

Guidelines for writing applied case studies in sport and exercise psychology

Richard James Keegan*, Robert Schinke**, Sharon Chirban***, Natalie Durand-Bush, S.
 Baggio**** and Stewart Cotterill*****

DIRECTRICES PARA ESTUDIOS DE CASO DE LA PRÁCTICA DE LA PSICOLOGÍA DEL EJERCICIO Y DEPORTE

KEYWORDS: Introduce guidelines, case studies, practitioners, applied practice, supervised experience, training.

ABSTRACT: While there has been a significant expansion of continued professional development opportunities in recent years, there has often, historically, been a reluctance for sport and exercise psychologists to both share, and receive feedback on their professional practice (Cotterill, Weston and Breslin, 2016). The recent development of the new Case Studies in Sport and Exercise Psychology journal, a flagship journal of the Association for Applied Sport Psychology, supports an increasing appetite for this type of dissemination. Building upon these recent developments this paper draws on the experience of several experienced practitioners, who are also supervisors, assessors and journal editors in applied sport and exercise psychology. Guidelines for the preparation of applied case studies are offered as an aid for practitioners who are seeking to both publicise and share their work, and/or contribute to the literature and current knowledge in this area. We argue that the voices of practitioners represent an important component of any scientific literature, and we encourage practitioners to both share their work; reflect on the effectiveness of different approaches and techniques, and engage in the ongoing debate that characterizes scientific progress. In this way, we seek to help address the criticism that literature in sport and exercise psychology is too theoretically focused, and not representative of the ‘real-world’. We seek to help close the research-practice ‘gap’.

Recent papers in sport and exercise psychology have re-emphasised the benefits of, and necessity for, published case studies describing and reflecting on applied practice (e.g., Cotterill, Schinke, and Thelwell, 2016; Hassmén, Keegan, and Piggott, 2016; Keegan, 2014, 2016a, 2016b; Keegan, Cotterill, Woodway, Appaneal, and Hutter, *this issue*). Numerous case studies are produced by practitioners while undergoing training and supervised practice, or completing university courses (Virués-Ortega and Moreno-Rodríguez, 2008). However, case studies produced by experienced or senior practitioners are more sparse in the sport and exercise psychology literature (Cotterill

et al., 2016; Hassmén et al., 2016; Hemmings and Holder, 2009; Tashman and Cremades, 2016).

The hypothesised reasons for this apparent absence of published case studies recur across many different scientific fields (Norman, 2010). First, practitioners are rarely judged on their publication record, but rather their ability to recruit sufficient clients to run a business, and to deliver results for those clients. They do not typically write papers, and are therefore not in a position to provide valuable citations to researchers, who *are* often judged by citations and ‘impact’. Secondly, practitioners often feel that the literature in their field is increasingly unhelpful, abstract, and self-serving, with little

85 Correspondence: Richard Keegan. Address for Correspondence: Research Institute for Sport and Exercise Science, University of Canberra, Haydon Drive, Bruce, Australia ACT 2601, Australia. Tel: +61 (0) 2 6201 2971 and +61 (0) 457 276 419. E-mail: richard.keegan@canberra.edu.au
 * Research Institute for Sport and Exercise Science, Faculty of Health, University of Canberra, ACT 2601, Australia
 ** School of Human Kinetics, Health, Laurentian University, 935 Ramsey Lake Rd., Sudbury, Ontario, P3E 2C6, Canada
 *** Amplifying Performance, 137 Newbury St, Boston, Massachusetts, 02116, USA.
 **** School of Human Kinetics, University of Ottawa, Montpetit Hall, 125 University, Ottawa, Ontario, K1N 6N5, Canada.
 ***** Department of Sport and Exercise, University of Winchester, Sparkford Road, Winchester, Hampshire, SO22 4NR. United Kingdom.
 Reception date: 15-05-2017. Acceptance date: 17-06-2017

relevance to applied practice. This could be detracting them from getting involved in this self-reinforcing game of publication and citation. Finally, the core values and methods of applied practice and research differ greatly (Hassmén et al., 2016; Martens, 1987; Norman, 2010).

