

## **Reflecting back and forwards: An evaluation of peer-reviewed reflective practice research in sport**

### **Abstract**

Researchers in sport have claimed that reflective practice is important for competent practice. Evidence supporting this claim is sparse, highly theoretical and located within a variety of domains. The aim of this study was to assimilate and analyse the last twelve years of reflective practice literature within the sport domain in order to identify new areas of inquiry, emerging trends with regards to findings or methodology, and to identify implications for future research and practice. A sample of 68 papers published between 2001 and 2012 was examined, and investigated for the research locations, data collection methods utilized, and the professions and communities involved. The paper concludes with some suggestions for future research.

**Keywords:** reflective practice, reflection, sport, practitioner development, review

## Introduction

A practitioner can be described as a person engaged in the practice of a profession or occupation and in sport this may be, for example, a sport psychologist, a sport scientist or a coach. Over the last twelve years researchers have debated how these sport-based practitioners learn their craft, develop expertise, become effective within their roles and as a consequence have discussed reflective practice themes and processes (Cropley, Hanton, Miles, & Niven, 2010). In one of the first discussions of reflective practice in sport science pedagogy, Knowles et al. (2001) noted that the development of expertise is “often acquired through a mixture of ‘professional knowledge’ based programs (e.g., academic courses or coaching awards) and practical experience within the sports setting (through supervised experience or in/post-course placement)” (p. 185). However, knowledge and experience alone are not necessarily enough to develop effectiveness in ever-changing environments where textbooks do not always provide solutions to real life problems.

The context of sports performance is dynamic and complex and thus requires practitioners to be flexible and progressive in the way they approach their work. Arguably, professional training pathways for sports practitioners should facilitate the development of such competencies and this responsibility often rests with governing or accrediting bodies. For example, the British Association of Sport and Exercise Sciences (BASES), who accredit sport and exercise scientists in the UK, overview professional training opportunities and processes in these fields respectively. Other organisations exist in the UK and beyond also regulate professionals working within the sporting environment such as the British Psychological Society (BPS; UK), Association for Applied Sport Psychology (AASP; USA), and Australian Institute of Sport (AIS; Australia).

For the purposes of this paper, accreditation bodies within the UK have adopted practices and generic approaches to professional development influenced by practice from

allied domains. According to Knowles, Gilbourne, Tomlinson, and Anderson (2007) both BASES and the BPS have utilised the tenets of reflective practice long established within nursing, health, education, and psychology disciplines (e.g. clinical, health, educational, counselling psychology). These allied disciplines share similar characteristics to that of sport whereby practice environments are multifaceted, requiring sport practitioners to develop both professional and craft-based knowledge, the latter being grounded in the day-to-day practical, context-specific experience (Knowles et al., 2001). Reflective practices whether at a technical, practical, or critical level (see Anderson, Knowles & Gilbourne, 2004), have been consistently identified as a key construct in enhancing the competence and effectiveness of practitioners within medical education (e.g., Gordon & Campbell, 2013), nursing (e.g., Kinsella, 2010), social work (e.g., Wilson, 2012) and clinical psychology (e.g., Binks, Jones, & Knight, 2013).

In an attempt to overcome some of the definitional issues associated with reflective practice in the sporting domain, this paper adopts the following understanding, “A purposeful and complex process that facilitates the examination of experience by questioning the whole self and our agency within the context of practice. This examination transforms experience into learning, which helps us to access, make sense of and develop our knowledge-in-action in order to better understand and/or improve practice and the situation in which it occurs” (Knowles, Gilbourne, Cropley, & Dugill, 2014). Similar to the historical debates in other professions, sport-based research to date has focused upon the underlying rationale, the utility, and the value of reflective practice for practitioner development. As an example, these issues all feature in differential ways amongst a recent commentary on reflection around the elite sport setting, (Knowles, Katz, & Gilbourne, 2012). Here, the authors suggest that although reflective practice features within the training and development curricula of BASES (2009) and BPS (2011), critique over the role and efficacy of reflective processes remain.

