The Development of Confidence Profiling for Sport

Kate Hays
English Institute of Sport (EIS)

Owen Thomas
University of Wales Institute, Cardiff (UWIC)

Joanne Butt and Ian Maynard
Sheffield Hallam University

This study documents an ideographic approach to the assessment of sport confidence in applied settings. In contrast to traditional nomothetic measures, *confidence profiling* provides an assessment of sport confidence from the athlete's own perspective. Seven athletes (4 male, 3 female) completed the profile and were encouraged to give an accurate account of their sources and types of confidence, and identify the factors that were debilitative to their confidence levels. Reflective practice on the application of confidence profiling, provided by three British Association of Sport and Exercise Science Accredited sport psychologists, demonstrated the versatility of approach, and indicated that the process allowed the athlete to accurately recall their confidence related experiences and attain an accurate and in-depth assessment of their sport confidence. Thus, it was concluded that completed confidence profiles could provide a strong foundation from which athlete-centered interventions might be developed.

Researchers and practitioners within sport psychology have often cited confidence as an important influence on athletic performance (e.g., Bandura, 1986; Jones & Hanton, 2001). Indeed, one of the most consistent findings in the peak performance literature is the direct link between high levels of self-confidence and successful sporting performance (Zinsser, Bunker, & Williams, 2006). Furthermore, international-level elite athletes have identified self-belief as fundamental when defining and developing mental toughness (Connaughton, Wadey, Hanton, & Jones, 2008; Jones, Hanton, & Connaughton, 2002). Consequently, study, and application of interventions to enhance self-confidence have featured prominently in theoretical and applied sport psychology, with the social cognitive theories of Bandura's self

Hays is with the English Institute of Sport (EIS), London, UK. Thomas is with the Cardiff School of Sport, University of Wales Institute, Cardiff (UWIC), Cardiff, UK. Butt and Maynard are with the Centre for Sport and Exercise Science, Sheffield Hallam University, Sheffield, UK.

efficacy theory (Bandura, 1977; 1997) and Vealey's initial (1986), and reconceptualized (1998, 2001) models of sport confidence shaping the majority of this work.

Parallel to these theoretical and conceptual developments, a range of inventories have been designed to assess efficacy and confidence in sport. For example, task specific self-efficacy measures are typically constructed by listing a hierarchical series of tasks, usually varying in difficulty, complexity, and/or stressfulness (Feltz & Chase, 1998). Separate inventories have also been developed to operationalize the sport confidence constructs within Vealey's original 1986 model. Specifically, the Trait Sport Confidence Inventory (TSCI; Vealey, 1986) was developed to measure an athletes' dispositional belief about their sporting ability, and the State Sport Confidence Inventory (SSCI; Vealey, 1986) was developed to measure an athlete's belief about their sporting ability in a particular situation. However, the orientation instructions associated with the TSCI and SSCI have been criticized in that participants are instructed to rate their perceived confidence in comparison with the most confident athlete they know. This format is thought to produce unsystematic variance, depending upon whom participants select as their standard of confidence (Feltz & Chase, 1998). Furthermore, although items on the TSCI and SSCI assess athletes' confidence about various areas (e.g., skill execution, focusing, refocusing after errors), the instruments provide a single confidence score which integrates all types of confidence into a unitary sport confidence construct. This renders these measures at odds with recent research that has emphasized the multidimensional nature of sport confidence (e.g., Hays, 2008; Hays, Maynard, Thomas, & Bawden, 2007).

In line with her reconceptualized model of sport confidence, Vealey, Hayashi, Garner-Holeman, and Giacobbi, (1998) developed the Sources of Sport Confidence Questionnaire (SSCQ) to assess the sources of confidence particularly salient to athletes in competitive sport. Within their validation study, Vealey et al. (1998) provided evidence to support the reliability and validity of nine sources of sport confidence in high school and collegiate athletes. However, in a study examining sources of sport confidence in master athletes, Wilson, Sullivan, Myers, and Feltz (2004) failed to support the proposed 9-factor structure of the SSCQ, suggesting potential inconsistencies between different athlete groups. Indeed, more recent research (e.g., Hays et al., 2007; Vealey, 2001) has demonstrated that the organizational culture of sport and society, in addition to individual difference characteristics, influences the manifestation of sport confidence in athletes.

