Baltzell, A. (2019). Towards a contextual approach to athletic performance enhancement: Reflections, perspectives, and applications. *Journal of Sport Psychology in Action, 10*(4), 195-198. https://doi.org/10.1080/21520704.2019.1643613