Reflective practice research in the sport domain is seen across a number of disciplines and levels of expertise. For example, neophyte or practicing sport psychologists (e.g., Cropley, Miles, Hanton, & Niven, 2007); sports coaches (e.g., Nelson & Cushion, 2006); and within a consultancy setting with athletes (e.g., Faull & Cropley, 2009). These authors have advocated the value of reflective practice. However, the supportive literature drawn on by these authors to make such claims remains mostly theoretical or exploratory. Consequently, there have been increasing calls for empirical-based research to evidence the efficacy and impact of reflective practice for practitioners or athlete development (Picknell, Cropley, Hanton, & Mellalieu, 2014). This suggests a ‘slippage’ of sorts between research and practice. Here, the currency of reflective practice remains high within the contemporary applied literature and across training curricula, but little evidence is on offer to those designing training programs in regards to the what’s, when’s and how’s of reflective practice and how it might be developed within practitioner training pathways. Consideration is given here as to the gaps between theory and practice, as well as providing a more informed evidence-based view of reflective practice is perhaps pedagogically essential for the consumer (e.g., trainee or established practitioner, educator, athlete). In a similar vein, Mann, Gordon, and MacLeod (2009) argued that little guidance was available as to how reflection and reflective practice should be developed within a medical education setting. Specifically, they investigated the key variables that influenced reflective practice, locate gaps in the evidence base and explore future implications by conducting a review of the existing literature in this area. The findings offer some insight into potential avenues for future reflective practice research in the sports domain.

Given the increasing presence of reflective practice research across the applied sports literature, and its appearance in professional training programs in the UK, it seems timely to pause and examine how reflective practice texts have progressed to that of the present day.

To achieve this, a collation and analysis typically associated with a review of literature evidenced previously in other areas of sport (e.g., Culver, Gilbert, & Trudel, 2003; Culver, Gilbert, & Sparkes, 2012) has been adopted. The current paper aims, therefore, to assimilate, analyse and present the last twelve years of reflective practice literature within the sport domain. Research questions included the following: how many peer-reviewed papers were published between 2001-2012 focusing on reflective practice or reflection within 'sport'? Who are the producers and consumers of the research? What methodologies and data collection methods were utilised? Where did the research take place and what are the peer-review outlets publishing in this area? To conclude, critical reflections about the past, present and future of reflective practice research are offered. This exercise allows knowledge gained to be drawn together in one place and for strengths, trends and possible limitations of reflective practice in sport research to be identified. Indeed, the determination and justification of a suitable review methodology itself to answer the proposed research questions raises an interesting debate.

Meta-analyses are common amongst sport researchers, particularly from those allied to a traditional scientific paradigm (e.g., Brown, Brown, & Foskett, 2013) where statistical pooling and effect sizes are important. Others have used systematic reviews (e.g., Goodger, Gorely, Lavalley, & Harwood, 2007) in order to provide a longitudinal summary of a specific research area. The intention in the current paper was to demonstrate a robust and reproducible data collection method and analysis process in order to reduce researcher subjectivity and bias, whilst being cognisant of our own individual epistemological and ontological beliefs. We therefore wanted to simultaneously remain true to those underlying values. That said, Goodger et al., (2007) acknowledged that qualitative research within their systematic review was treated differently to the majority of the other research, which was mostly quantitative in nature, and thus they chose to adopt a more descriptive approach. Such treatment of

qualitative research was supported by Booth's (2001) argument that the criteria by which a systematic review is judged is mostly underpinned by quantitative methods, which he described as "institutionalised quantitativism". This infers that a 'gold standard' of methodology exists and a 'good' review must adopt such a paradigm, which when solely reviewing qualitative papers is not possible. Therefore, given that a meta-analysis was not appropriate due to high volume of qualitative content, whilst acknowledging that systematic reviews of qualitative papers take a different approach to that of the more traditional sense (Goodger et al., 2007), Mann et al.'s (2009) review method of similar literature was replicated and adapted.

As reflective practice research in domains and disciplines outside of sport is largely qualitative in nature a meta-analysis, and to some extent a systematic review methodology, would not be appropriate approaches to answering all of research questions proposed in this paper. As a result, a reproducible data collection procedure was adopted based on that of Mann et al.'s (2009) systematic review, whose literature search procedure was replicated within the sports literature (in order to reduce any subjectivity or bias in the research), which displayed an affinity with Booth's (2001) promotion of 'meta-synthesis' versus a 'meta-analysis'. In addition, a reference to previous reflective practice research, as observed in Culver et al. (2012) was included in the selection criteria. Furthermore, specifically within the analysis of the sample, Culver et al.'s (2003) categorisation of qualitative papers was employed. In view of this, it is believed that a methodology has been constructed that is more sympathetic to the paradigm within which the research being reviewed was originally conducted.