Hays et al., (2007) provided a detailed exploration of sport confidence from the perspective of successful World Class sports performers, and were among the first to demonstrate the multidimensional nature of sport confidence, and the importance of utilizing a sport-specific framework to aid future research. The sources of sport confidence identified showed some overlap with the sources of efficacy beliefs identified by Bandura, however, they were more specifically associated with the competitive and training environments of sport. Furthermore, several sources of confidence in addition to those included within Bandura's (1997) self-efficacy predictors, or the sources of sport confidence proposed by Vealey et al. (1998) were identified. These sources appeared to form the basis of an athlete's sport confidence beliefs (types of confidence) and would therefore seem critical to their confidence levels (Hays et al., 2007). Thus, the use of in-depth interviews enabled the exploration of meanings of sport confidence for a limited sample, and

resulted in contributions to the literature that hadn't been previously addressed. Consequently, while the majority of studies on confidence in sport have adopted quantitative, nomothetic research approaches, in which numbers are used to represent athletes' perceived confidence, more recent qualitative approaches suggest that people cannot be characterized by the same set of descriptors. These factors need to be considered when assessing the confidence of sport performers. Furthermore, since Hays et al.'s (2007) study was among the first to provide a solid conceptual foundation for the existence of different types of sport confidence, there is at present no available method of assessing athletes' confidence types.

Given that the available confidence inventories were designed and validated as research tools (Vealey, 2001), their applicability in intervention work has been questioned (Vealey & Garner-Holman, 1998). Some sport psychologists deem the use of inventories unnecessary and even detrimental to their style of intervention work (e.g., Dorfman, 1990; Halliwell, 1990; Orlick, 1989; Ravizza, 1990; Rotella, 1990), whereas others agree that psychological inventories can be beneficial when used in conjunction with other assessment methods (e.g., Gardner, 1995; Perna, Neyer, Murphy, Ogilvie, & Murphy, 1995). Indeed, Vealey and Garner-Holman (1998) noted that interviews and observation might be more suitable to the assessment of athletes' confidence, and that more idiographic approaches to measurement should be adopted. Furthermore, they suggested that applied measurement techniques should be validated based upon their effectiveness in practical settings.

A move toward a more idiographic approach to the assessment of sport confidence would allow an individual's particular confidence needs to be explored (i.e., sources and types of confidence), regardless of their gender, sport level or sport type. Eliciting information which is important to the performer, in contrast to tests or questionnaires that plot the performer against predetermined axes, is in accordance with Personal Construct Theory (PCT: Kelly, 1955). Originally developed within the realm of clinical psychology, PCT proposes that individuals differ in how situations are perceived and interpreted, what is considered important, and what is implied by his or her particular construing of the event (Kelly, 1955).

The performance profile is a natural application of PCT and enables the athlete to construct a picture of him or herself rather than forcing him or her to respond to fixed measures. Consequently, performance profiling enhances an athlete's self-awareness and enables both the coach and the sport psychologist to gain an understanding of how the athlete perceives his or her preparation and performance, providing a basis for coaching and psychological interventions. Since it is athlete driven, performance profiling is in accordance with the empowering ideologies of many psychological skills training programs (e.g., Gauron, 1984; Orlick, 1990) and can be used to monitor perceived changes in the various constructs over time via repeated administration of the completed profile.

Given the limitations associated with traditional nomothetic sport confidence measures, the purpose of this study was to develop an ideographic method of assessing and monitoring an athlete's sport confidence (i.e., sources and types of confidence), and factors related to their sport confidence, regardless of their demographics, sport type, or the organizational culture to which they belong (cf. Hays, 2008; Hays et al., 2007). More specifically, performance profiling was extended and applied to the assessment of sport confidence in a practical setting. Researchers (e.g., Anderson, Knowles, & Gilbourne, 2004; Schön, 1987) have identified the use

of knowledge-in action as key to professional practice. Consequently, this paper provides an overview of the development of confidence profiling and the reflections of three sport psychology consultants, with varied experience and work history, on the applicability of the approach.

