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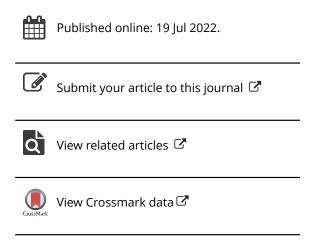
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Challenging the status quo of sport injury psychology to advance theory, research, and applied practice: An epilogue to a special issue

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ABSTRACT

In this epilogue to the Special Issue of Journal of Applied Sport Psychology on sport injury psychology, we consider how the five papers presented within have advanced this field of research in three meaningful ways: (a) moving beyond models (theoretical diversification); (b) working "with" rather than "on" participants (research diversification); and (c) moving beyond the "usual suspects" (applied diversification). We hope the next wave of research on sport injury psychology builds upon these studies to keep pushing the boundaries of our understanding of sport injury.

Lay summary: In this epilogue to the Special Issue, we consider how the papers presented within extend our understanding of sport injury and push the boundaries of the field of sport injury psychology. A shift toward more diverse scholarship to extend theory, research, and practice is encouraged.

ARTICLE HISTORY

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Although the field of sport injury psychology has continued to evolve and expand in its advancement of theory, research, and practice, we would argue that in some ways it has remained streamlined since its inception. By streamlined, we mean how researchers continue to conceptualize sport injury through a models-based approach, frame their aim and scope in individualistic or personal terms (i.e., focus on injured athletes "inner" world of thoughts and feelings and how others can help them), work "on" rather than "with" their participants through the methodologies and methods they employ, and examine cognitive-behavioral interventions (e.g., psychological skills) that seek to reframe "maladaptive" thoughts with more "adaptive" ones. Although this approach to research has served this field well (and will continue to) in terms of advancing our understanding of sport injury and how sport psychologists can work with injured athletes, we are proud how the papers in this special issue help to further expand and diversify our understanding of sport injury by promoting new ways of knowing. To be clear, we are not recommending that this streamlined approach to sport injury psychology research should be abandoned; quite the contrary. This special issue encourages a shift toward more diverse scholarship and new ways of knowing, which we believe will lead to a further enriched field of research that continues to push the boundaries of our understanding of sport injury.

In this epilogue to the Special Issue of Journal of Applied Sport Psychology on sport injury psychology, we showcase how the studies presented within significantly extend this field of research in at least three meaningful ways: theoretical, research, and applied diversification. Indeed, the main thread running throughout the studies in this special edition is, namely, diversification. The following three subsections elaborate on how the studies help to diversify theory, research, and practice, respectively.

Moving beyond models: theoretical diversification

In the first special issue on sport injury psychology published in the Journal of Applied Sport Psychology over 20 years ago (Brewer, 1998), two models were published: Williams and Andersen's (1998) multi-component model of stress and injury and Wiese-Bjornstal et al. (1998) integrated model of response to sport injury. Both these models are informed and underpinned by cognitive-behavioral thought and focus on and center around injured athletes' cognitive appraisals, which are suggested to impact injury onset and athletes' responses to and rehabilitation from sport injury. For example, Wiese-Bjornstal et al. (1998) reported, "... the core of the integrated model-as is consistent with the psychology literature on the stress process-posits that cognitions, such as self-perceptions, are important because they in turn influence the emotional and behavioral responses of athletes to injury" (p. 50). These models were groundbreaking and significantly helped to enhance our understanding of sport injury, for which this field of research is greatly indebted; they have been instrumental in the construction of systematic lines of research, assisted researchers' interpretations of their datasets, and guided the development of preventative and rehabilitation interventions to support injured athletes. They have become the "go to" models to frame, guide, and interpret sport injury psychology research. Yet, while we stop, reflect, and recognize the significance of these models, it is also important to recognize what the authors of these models did not set out to do and perhaps consider building upon and moving beyond a models-based approach.