## **Methods**

### ***Locating the research***

In order to locate literature that referred to reflective practice Sports Discus, PSYCHinfo, and Web of Science databases were accessed and the following search terms used: reflect; reflection; reflective practice *and* sport; within the title, abstract or keywords of each article only. Manual searches and reviews of identified bibliographies were also conducted using the same criteria. The search was limited to English language peer-reviewed research, published between 2001 and 2012 inclusively, which specifically focused on sport education or practice. The rationale to only include peer-reviewed journal articles is one supported by Culver et al. (2003), and which the authors feel is valid given that such papers are readily available in the public domain and for scrutiny by readers wishing to verify the claims made about their content in the current paper. However, we acknowledge that there is other credible research not represented here focusing on reflective practice in sport (e.g., book chapters). Nevertheless, these outputs do not always undergo the same independent scrutiny as the academic peer review process, and it is beyond the scope of this paper to review all forms of writing on the selected topic. The original search yielded 179 papers, literature reviews, conference proceedings, articles and commentaries.

Preliminary analysis of the peer-reviewed papers identified that many included the term “reflection” within the desired fields, however, subsequently did not discuss or demonstrate evidence of reflective practice akin to the definition offered by Knowles et al. (2014) presented earlier or provide reference to reflective practice research. Further criteria for inclusion included: (a) papers had to consider or discuss at least one of the following: the *process* of reflection, and/or the *outcome* of reflection and (b) articles must have also provided reference to previous reflective practice research though the context of this was not stipulated (cf. Culver et al., 2012).

### ***Review procedure***

Akin to the process of content analysis as described by Sparkes and Smith (2014) all abstracts were read independently and then discussed as part of developing a coherent and negotiated coding protocol. As part of this process any discrepancies were resolved by case discussion until consensus between authors 1, 2, and 5 was agreed (see Lincoln & Guba, 1985). This resulted in a final sample of 68 items.

### ***Analysis***

The identified sources were summarised and categorised by country of origin, publication outlet, profession or community, research design and data collection techniques used. In order to categorise the papers, a combination of the classification procedures used by Mann et al. (2009) and Culver et al. (2003, 2012) were adopted. For example, studies were classified as qualitative if they employed one of the following data collection or generation techniques: (a) journaling or writing in log books; (b) open-ended questions, which were written responses to part of a survey or questionnaire; (c) interviews, structured, semi-structured or unstructured; (d) focus groups; and (e) observations, nonparticipant or participant. However, since not all papers in this instance included actual ‘data’, an extra category relating to discussion-based papers was included into the qualitative classification. Consequently, any research lying outside this definition was categorised as “quantitative” if “quantification in collection and analysis of data through the process of precise numerical measurement” (Smith, 2010, p. 8) was evident or “mixed” when employing a combination of methods. Figure 1 represents the review and analysis procedure described above (a full list of references of papers included in the review is available upon request).

**\*\*[Insert Figure 1 here about here]\*\***

## **Results**

### ***Origination and dissemination: The ‘where’?***



Analysis of the sample ( $n = 68$ ), specifically the geographical location of reflective practice literature in sport, revealed that 77.9% ( $n = 53$ ) of scholarly contributions to the literature emanated from the UK. Other nations represented in the analysis were North America ( $n = 8$ ), Europe (excluding the UK;  $n = 5$ ) and Australia ( $n = 2$ ).

The predominant dissemination outlets for reflective practice literature within sport were *The Sport Psychologist* ( $n = 18$ ) and *Reflective Practice* ( $n = 17$ ), which accounted for 51% of the published literature in this area. The contributions from other outlets can be seen in Table 1.