Method

Development of the Confidence Profiling Process

In contrast to early conceptualizations, contemporary research has emphasized the multidimensional nature of sport confidence and the importance of using a sport-specific framework to aid future research (e.g., Hays et al., 2007; Vealey, 2001). Hays et al. (2007) used in-depth interviews to explore the meanings of sport confidence within a World Class sample. The sources and types of confidence identified were influenced by demographic and organizational factors and it was noted that these factors should be considered when assessing the confidence levels of performers. Consequently, the current study used a condensed version of the interview schedule designed by Hays et al. (2007), in which athletes identified their types of confidence, and then the sources from which these types were subsequently derived. To demonstrate the utility of confidence profiling regardless of demographic and organizational factors, the participant sample employed in this study was deliberately varied to include both male and female athletes, competing in different individual and team sports at different levels of achievement.

One criticism that can be leveled toward confidence inventories that have been developed nomothetically, is their inability to measure the idiographic nature of an athlete's responses. In clinical domains (i.e., substance abuse), a variety of methods are used to explore patients' confidence in the clinical encounter (Velasquez, Von Sternberg, Dodrill, Kan, & Parsons, 2005). For example, 'confidence rulers' have been used to address concerns about self-efficacy and explore potential barriers to change at-risk behaviors (Velasquez et al., 2005). Originally developed within the applied context of motivational interviewing (MI; Rollnick & Miller, 1995), confidence, or scaling rulers, have advanced the use of Likert scales to provide an accurate understanding of the client's viewpoint, in addition to an assessment of their readiness to change certain health behaviors (Miller & Rollnick, 1999). Thus, by enabling practitioners to understand the client's viewpoint accurately, and allowing the client to assume an active role in the decision-making process, scaling rulers are applicable to more idiographic approaches to measurement in sport psychology consultancy.

Motivational strategies are used along with the ruler to identify reasons that confidence might be low and to help problem-solve to increase confidence. For example, an athlete might be asked to identify confidence debilitating factors and strategies that they could use to change their current behavior, encouraging them to accurately assess their current situation and provide a means of developing an athlete-centered intervention. Indeed, by enabling practitioners to understand the athletes' view accurately and allowing the client to assume an active role in the decision-making process, scaling rulers are applicable to sport psychology consultancy.

Grounded in a thorough review of previous research, confidence profiling was designed to provide an applied sport confidence assessment method, providing the foundation for subsequent sport confidence interventions. The confidence profiling process follows the main stages of performance profiling, but also incorporates scaling rulers and motivational strategies as fundamental aspects of the process.

Participants

With Institutional ethics approval, seven athletes (4 males, 3 females) aged between 15 and 21 years (18.43 ± 2.15 years) generated a confidence profile assisted by the first author. Four of the athletes competed internationally, two competed at a national level, and the remaining athlete performed at a county level (equivalent to U.S. state). The athletes had competed at their highest level for between 1 and 5 years (2 ± 1.41 years) and included two team sport participants (volleyball and cricket) and five athletes who participated in four different individual sports (diving, $n = 1$; athletics, $n = 1$; climbing $n = 1$; and swimming, $n = 2$).

Procedures

Participants were met by the first author who conducted an individual consultancy with each athlete following the three main stages of performance profiling advocated by Butler and Hardy (1992): Introducing the idea, eliciting constructs and assessment. The consultant was a British Association of Sport and Exercise Sciences (BASES) Accredited sport psychologist, and had been practicing as an applied sport psychologist for four years. At the onset of each consultancy standardized introductory comments were provided pertaining to the purpose of the study, the use of data, and issues regarding confidentiality and anonymity. To help determine the usability of confidence profiling, two additional sport psychology practitioners assessed the sport confidence of one of their own clients by adhering to the procedures outlined below. Consultant 1 was a 32-year-old female sport psychologist (BASES accredited) and had been training and practicing in sport psychology for four years. Consultant two was a 31 year old male sport psychologist, also accredited by BASES. He was an active applied sport psychologist who had been practicing for 6 years.

Stage 1: Introducing the Idea.   Introductory comments pertaining to sport confidence and the influence of sport confidence on sport performance provided the athlete with an understanding of the importance of effectively assessing their sport confidence levels. Sport confidence profiling was then introduced to the athlete as a means of identifying his or her sources, types and levels of sport confidence. It was emphasized that there were no right or wrong answers and that the purpose of the technique was to identify what the athlete considered as important in relation to their sport confidence. It was also highlighted that the information provided may enhance the athlete's own awareness and act as the foundation for an intervention targeted at the athletes specific sport confidence needs. Indeed, each participant was offered the opportunity of continued sport psychology support on completion of the profiling consultancy.