First, the authors of these models did not set out to provide theoretical explanations of sport injury. The models are descriptive and were never intended to explain how various concepts individually and collectively impact and are impacted by sport injury (Brewer, 2020). Second, the models are reductionistic and individualistic (Wadey, 2020). Given their cognitive-behavioral underpinning, the spotlight is on the "inner" world of injured athletes. Although the social context is acknowledged, primacy is given to the way athletes' think and interpret the situations they find themselves in (e.g., demanding athletic situation, rehabilitation). Here, we would argue that both models take a "thick individual" and "thin social relational" view of sport injury (Smith & Sparkes, 2008). Furthermore, given the primarily cerebral underpinning of the models, the physical body is omitted or given minimal attention within them. Given sport injury is a bodily experience (e.g., Allen-Collinson, 2017; Hall et al., 2022), this disembodied portrayal of injury is surprising, especially as "... thoughts, feelings, and behaviors are grounded in sensory experiences and bodily states" (Meier et al., 2012, p. 2). Lastly, the models

locate the problems experienced by athletes prior to or following injury squarely within the individual (e.g., they are not thinking correctly, they lack personal resilience). Put another way, they are to blame for their injury and how they respond to injury. In presenting the injury experience in this way, the broader social context is left under-theorised and unchallenged. This observation might explain why all the experimental intervention studies conducted in the sport injury psychology literature focus on upskilling injured athletes (Ledingham et al., 2020). Indeed, these interventions call on athletes to develop the resources to personally take care of their own physical and mental health. As a result, the social-cultural environment gets "brushed under the carpet" and its status quo is maintained. Although some applied sport psychologists might argue that issues beyond the "inner" world of athletes are beyond their role, we would challenge them. We argue that this is a narrow and short-cited view and how internalizing and promoting this view can make practitioners complicit in the reproduction of potentially damaging practices that lead to injury and/or devastating responses following injury.

We are proud that the authors of the papers within this special issue have moved beyond a models-based approach to open new ways of knowing. By drawing on diverse theoretical lens that broaden our analytical gaze beyond the "inner" world of injured athletes' experiences, they have brought a critical social consciousness to the field of sport injury psychology and challenged the neo-liberal agenda that injured athletes are the "problem." To illustrate, the paper by Kerry McGannon et al. (2021) in this special issue extends the literature by drawing upon media research (see McGannon & McMahon, 2020) and narrative theory (Frank, 2013) to explore retirement and injury in a cultural context of a high-profile athlete in the National Football League. Specifically, they turn their analytical gaze on how the media as a cultural site circulate stories within narratives that frame them to convey meanings (e.g., injury is normal) and values (e.g., playing through pain). Rather than taking a "thick individual" and "thin social relational" perspective, they take a "thin individual" and "thick social relational" perspective to learn more about the social-cultural construction of sport injury. To further expand our social consciousness, the study by Casandra Seguin and Diane Culver (2001) used Bronfenbrenner's Ecological Systems Theory (EST; 1992) to frame their research and extend the literature by taking a more "holistic" view of sport-related concussions (SRC). The authors reported how SRC research has not yet explored psychological, social, and cultural factors and how they interrelate, and shape lived experience. Specifically, Bronfenbrenner's EST comprises five systems: microsystem (e.g., intrapersonal experiences), mesosystem (e.g., coach-athlete relationship), exosystem (e.g., concussion protocols), macrosystem (e.g., sport culture), and chronosystem (e.g., life span). By drawing on EST, the authors theorize about and provide evidence of how the social context impacts SRC. They also reflect on how sport psychologists could advocate for injured athletes and challenge damaging cultures (see Heil, 2016). In the future, researchers should continue to draw from diverse theoretical perspectives to enrich their datasets and grapple with the complexity of sport injury. That said, it is important to recognize that theory can be used in a variety of ways. It is not always about "testing" theory, sport injury psychology researchers might also aim to "build" theory and "apply"

theory (Cassidy, 2019). Put another way, "... there is plenty of room for theoretical growth in sport injury psychology" (Brewer, 2020, p. 235).