\*\*[Insert Table 1 here about here]\*\*

### ***Reflective practice and professions/communities: The ‘by whom’ and ‘for whom’?***

Sport psychology (61.8%) and sports coaching (29.4%) were the most represented professions within the reviewed sample of articles; others included sport performance (where specific issues in sport were the central focus;  $n = 4$ ) and those generally-termed as sport scientists ( $n = 2$ ). Within the whole sample, the dominant communities who were the focus or presenters of reflections were psychology practitioners (35.3%), coaches (20.6%) and athletes (19.1%). This category also included literature that was classified as ‘NA’ as they were discussion or literature-based papers and thus did not include participants. These accounted for 10 out of 68 of the overall sample (14.7%).

### ***Research design and data collection techniques: the ‘how’?***

Reviewing the sample of literature in question, it is evident that qualitative methods were most prominent (88.2%) with only four articles each adopting quantitative or mixed methods. Of this majority, 18.3% were discussion-based papers. Data collection methods, 38.3% included personal reflection, with 78.2% of those specifically focused on that of sport psychology practice. Additionally, 18.3% were discussion-based, and 15% adopted interviews as the data collection method.

A proportion of the literature reviewed classified as discussion or literature-based papers (and thus not methodologically focused) and accounted for 16% of the sample.

### **Critical Reflections**

The findings presented above suggest four focal points worthy of discussion: (a) reflective practice research is predominantly conducted within the UK (where); (b) reflective practice within sport psychology (who); (c) reflective practice and qualitative enquiry (how); and (d) understanding reflective practice (what).

#### ***Reflective practice within the UK***

The review concluded that the UK was (is) predominant in respect of peer-reviewed publications on the topic of reflective practice in sport. Within the UK, reflective practice appears to have been policy driven over the last decade or so, with several “waves” of literature resulting from and subsequently informing policy (see Figure 2). For example, within BASES, reflective practice was only ‘recommended’ within its supervised experience training program early in this analysed time period (pre-2009), but became a mandatory competency after this date corresponding with increased research outputs of this nature. A similar pattern of research informed policy is evidenced within allied health professions (e.g., counselling and psychotherapy, Brown, Duff, Karatzias, & Horsburgh, 2011; nursing, Evans & Strumpf, 2011). The UK dominance in this research area could be explained by such accompanying changes in policy, of which similar curricula do not appear to exist in equivalent professional training bodies overseas. For example, within the AASP certification criteria, based in the US, there is currently no formal requirement in place to engage in or evidence reflective practice. However, researchers and practitioners from this region have discussed the benefits and advocate its use within and for applied practice (e.g., Holt & Strean, 2001; Poczwardowski, Sherman, & Henschen, 1998). A future question, therefore, could be ‘when does reflective practice development take place?’

\*\*[Insert Figure 2 about here]\*\*

There is currently a cluster of UK-based researchers who are actively researching reflective practice in sport, who have predominantly targeted an international audience indicated by the outputs they target for publication (e.g. *The Sport Psychologist*). Although not indicated by the results of this review, it is evident that others outside the UK are highly supportive of reflective practice in sport and its benefit in becoming a more competent sport practitioner. Based on the last decade or so of dissemination in this field, is now an appropriate time to encourage the international community to embrace reflective practice amongst its training and professional practice requirements and to share best practice? Furthermore, since there is limited, if any evidence *against* reflective practice, wouldn't it be of benefit to those who currently do not engage in this process in terms of enhancing their practice?

### ***Reflective practice within sport disciplines***

The review showed a dominance of peer-reviewed sport psychology and sports coaching literature over the last decade within the general domain of sport. By way of explanation the initial ( $n = 3$ ) publications on reflective practice in 2001 were focused on sports coaching ( $n = 2$ ) and sport psychology ( $n = 1$ ) and these professions have seen a literature base grow considerably over the last 12 years.

As mentioned previously, it is suggested that significant changes in policy that have made reflective practice a compulsory element of training programs has contributed to the growing evidence base over the last decade. This is likely to become more evident given the pending development of a new journal (*Journal of Applied Case Studies in Sport and Exercise Sciences*) to specifically publish practitioner case studies and share best practice within the wider sport community.