Stage 2: Eliciting Constructs.   First, the athlete was asked to identify the constructs which they perceived a confident athlete possessed. For example, they were asked, "what do you need to be confident about to perform successfully in your sport?" Next, the focus of the consultancy turned to the athlete's own types of confidence, and the sources from which they were derived. Essentially, each athlete was asked, "what are you confident about?" These types of sport confidence were entered onto a visual sport confidence profile (see Figures 1 & 2). Once all types of confidence had been exhausted, the athlete was asked to identify the source from which each type of confidence was derived i.e., "where do you think that type of confidence in yourself as an athlete comes from"? These sources of confidence were then added to their profile.

To provide assistance in generating a broad range of sport confidence sources and types, and to create a consistent level of depth across the participants (cf. Patton, 2002), each athlete was asked to recall the time that they had been most confident going into an important competition and was further questioned about their sources and types of sport confidence in that situation. Each athlete was also asked to recall the time that they had felt least confident going into an important competition and highlight the factors responsible for debilitating their sport confidence (cf. Hays et al., 2007). Finally, each athlete was given the opportunity to add any other important information that might have been overlooked during the process. Any additional sources and/or types of confidence generated from this discussion were also entered into the athlete's sport confidence profile.

Stage 3: Assessment.   Once the athlete had been encouraged to produce a comprehensive profile of their sport confidence, they were asked to assess their current sport confidence levels. Each athlete was asked to rate himself or herself on each of their types of sport confidence and these were also recorded on their sport confidence profile. For each type of confidence, the athlete was asked on a scale of 1–10, with 1 being 'not at all confident' and 10 being 'extremely confident', "how confident are you about your skill execution (for example)?" If the participant indicated a low level of confidence, a 3 for example, this question was followed with; 'Why do you feel that you are a 3 on that rather than a 0'? Regardless of how low the participant's ratings of confidence, when compared with 0, they would likely be able to identify at least one source of their identified confidence type, supplementing the in-depth exploration of their current confidence profile. Further motivational strategies were used along with the scaling ruler to identify reasons that confidence might be low and to help problem solve to increase confidence (Valesquez et al., 2005) For example, a participant with a confidence rating of 3 for a particular confidence type was asked, "What changes do you think you would have to make in order to be a 6 or a 7?" "How might you go about making these changes"? "What would be a good first step?" Thus, each athlete was prompted to make an accurate evaluation of their current confidence levels and identify client-centered information for the foundation of any future intervention strategies.