We are seeing a gradual shift towards the publication of case studies, which is enabling practitioners to have a voice in the transfer of knowledge. This is positively contributing to the creation of a shared understanding about what ‘best practice’ entails – allowing athletes, coaches, teams, organisations and governing bodies to understand what attributes to look for when recruiting, training, and evaluating sport and exercise psychology practitioners. The process of writing case studies also benefits practitioners by offering a means for structured reflection on philosophical and theoretical counselling approaches, service delivery design, implementation methods, and effectiveness.

Where Martens (1979) originally critiqued ‘theoretical practice’ as using theories designed in controlled lab settings for ‘in the field’ work, Keegan et al. (this issue) have argued that our field should generate ‘practical theories’ with applied relevance and utility, and ‘theories-of-practice’ attempting to understand how outcomes are achieved within applied practice. Imagine the understanding and insight that could be generated by reviewing a variety of applied case studies, extrapolating reflections and meta-reflections, and exploring trends, patterns, and themes across these case studies. Presently, this opportunity is not available in sport and exercise psychology. The following guidelines for preparing applied case studies in sport and exercise psychology have been generated by the authors: a group of experienced practitioners, supervisors and assessors in applied sport and exercise psychology. Following our collective experiences, particularly in reviewing (and editing journals) for applied case studies, reflective discussions have led to the development of the following guidelines.

Components of sound case studies

Whereas many traditional, positivist research papers seem to pursue a ‘correct’ answer or ‘one’ truth – in the form of verified theory, methodology, and results – contemporary approaches to scientific enquiry that lend themselves well to case studies emphasise transparency, accessibility, and coherence as the core values (e.g., Cotterill et al., 2016; Keegan, 2016a). Editorials introducing journals dedicated to applied case

studies indeed emphasise these values over-and-above one ‘correct’ approach to conducting and reporting applied work (Cotterill et al., 2016; Keegan 2016a; Pummell and Arnold, 2014). Likewise, while scientific psychological support often takes place over a long period of time, and may address multiple issues, journal word limits (and those of regulatory bodies) restrict authors to anything between 3000-6000 words. With this need for brevity in mind, authors may want to focus on specific aspects of their support work, rather than the entire process. Such a critical analysis of events as they took place with a client in context, may help to inform the thinking of readers seeking knowledge or insight.

Figure 1, adapted from Keegan (2016a), illustrates a helpful model for informing the conduct and reporting of applied case studies. The model is not intended to represent a linear progression, but rather an outline of core identifiable processes and tasks that practitioners typically undertake when providing psychological services, which warrant discussion in any case study.

As suggested in Figure 1, it is imperative that ethics and philosophy be addressed in each case study as they are the foundation of the helping process and they help define success and failure (cf. Cotterill et al., 2016; Keegan, 2010, 2014, 2016a). Disagreements regarding a practitioner’s efficacy often emanate from differences in philosophical assumptions. Therefore, for the sake of transparency and reasoning, authors are encouraged to discuss the ethical and philosophical underpinnings of their work when writing case studies. The other components in Figure 1 are equally important and help authors to both describe and justify the work they do from the onset of a relationship to the achievement of end goals.

These suggested components can be integrated in a case study paper using headings similar to those below. Evidently, support from the literature is encouraged throughout any case study paper. The expectation is not to provide an extensive systematic review of literature, for this is not the purpose of such contributions. However, case studies must demonstrate how practitioners have drawn intelligently from the literature to conduct, explain, and evaluate their work.

Abstract

The abstract serves to summarise key aspects of the case: the situation/context and client needs, as well as the intervention, outcomes, and lessons learned.

Introduction

In the introduction, authors should clearly signpost the aims of the paper (lessons and themes, *as separate from* the aims of the psychological services provided), define key terms or concepts, and summarize the context (e.g., high school sport, recreational physical activity) in which the applied work occurred. Likewise, the introduction should detail both: (a) how ethical issues were managed, and any matters that arose with respect to ethical considerations; and (b) the assumptions and principles of practice to inform the reader of the underlying philosophy that informed the support provided. For example, it is helpful for authors to discuss their underpinning philosophies/assumptions regarding: (a) the aims of services provided (e.g., performance enhancement, athlete wellbeing, injury management, lifeskills development); (b) the assumptions regarding the nature of what was being assessed, influenced and monitored (often called epistemology, but simplified by Keegan [2016a] for applied practitioners); and (c) the style or orientation of support provided [e.g., client-led (e.g., humanistic) versus practitioner-led (e.g., classical cognitive-behavioural therapy)]. It is also important to contextualise the practitioner, outlining key factors such as education, qualification, and expertise. This further enhances the readers' understanding of why certain approaches were adopted.