The majority of practice-based reflection literature was found to be derived from the experiences of trainee and neophyte sport psychology practitioners (e.g., Huntley & Kentzer, 2013; Rowley, Earle, & Gilbourne, 2012). Requirements for professional training schemes (e.g., BASES) with regards to evidence of reflective practice may encourage these practitioners to write and subsequently share those reflections more publically. Accomplished practitioners alike are required to document reflections for the purpose of re-accreditation or continued professional development and sharing these experiences from this more established platform is fruitful for trainee or less experienced practitioners and to gain peer-review on their applied practice. To date, however, only one article exists that documents in-event experiences and reflections within sport psychology (e.g., Knowles et al., 2012), which builds on the sentiments of Andersen (2000), who called for more real-life examples of sport practitioners in action to be presented within the literature. Therefore, if practitioners were formally encouraged to share reflections and experiences more frequently, could this not further develop the field and create a more supportive culture where we can share best practice?

### ***Reflective practice and qualitative enquiry***

Reflective practice literature in sport over the last decade is dominated by qualitative methodologies. Much of this research has been self-reflective in nature (i.e., reflections on one's own practice or experience). Holt and Streat, (2001), authors of the first published paper to formally consider reflective practice in sport psychology, suggested, "Self-reflective writing techniques allow practitioners to explore their practice and reflect on their experiences" (p. 193). Several examples of such writing in a sports context were observed within special editions of the journal *Reflective Practice* in 2009, 2012 and 2013. However, some articles in this topic area (beyond those in *Reflective Practice*) provide limited information about the actual reflective processes utilised (Knowles et al., 2012). Providing

evidence of the reflective process, whilst sharing experiences can be achieved in different ways. For example, Cropley et al. (2007) provided direct extracts of the primary author's reflective writings, whereas in Knowles et al. (2012) other authors were used as 'critical friends' to a practitioner to stimulate further reflection post-event of a staged and layered nature. However, it appears that whilst practitioner-focused reflective accounts have steadily increased; researchers are now more readily using 'other' formats of representation, such as confessional tales and autoethnography through which to stimulate the process of reflection or frame their writings (see Sparkes & Smith, 2014). Autoethnography, can be used as a means of instigating and supporting the process of reflective practice, and in some cases provide evidence of critical reflection in action (McIlveen, 2008). However, according to Knowles et al. (2012) many autoethnographies currently available in the literature do not demonstrate a level of critical reflection that is useful to shape future writings and genres within the field. For example, in response to a recent article by Rowley, et al. (2012) documenting personal experiences of a neophyte practitioner working within rugby league, Tod (2012) observed that the author "felt compelled to spend a significant chunk of the paper justifying the value of reflective practice and autoethnographic writing. The consequence is that there is likely to be more to his experience than we have been able to read" (p. 52). This suggests that the sport community as a whole risks being restrained from generating insights into practice and application as authors often feel the need to adopt a defensive approach should they engage in different forms of representation. Accordingly, they spend much of their articles *telling* the reader about their approach rather than *showing* them the process of reflection in action. This is counterintuitive, as to accept these methodologies could lead to a deeper understanding of reflective processes by way of dissemination, which could therefore develop a more efficacious approach to development.

Although self-reflective writing and sharing is of value, and the volume of reflective practice research in sport has increased, there seems, still, to be a lack of evidence-based research. More research exploring the effectiveness of reflective practice within sport and/or practitioner settings (e.g., Knowles et al., 2012), and evaluations of reflective practice interventions (e.g., Picknell et al., 2014) appear useful at this time to provide a more empirically robust case for its use, benefit and impact. Additionally, an appreciation of the strengths and limitations of evidence emanating from different paradigms would be valuable, as it appears a defensive stance is sometimes held with regards to autoethnography, which is likely to be that it is so often judged using inappropriate criteria, meaning that authors have to invest a lot of words in a paper justifying the approach rather than actually doing it.

### ***Understanding reflective practice***

Although many articles present the term ‘reflection’ in the title or keywords they were removed from the data set for reasons of not fulfilling the inclusion criteria of discussing the process or outcome of reflection, and/or not using literature on this topic to support their present work (i.e., provided in their reference list). One explanation here is that whilst ‘reflection’ and ‘reflective practice’ are terms that are widely used in sport, in practice they are less widely understood (Cropley et al., 2010). This is supported by Cropley, Miles, and Peel (2012) who investigated issues currently associated with reflective practice within coach education. They found that participants reported a lack of confidence in their understanding of reflective practice, which contributed to limited engagement with the process. It could be suggested therefore that within sport, we have ‘jumped on the bandwagon’ of reflection without fully understanding what it is and how it is done. As a result practitioners and researcher alike have negative experiences of engagement in the reflective process and often cease to adopt reflective approaches to learning. Consequently, if there is a lack of understanding about reflective practice in sport and how to engage in it, could it be that the