Analysis

The three sport psychology consultants reflected on their use of confidence profiling as guided by John's (1994) structured reflection procedures, adapted by Anderson
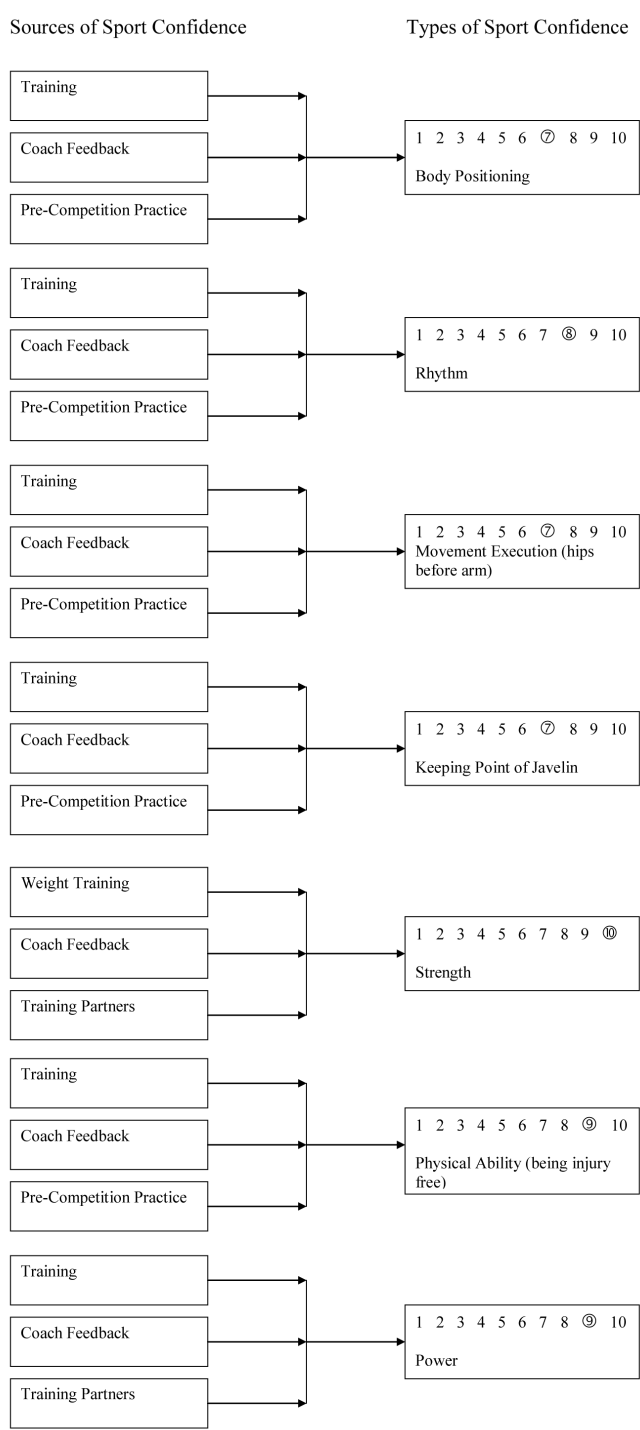
Sources of Sport Confidence   Types of Sport Confidence

| Training |
| Coach Feedback |
| Pre-Competition Practice |

| 1 2 3 4 5 6 ⑦ 8 9 10 |
| Body Positioning |

| Training |
| Coach Feedback |
| Pre-Competition Practice |

| 1 2 3 4 5 6 7 ⑧ 9 10 |
| Rhythm |

| Training |
| Coach Feedback |
| Pre-Competition Practice |

| 1 2 3 4 5 6 ⑦ 8 9 10 |
| Movement Execution (hips before arm) |

| Training |
| Coach Feedback |
| Pre-Competition Practice |

| 1 2 3 4 5 6 ⑦ 8 9 10 |
| Keeping Point of Javelin |

| Weight Training |
| Coach Feedback |
| Training Partners |

| 1 2 3 4 5 6 7 8 9 ⑩ |
| Strength |

| Training |
| Coach Feedback |
| Pre-Competition Practice |

| 1 2 3 4 5 6 7 8 ⑨ 10 |
| Physical Ability (being injury free) |

| Training |
| Coach Feedback |
| Training Partners |

| 1 2 3 4 5 6 7 8 ⑨ 10 |
| Power |

Figure 1 — Sources and types of sport confidence identified by participant one.

Sources of Sport Confidence   Types of Sport Confidence

| Training |

| 1 2 3 4 ⑤ 6 7 8 9 10 |
| Flexibility |

| Training |

| Coach Feedback |

| Training Partners |

| Pre-Competition Practice |

| 1 2 3 4 5 6 7 8 9 ⑩ |
| Ability to Throw/Hit it Hard |

| Training |

| Coach Feedback |

| Training Partners |

| Pre-Competition Practice |

| 1 2 3 4 5 6 7 8 ⑨ 10 |
| Ability to Achieve Performance |
| Outcome i.e. Distance of 50m |

| Pre-Competition Practice |

| 1 2 3 4 5 ⑥ 7 8 9 10 |
| Ability to Remain Self-Focused |

| Competition Experience |

| 1 2 3 ④ 5 6 7 8 9 10 |
| Competition Preparation |

Figure 1 — *continued*

(1999) for use in sport psychology practice. More specifically, the following results section provides a narrative account of the development and refinement of sport confidence profiling, incorporating some description of the consulting experience, and the authors' reflections of the process. Reflective writing utilizes an 'author involved' text (Krane & Baird, 2005). While this form of writing is relatively rare in traditional applied sport psychology research, recent publications have used the approach to explore issues relating to professional practice in sport psychology (e.g., Gilbourne & Richardson, 2006; Lindsay, Breckon, Thomas, & Maynard, 2007; Tonn & Harmison, 2004).