Case overview

This section serves to provide a summary of the case itself. A case study can focus on: (a) an individual exerciser or sport performer; (b) a community, exercise group or sport team; or (c) a population, region, or organisation. Irrespective of the focus, a concise overview of whom or what is at the centre of the study is needed. If dealing with an organisation, information regarding its strategy, scale, and structure is needed. In the case of an individual or a group, background information, reasons for seeking support, and referral details (e.g., coach, parent, physician) should be addressed.

Intake and needs analysis

This section should detail how the intake and needs analysis was performed, including outcomes of this, given that this information is required to inform the 'case formulation'. Authors can opt to discuss differences between perceived needs versus actual needs of the client. There should be a clear attempt to *synthesise* and interpret information gathered through different methods, avoiding the reporting of disjointed and thus relatively meaningless data. The needs analysis should converge

into a coherent overall picture, even if it remained ongoing and was updated in light of ongoing support and feedback.

Case formulation and intervention selection

Authors should detail the decision-making process that led to the identification of the intervention and its aims. They should draw upon research and theory, as well as the results of the intake and needs analysis, to demonstrate why a specific intervention or technique – such as goal-setting, reframing, mindfulness training etc. – was adopted. Invariably, some kind of working model or theory is invoked that explains the client's history and predicts useful interventions/support strategies. The authors should explain if other interventions were considered, which ones they decided to pursue, and why. Clear consideration of the evidence-base must be presented, in order to demonstrate how research has informed the intervention, where possible. A link may be made to the author's philosophical assumptions, because this will be a key factor in how theory and evidence are deployed in the consultancy. Likewise, authors should explain the role/influence of the context in which the intervention took place, and do so without assuming cultural knowledge on the reader's part.

Where the case-formulation is meant to explicate the working model or theory that informed work with the client, it is important to critically evaluate both: (a) the theory/model (whether it was derived from formal literature, or whether it is a hybrid of theories, or a custom-developed working model for the client); and (b) the evidence supporting any resulting interventions or strategies (i.e., evidence-based practice). It is not so much that any intervention must be tested in randomised controlled-trials prior to use in practice, but rather that techniques should not be prescribed without carefully considering the strength (and relevance) of any available evidence. If-and-when the evidence is found to be lacking, it should be clear what actions were taken to safeguard the client, and the intervention.

Intervention plan, delivery, and monitoring

Details concerning the intervention should be presented, such that the reader can determine what was done, when and where the work was implemented, and how it relates to the stated aims. The timescale should be identified, along with the strategies used for the evaluation of progress. Similar to the methodology described in empirical studies, the intervention plan should be detailed enough so that an appropriately qualified

practitioner could replicate the intervention. For example, the authors might want to illustrate their plan with a Gantt chart. Progressions through stages would usually be expected, but it may be useful to explain why plans were changed, and the impact of such changes.

Evaluation of intervention and its outcomes

It is important that the authors provide a critical reflection of the intervention, including both expected and unexpected positive and negative outcomes, strengths and weaknesses regarding the intervention and the practitioner; as well as barriers or professional practice issues. Authors are encouraged to report what went wrong, as case studies resulting in failures and/or difficulties are more informative than self-aggrandising 'adverts'. A thorough evaluation of the process is critical to inform applied practice. It can be based on ongoing client feedback, pre and post-service delivery assessments, detailed case notes, and broader reflective practice. The latter should be underpinned by a structured approach - models of reflective practice have been specifically developed for helping professions (e.g., Gibbs, 1988; Johns, 1994). Overall, such data collection and analysis methods serve as the equivalent of those used in traditional research.