Working "with" rather than "on" our participants: research diversification

In her critical pursual of the sport injury psychology literature, Leggat (2020) raised concerns about how researchers are currently *doing* research. She outlined how the common methodological approach by injury researchers who have published in sport psychology journals has been to construct their own research questions, devise their own methodologies and methods, collect data "on" participants, interpret their datasets and write up their results themselves, and disseminate the findings through conferences and peer-review journals. Although this approach has its merits, Leggat argued that this methodological approach is likely to restrict the uptake of research in applied practice. She recommended that researchers should work "with" rather than "on" our participants to help bridge the evidence-practice gap that prevails in sport psychology generally and sport injury psychology specifically (see Leggat, 2020; Leggat et al., 2021). As Verhagen (2012) suggested, "if Mohammed will not come to the mountain, then the mountain must come to Mohammed" (p. 8).

We are delighted how the papers in this Special Issue have challenged the dominant way of doing research and have further elaborated upon how researchers might work with participants to bring them into our research to maximize research uptake and impact. In the study by Cassandra Seguin and Diane Culver (2021), they embraced a novel methodological approach in the sport injury psychology literature: collaborative inquiry. According to Bray et al. (2000), collaborative inquiry is an active process of engagement in reflection and action through which a group of peers (i.e., athletes and researchers) work together to address questions that are of relevance and importance to the group. Specifically, three central tenets of collaborative inquiry were drawn upon: (a) peers (i.e., athletes and researchers) are considered co-researchers, which entailed collaborative decision making, discussion, and reflection; (b) cycles of reflection and action are at the heart of this methodology, revealing this strategy as "a powerful approach to learning from experience and, simultaneously, a valid method of conducting inquiry into the nature of human experience" Bray et al., 2000, p. 10); and (c) research questions are of importance to all inquiries, supporting the notion that each co-researcher is legitimately equal (cf. Smith et al., 2022). Yet, while this study illustrated the importance of using a methodology that involves working with athletes who have experienced concussion to enrich our evidence-base, Evans and Brewer (2021) in their paper in this Special Issue go one step further and critically reflect on how our evidence-base could become translated and embedded in professional practice by working with those who we aim to serve and support.

Framing their argument around the metaphor-"valley of death"-Evans and Brewer (2021) argued that few interventions or protocols originating in sport injury psychology have become standard practice in the delivery of services to athletes before or after injury. Thus, perpetuating a "research-practice gap" or "know-do" gap (Leggat, 2020). The authors argue, "Before the valley can be crossed, it must first be reached with relevant, meaningful, application-ready research findings in hand" (p. 2). To do this, they

emphasized the importance of aligning with the needs of and understanding the context in which applications are likely to occur and how primary "targets" for the application of knowledge (e.g., athletes, coaches, health-care professionals) should be an integral part of the research design process. It was recommended that sport injury psychology researchers consider the field of implementation science (IS), which offers a theoretically grounded approach to increasing research uptake in practice to help facilitate the translation of research into practice. IS is the "scientific study of methods to promote the systematic uptake of research findings and other evidence-based practices into routine practice, and, hence, to improve the quality and effectiveness of health services and care" (Eccles & Mittman, 2006, p. 1). This novel approach to research might be done by facilitating the translation of existing research into practice or by challenging the traditional "top-down" academic-led research. Here, researchers might consider a shift toward more active collaboration between researchers and participants in all aspects of the research process (e.g., shaping the research questions, research methods, interpretation of findings, and implementation of research results; Leggat, 2020). We applaud Evans and Brewer (2021) for raising attention to this timely and critical issue and for offering several helpful avenues for researchers to help move our discipline across the "valley of death."