academic literature is moving too quickly and is in danger of leaving practitioners behind in its wake (Trelfa & Telfer, 2014). If this is the case, it may be appropriate to take stock as a field to ensure better understanding of the concept or entice practitioners and educators to ‘move with the field’ by translating this into education, training and facilitation of strategies. Reflective practice specifically within sport psychology to date has been driven somewhat by policy, whereby practitioners are ‘forced’ to engage in reflective practice (whether they want to or not) in order to achieve professional qualifications. However, according to Hobbs (2007), expecting people to be open and honest and disclose personal information involuntarily can provoke strategic responses or even hostility. Although reflective practice has been deemed compulsory in some settings, where professional competence is a requirement, there is limited scope to conform to the personal preferences of learning by every individual. If future reflective practice research within sport tackles this issue of engagement and the barriers to limited empirical evidence provided so far, then it could be argued that future reflective practice research within sport would go some way to address this lack of understanding and willingness to engage in it as a process.

The academic journals that have published reflective practice research have an important role to play in ensuring such outputs, through the review process, are theoretically robust in their conceptual understanding of reflective practice and are located within the wider literature base of the topic area. Indeed, by publishing reflections that are not (by way of definition) reflective practice-based (e.g. reflections that are accounts, report-based, or descriptions of ‘what happened’) there will continue to be a lack of understanding in this area. Understanding the terms reflection and reflective practice nevertheless, does not mean that practitioners apply or report it representatively within the contexts in which they find themselves. Finally, it should be acknowledged that by removing articles deeming to describe or utilise reflective practice (by employing these terms within the title and/or keywords), the

question to be asked is that if the authors are not ‘reflecting’, what are they actually doing if it is not reflection? Encouraging authors to justify their ontological and epistemological positions within their writing could ensure that reflective practice theory is acknowledged and therefore as a consequence, any subsequent writing/research would be aligned with reflection and/or reflective practice markers.

As a result of the limited attention provided to the theoretical or philosophical standpoints and methodologies, it should be acknowledged that the categorisation of the articles within this study was not an easy process, and a number of negotiated judgment calls had to be made. For example, Richards, Collins, and Mascarenhas’ (2012) reflective practice study within netball adopted a unique research design, which was very different to any other paper within the sample. The paper fulfilled the selection criteria outlined in the methods section in order to warrant its inclusion, but its design was categorised as ‘mixed’ as it used both statistical analysis and personal reflection. However, this paper could have also been categorised as ‘qualitative’, with the statistical analyses presented part of the overarching personal reflections. Given the dynamic nature of making such judgment calls it could be argued that some articles were misallocated, and others may disagree with the categorisations made. These challenges, however, provide more evidence for the need to define reflective practice and acknowledge underpinning methodology and theory when conducting research on reflective practice in sport in order to provide more credibility and evidence of the effectiveness of the concept.

Moreover, self-reflective research could be viewed by some as ‘easy research’, for reasons including the ability to utilise small participant samples in such studies (in many cases just the authors themselves); complex ethical applications are not needed; and minimal costs are involved. However, the outcome and the quality of reflection and reflective practice



are more complex issues, some of which we are only now discovering, and as a result, such research should not be viewed as ‘easy’.

### ***Reflecting back***

The current paper reveals that several ‘waves’ have emerged over the last decade surrounding reflective practice in sport, (e.g., 2004+, 2009+). The sport community is beginning to see evidence-based research through academic papers in reflective practice in sport, with more disciplines embracing reflective practice (driven by policy, maybe) in a professional context (Knowles et al., 2014). Therefore, this would suggest that there is perhaps no longer a need to argue in favour or convince sport professions as to the benefit of reflective practice (Tod, 2012), but a need to now proceed with the evidence-based research which is required for the field to develop further (e.g., Cropley et al., 2012; Knowles et al., 2012). Furthermore, books and associated chapters (e.g., Knowles et al., 2014) are helping the accessibility and area of reflective practice commentary and applications, as they are easily accessed within education and the wider sport community as teaching aids and learning resources.