Discussion of applied, theoretical, and research implications

In concluding the case study, it is important to highlight key implications. It is also good practice to highlight limitations of the work completed and gaps in the existing evidence/knowledge base, with recommendations to address such limitations. Adopting this approach is beneficial as it draws the applied and research arms of the profession together in seeking to develop a coherent evidence base.

If the case study raises research questions, these should be clearly stated. Similarly if the case study has implications for the methods used by researchers, these should be presented as well. In the discussion, authors should ensure they address any implications from their case; for example, implications for the teaching and assessment of students and trainees. If theoretical modifications are necessitated, or caveats and exceptions to well-known theories are noted, this may also be useful. Essentially, implications of the case study for the field of sport and exercise psychology should be provided. Finally, Table 1 contains a summary of the common 'pitfalls' that authors of case studies should avoid.

Conclusion

Case studies offer a structured way to disseminate 'real life' experiences and relevant localized approaches that bridge theory and situated practice, as a reciprocal process (Cotterill et al., 2016). These sensitized practices go beyond describing 'what' was done and 'how' it was delivered, and seek to better understand the 'why' of the process. This is achieved through critical introspection and reflection on behalf of the authors, and hopefully also stimulates thoughtful reflection in the reader. Case studies offer a mechanism through which practitioners can have a voice and contribute to knowledge transfer so that research and practice can become better linked, and those working in sport and exercise psychology field can better understand various realities and critical issues requiring solutions.

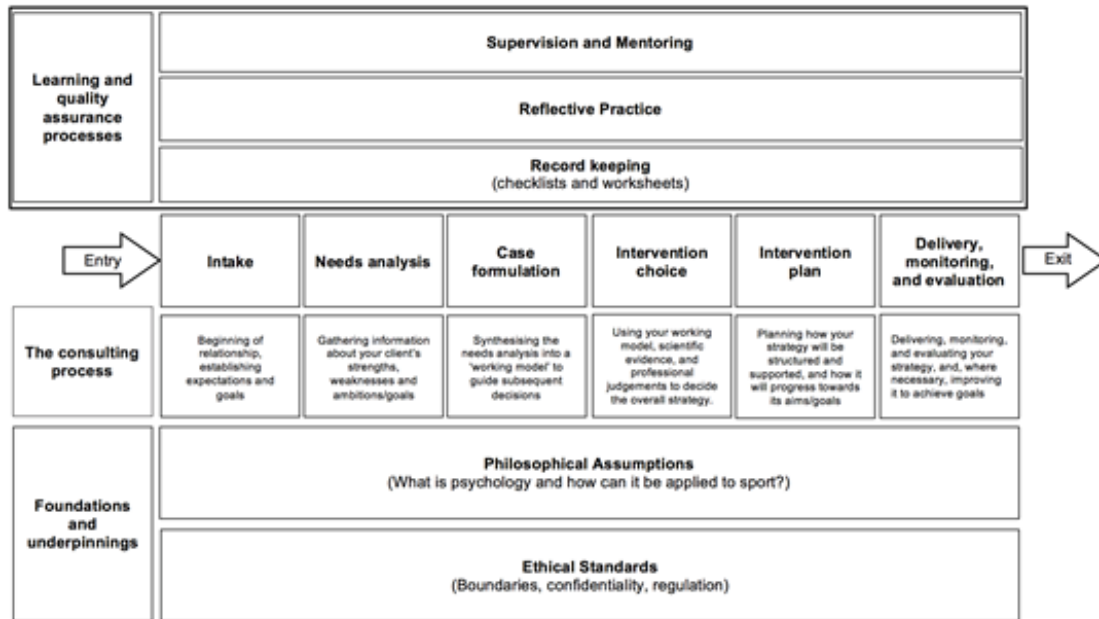


Figure 1: A heuristic overview of the typical processes and tasks carried out during the provision of applied sport and exercise psychological support (adapted from Keegan 2016a)

DIRECTRICES PARA ESTUDIOS DE CASO DE LA PRÁCTICA DE LA PSICOLOGÍA DEL EJERCICIO Y DEPORTE

PALABRAS CLAVE: Introducción de directrices, estudios de caso, profesionales, práctica aplicada, experiencia supervisada, formación.