Moving beyond the "usual suspects": applied diversification

There is a growing body of evidence that explores the efficacy and effectiveness of interventions that aim to lower of the risk of sport injury and support injured athletes' rehabilitation and/or return to competitive sport (see Gledhill et al., 2018; Ledingham et al., 2020). Thus far, findings have been encouraging and offered empirical support for the use of psychological skills such as goal setting, imagery, and self-talk, showing them to have desirable impacts on cognitions (e.g., boost confidence), emotions (e.g., reduce "negative" mood), and behaviors (e.g., adherence). Although these findings are encouraging and more research is required to understand the mechanisms by which these interventions exert their effects, Wadey (2020) recently also encouraged researchers to become more diverse and to shift away from solely examining the "usual suspects" (i.e., psychological skills), which are underpinned by a cognitive-behavioral framework. This critical view challenged the notion of "best-practice" and the notion of winnowing out ineffective practices, which was predicated on the assumption that the broader the array of available practices, the greater the number of athletes who will find help. We were excited to see how the papers in this Special Issue that did just that; they examined or proposed novel ways to intervene pre or post injury.

In the study by Luuk van Iperen et al. (2022), they sought to reduce running-related injuries (RRIs) and chronic fatigue among long distance runners. The novelty of this study was that they used a mobile application ("app") called "Running and Exercise Mental Break Optimisation" (REMBO). The app collects 12 statements (e.g., tiredness, irritability, bodily pain, feeling forced to go running), which runners' rate on a 7-point answer glider from 1 ("disagree) to 7 ("agree") to assess their current physical and mental load capacity. After rating these statements, participants were given personalized advice using a traffic light system. If their load capacity was assessed to be sufficient,

then runners were advised keep listening to their body and to initiate their training as planned (i.e., a green light). If their load capacity was assessed as questionable, then runners were advised to reduce their planned run (i.e., an orange light). If the load capacity was assessed as insufficient, then the advice was given to not run at all (i.e., a red light). By supporting runners' self-regulation through the REMBO app, the authors hypothesized that runners who frequently run beyond their limits would more often and more adequately balance their training load with their training capacity, resulting in a lower risk of sustaining RRIs and a low chronic fatigue. Although no significant difference between the REMBO app condition and the control group for RRIs and chronic fatigue was identified, it was encouraging that some of the individuals who participated found it of use. For example, "the app taught me to more consciously deal with injuries, I need to give some thought to whether it's responsible and useful to run so far or long" (p. 18). We applaud the authors for going into the unknown, for trying something new. We also echo their conclusion that researchers should strive for multi- and interdisciplinary approaches to injury prevention to push the boundaries of our knowledge and understanding.

The study by Katherine Tamminen and Jeanne Watson (2022) also goes into the unknown by providing a position paper that considered a new way applied sport practitioners can work with injured athletes. Although the dominant approach to-date in the literature has been on cognitive-behavioral approaches that focus on cognitions and seek to "control injury-related stress and anxiety" (Wiese-Bjornstal et al., 2020, p. 729), the authors in this article proposed the use of emotion-focused therapy (EFT), where the aim is to work with "with" emotion instead on working "on" emotions. Indeed, this approach involves working with athletes in a therapeutic setting to evoke and experience emotions, attend to, and label emotions, and help athletes to process their experience by exploring, reflecting on, and making sense of their emotions. For example, while some athletes might tend to "stay in their heads" by engaging in rationalization and cognitive re-appraisals in their efforts to process injury-related emotions, in doing so they ignore the information from their bodies. These efforts might represent a "search for solutions" rather than acknowledging and expressing emotions that arise within the injury experience. Given how emotions are central in athletes' sport injury experiences (see Tamminen et al., 2020) and how EFT is a robust, empirically-supported therapeutic approach grounded in experiential therapy and emotion theory, EFT holds much promise in our field. The authors also bring EFT to life in their rich examples of some of the challenges and conflicts that arise within athletes' injury experiences as well as "in vivo" examples of doing EFT in practice. We hope in the future, researchers build upon this study to examine the efficacy and effectiveness of EFT and consider new ways of working with injured athletes directly and beyond (e.g., dyads, multidisciplinary teams, organizations, cultures; Wadey et al., 2018).