### ***Reflecting forwards***

By way of conclusion to this paper we feel it appropriate to propose some avenues to consider regarding reflective practice in sport in relation to motivation, efficiency, and effectiveness. Currently most reflective practitioners are (or at least initially) extrinsically motivated regarding reflective practice and most engagement appears to be policy driven. How can we therefore develop intrinsically motivated reflectors or reflective practitioners? We believe that in the short-term at least, engagement in reflective practice will still be stimulated from extrinsic sources, with the view that some will continue and experience the intrinsic benefits of reflective practice and thus it become habitual to their practice. However, as the evidence-base for reflective practice in sport increases (e.g., internationally and across

domains) we may begin to see more individuals embracing reflective practice as an approach for personal and professional development regardless of the external drivers of policies and regulation.

Finally, we believe that the ‘how to’ of reflective practice has not been sufficiently addressed in within sport. Therefore, more appropriate education on and pedagogical approaches to reflective practice is required for practitioners, educators and supervisors of the future, especially those allied to professional training schemes where the demonstration of reflective practice as a competency is required.

### **Summary**

This article summarises our findings from reviewing the reflective practice research within sport published over the last twelve years (2001-2012). Although more than a decade has elapsed since the initial reflective practice research in sport, the literature is still developing, with many areas warranting further attention. Throughout the paper, we have made recommendations about those areas we believe deserve greater focus, which include (but are not limited to) calls for: more evidence-based studies (e.g., interventions) to demonstrate the effectiveness and utility of reflective practice within sport; greater methodological attention and transparency within future research outputs. Further recommendations are presented within Knowles et al (2014), which include but are not limited to, a need for reflective practice to remain a central facet of educational and professional processes within sport, to encourage a wider use of technology to facilitate the process of reflection, and a balance between scientific/empirical evidence and evidence of personal accounts. Finally, we encourage researchers beyond the UK to embrace and explore reflective practice in the domain of sport.

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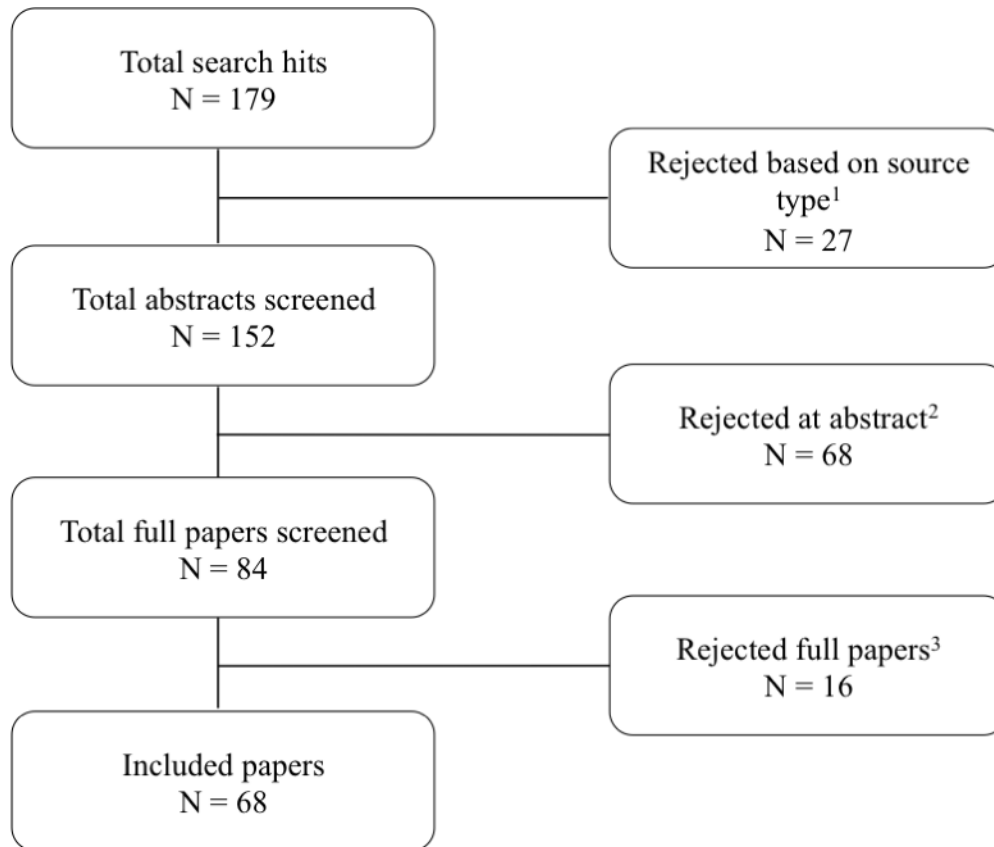