RESUMEN: Aunque ha habido una expansión significativa de las oportunidades de desarrollo profesional continuado en los últimos años, históricamente ha habido una renuencia de los psicólogos del deporte y del ejercicio a compartir y recibir sugerencias y comentarios sobre su práctica profesional (Cotterill et al., 2016). El reciente desarrollo de la nueva revista de Estudios de Casos en el Deporte y la Psicología del Ejercicio, una revista emblemática de la Asociación de Psicología del Deporte Aplicado, apoya el creciente interés por este tipo de difusión entre profesionales. Basándose en estos recientes desarrollos, este trabajo se basa en la experiencia de varios profesionales experimentados, que también son supervisores de estudiantes, asesores y editores de revistas en el deporte aplicado y la psicología del ejercicio. Las guías para la preparación de estudios de casos aplicados se ofrecen como una ayuda para los profesionales que buscan publicar y compartir su trabajo y / o contribuir a la literatura y el conocimiento actual en esta área. Parecería que las voces de los practicantes representan un componente importante de cualquier literatura científica, y animamos a los practicantes a compartir su trabajo; Reflexionar sobre la eficacia de los diferentes enfoques y técnicas y participar en el debate actual que caracteriza el progreso científico. De esta manera, tratamos de ayudar a abordar la crítica de que la literatura en el deporte y la psicología del ejercicio es demasiado teórica, y no representativo del "mundo real". Buscamos ayudar a cerrar la "brecha" entre la investigación y la práctica.

References

- Cotterill, S. T., Schinke, R. J., and Thelwell, R. (2016). Writing manuscripts for case studies in sport and exercise psychology. *Case Studies in Sport and Exercise Psychology*, 1(1), 1-3.
- Cotterill, S. T., Weston, N., and Breslin, G. (2016). *Sport and exercise psychology: Practitioner case studies* (1st Edition). London, UK: Wiley-Blackwell.
- Hassmén, P., Keegan, R., and Piggott, D. (2016). *Rethinking sport and exercise psychology research: Past, present and future*. London, UK: Palgrave-Springer
- Hemmings, B., and Holder, T. (2009). *Applied sport psychology: A case-based approach* (1st Edition). London, UK: Wiley-Blackwell.
- Keegan, R. J. (2010). Teaching consulting philosophies to neophyte sport psychologists: Does it help, and how can we do it? *Journal of Sport Psychology in Action*, 1(1), 42–52. <http://doi.org/10.1080/21520704.2010.518663>
- Keegan, R. J. (2014). Developing a philosophy and theoretical framework: Mapping a rich and complex landscape for the brave explorer. In G. Cremades and L. Tashman (Eds.), *Becoming a sport, exercise, and performance psychology professional: A global perspective*. London, UK: Routledge Psychology Press.
- Keegan, R. J. (2016a). *Being a sport psychologist*. London, UK: Palgrave Higher Education.
- Keegan, R. J. (2016b). Developing a philosophical and theoretical framework: Two cases that changed my approach to consulting style. In L. S. Tashman and G. Cremades (Eds.), *Global practices and training in applied, sport, exercise, and performance psychology: A case study approach* (pp. 58–68). London, UK: Routledge Psychology Press.
- Keegan, R.J., Cotterill, S., Woodway, T., Appaneal, R., and Hutter, V. (in press). Strategies for bridging the research-practice ‘gap’ in sport and exercise psychology. *Revista de Psicología del Deporte*.
- Martens, R. (1979). About smocks and jocks. *Journal of Sport Psychology*, 1, 94-99.
- Martens, R. (1987). Science, knowledge, and sport psychology. *The Sport Psychologist*, 1, 29–55.
- Norman, D. (2010). The research-practice gap. Retrieved September 29, 2015, from http://www.jnd.org/dn.mss/the_research-practic.html
- Pummell, E. and Arnold, J. (2014). Psychology section editorial. *Journal of Applied Case Studies in Sport and Exercise Science*, 1, 13-16.
- Virúés-Ortega, J., and Moreno-Rodríguez, R. (2008). Guidelines for clinical case reports in behavioral clinical psychology. *International Journal of Clinical and Health Psychology*, 8(3), 765-777.