Conclusion

We Are Proud Of The Papers That Have Been Published In This Special Issue And Are Sincerely Thankful To The Authors And Reviewers For Their Expertise. We Believe These Papers Have Made A *Significant* Contribution To Our Field And Have Helped

To Advance Theory, Research, And Practice In Sport Injury Psychology. Specifically, They Have Introduced New Ways Of Theorizing About Sport Injury, Expanded Our Social Consciousness Of The Social-Cultural Factors That Can Impact Athletes Lived And Embodied Experiences, Challenged The Neo-Liberal Agenda That Injured Athletes Are The "Problem." Embraced Novel Methodologies And Considered What Is Needed To Get Our Research "Out There." And Attempted And Offered New Ways Of Working With Athletes Pre And Post Injury. We Hope The Next Wave Of Research Is Diverse In Its Theoretical Orientation, Methods, And Applied Practice To Help Generate New Ways Of Knowing That Push The Boundaries Of Our Understanding Of Sport Injury.

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References

- Allen-Collinson, J. (2017). Injured, pained and disrupted bodies. In M. L. Silk, D. L. Andrews, and H. Thorpe (Eds.), Routledge handbook of physical cultural studies (pp. 267-276). Routledge.
- Bray, J. N., Lee, J., Smith, L. L., & Yorks, L. (2000). Collaborative inquiry in practice: Action, reflection, and meaning making. SAGE.
- Brewer, B. (2020). Three decades later: Looking back to look forward. In R. Wadey (Ed.), Sport injury psychology: Cultural, relational, methodological, and applied considerations (pp. 232-247). Routledge.
- Brewer, B. W. (1998). Introduction to the special Issue: Theoretical, empirical, and applied issues in the psychology of sport injury. Journal of Applied Sport Psychology, 10(1), 1-4. https://doi. org/10.1080/10413209808406374
- Bronfenbrenner, U. (1992). Ecological systems theory. In R. Vasta (Ed.), Six theories of child development: Revised formations and current issues (pp. 187-249). Jessica Kingsley Publishers.
- Cassidy, T. (2019). The role of theory, interpretation and critical thought within qualitative sport and exercise research. In B. Smith & A. C. Sparkes (Eds.), Routledge handbook of qualitative research in sport and exercise (pp. 397-408). Routledge.
- Eccles, M. P., & Mittman, B. S. (2006). Welcome to implementation science. Implementation Science, 1(1), 376-381. https://doi.org/10.1186/1748-5908-1-1
- Evans, L., & Brewer, B. (2021). Applied psychology of sport injury: Getting to-and moving across-the valley of death. Journal of Applied Sport Psychology, 2021, 1-18. https://doi.org/10. 1080/10413200.2021.2015480
- Frank, A. (2013). The wounded storyteller. University of Chicago Press.
- Gledhill, A., Forsdyke, D., & Murray, E. (2018). Psychological interventions used to reduce sports injuries: A systematic review of real-world effectiveness. British Journal of Sports Medicine, 52(15), 967–971. https://doi.org/10.1136/bjsports-2017-097694
- Hall, L., Rhodes, P., & Papathomas, A. (2022). Embodied experiences of injured endurance runners: A qualitative meta-synthesis. Qualitative Research in Sport, Exercise and Health, 14(4), 628-647. https://doi.org/10.1080/2159676X.2021.1989020
- Heil, J. (2016). Sport advocacy: Challenge, controversy, ethics, and action. Sport, Exercise, and Performance Psychology, 5(4), 281–295. https://doi.org/10.1037/spy0000078
- van Iperen, L. P., de Jonge, J., Gevers, J. M. P., Vos, S. B., & Hespanhol, L. (2022). Is self-regulation key in reducing running-related injuries and chronic fatigue? A randomised controlled