Figure 1. Flow diagram illustrating of article review stages

<sup>1</sup>Literature reviews, conference proceedings, articles and commentaries and equivalent were rejected here (e.g. only peer reviewed articles progressed further; Culver et al., 2003).

<sup>2</sup>Abstracts were rejected here if the process and/or outcome of reflective practice was not evident, as stipulated in Mann et al. (2009). If unclear, proceeded to next stage (full paper) for further examination.

<sup>3</sup>Full papers were rejected here if no reference to reflective practice literature was made, as outlined in Culver et al. (2012).



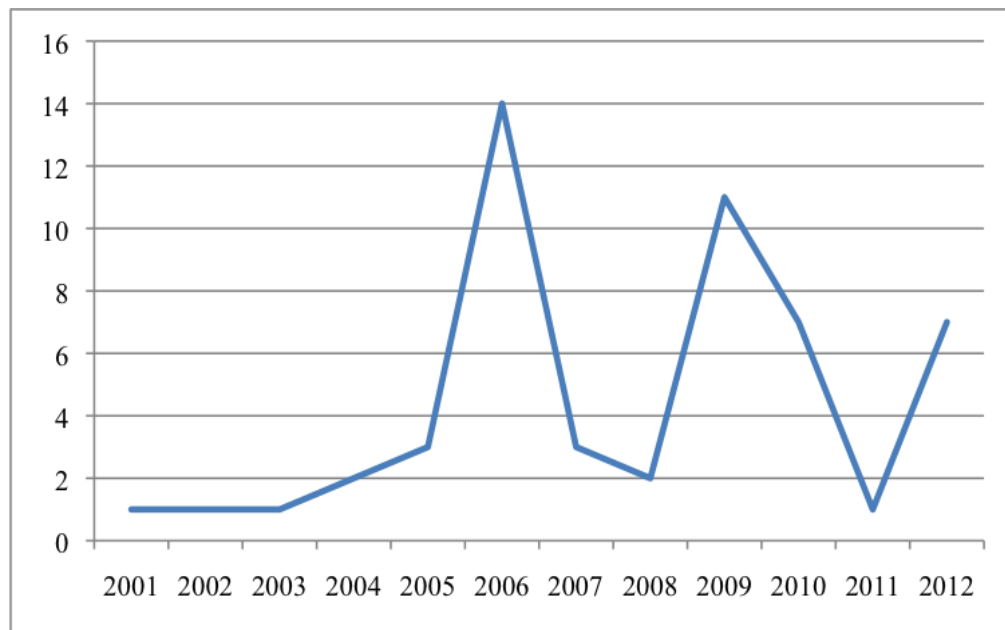


Figure 2. Temporal illustration of UK-based publications of reflective practice in sport

Table 1

*Number of reflective practice publications per outlet*

Outlet	Sport n (%)
The Sport Psychologist	18 (26.5)
Reflective Practice	17 (25.0)
Sport & Exercise Psychology Review	11 (16.2)
Psychology of Sport & Exercise	4 (5.9)
Journal of Sports Sciences	2 (2.9)
Quest	2 (2.9)
International Journal of Sports Science & Coaching	2 (2.9)
Athletic Insight	1 (1.5)
International Journal of Sport Psychology	1 (1.5)
Journal of Sports Science and Medicine	1 (1.5)
Research Quarterly for Exercise & Sport	1 (1.5)
Adapted Physical Activity Quarterly	1 (1.5)
Ergonomics	1 (1.5)
International Coaching Psychology Review	1 (1.5)
International Journal of Sport Science	1 (1.5)
Journal of Hospitality, Leisure, Sport & Tourism	1 (1.5)
Journal of Teaching in Physical Education	1 (1.5)
Physical Educator	1 (1.5)
Sports Coaching Review	1 (1.5)
<i>Total</i>	<b>68</b>