- trail among long-distance runners. Journal of Applied Sport Psychology, 2022, 1-28. https://doi. org/10.1080/10413200.2021.2015479
- Ledingham, K., Williams, T., & Evans, L. (2020). Experimental psychological response to injury studies: Why so few? In R. Wadey (Ed.), Sport injury psychology: Cultural, relational, methodological, and applied considerations (pp. 155-171). Routledge.
- Leggat, F. J. (2020). Introducing knowledge translation into the field of sport injury psychology: The art of improving research uptake in practice. In R. Wadey (Ed.), Sport injury psychology: Cultural, relational, methodological, and applied considerations (pp. 232-247). Routledge.
- Leggat, F. J., Wadey, R., Day, M. C., Winter, S., & Sanders, P. (2021). Bridging the know-do gap using integrated knowledge translation and qualitative inquiry: A narrative review. Qualitative Research in Sport, Exercise, and Health, 2021, 1-14. https://doi.org/10.1080/2159676X.2021. 1954074
- McGannon, K. R., & McMahon, J. (2020). Sport media research: Examining the benefits of sport injury psychology and beyond. In R. Wadey (Ed.), Sport injury psychology: Cultural, relational, methodological, and applied considerations (pp. 25-35). Routledge.
- McGannon, K. R., Staden, T. G., & McMahon, J. (2021). From superhero to human: A narrative analysis of digital news stories of retirement from the NFL due to injury. Journal of Applied Sport Psychology, 2020, 1-20. https://doi.org/10.1080/10413200.2021.1987351
- Meier, B. P., Schnall, S., Schwarz, N., & Bargh, J. A. (2012). Embodiment in social psychology. Topics in Cognitive Science, 4(4), 705-716. https://doi.org/10.1111/j.1756-8765.2012.01212.x
- Seguin, C. M., & Culver, D. M. (2021). The lived experience of sport-related concussion: A collaborative inquiry in elite sport. Journal of Applied Sport Psychology, 2021, 1-22. https://doi. org/10.1080/10413200.2021.1998804
- Smith, B., & Sparkes, A. C. (2008). Contrasting perspectives on narrating selves and identities: An invitation to dialogue. Qualitative Research, 8(1), 5-35. https://doi.org/10.1177/2F1468794107085221
- Smith, B., Williams, O., Bone, L., & Moving Social Work Co-Production Collective. (2022). Co-Production: A resource to guide co-producing research in the sport, exercise, and health sciences. Qualitative Research in Sport, Exercise and Health, 1-29. https://doi.org/10.1080/2159676X. 2022.2052946
- Tamminen, K. A., Dunn, R., & Gairdner, S. (2020). Time to re-examine injured athletes' emotional responses. In R. Wadey (Ed.), Sport injury psychology: Cultural, relational, methodological, and applied considerations (pp. 96-107). Routledge.
- Tamminen, K. A., & Watson, J. C. (2022). Emotion focused therapy with injured athletes: Conceptualising injury challenges and working with emotions. Journal of Applied Sport Psychology, 2022, 1-25. https://doi.org/10.1080/10413200.2021.2024625
- Verhagen, E. (2012). If athletes will not adopt presentative measure, effective measures must adopt athletes. Current Sports Medicine Reports, 11(1), 7-8. https://doi.org/10.1249/jsr. 0b013e318240dabd
- Wadey, R. (2020). Sport injury psychology: Cultural, relational, methodological, and applied considerations. Routledge.
- Wadey, R., Day, M. C., Cavallerio, F., & Martinello, L. (2018). The multi-level model of sport injury: Can coaches impact and be impacted by injury? In R. Thelwell & M. Dicks (Eds.), Professional advances in sports coaching: Research and practice (pp. 408-440). Routledge.
- Wiese-Bjornstal, D. M., Smith, A. M., Shaffer, S. M., & Morrey, M. A. (1998). An integrated model of response to sport injury: Psychological and sociological dynamics. Journal of Applied Sport Psychology, 10(1), 46-69. https://doi.org/10.1080/10413209808406377
- Wiese-Bjornstal, D. M., Wood, K. N., & Kronzer, J. R. (2020). Sport injuries and psychological sequelae. In G. Tenenbaum & R. C. Eklund (Eds.), Handbook of sport psychology (pp. 711-737). Wiley.
- Williams, J. M., & Andersen, M. B. (1998). Psychosocial antecedents of sport injury: Review and critique of the stress and injury model. Journal of Applied Sport Psychology, 10(1), 5-25. https://doi.org/10.1080/10413209808406375