Results

The results are presented in two parts: The first section contains an overview of confidence profiling, and the reflections of the first author on the process. The purpose of this section is to enhance the reader's understanding of the confidence profiling
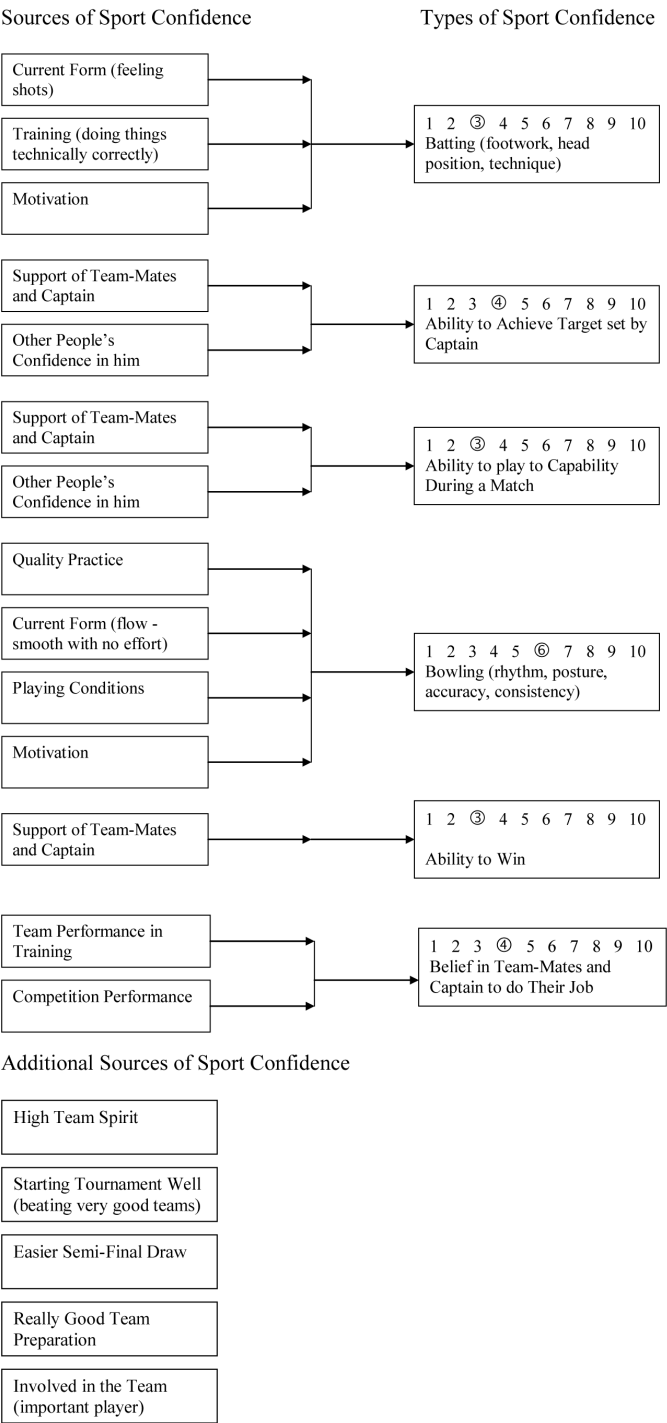
Sources of Sport Confidence   Types of Sport Confidence

Current Form (feeling shots)

Training (doing things technically correctly)

Motivation

1 2 ③ 4 5 6 7 8 9 10
Batting (footwork, head position, technique)

Support of Team-Mates and Captain

Other People's Confidence in him

1 2 3 ④ 5 6 7 8 9 10
Ability to Achieve Target set by Captain

Support of Team-Mates and Captain

Other People's Confidence in him

1 2 ③ 4 5 6 7 8 9 10
Ability to play to Capability During a Match

Quality Practice

Current Form (flow - smooth with no effort)

Playing Conditions

Motivation

1 2 3 4 5 ⑥ 7 8 9 10
Bowling (rhythm, posture, accuracy, consistency)

Support of Team-Mates and Captain

1 2 ③ 4 5 6 7 8 9 10

Ability to Win

Team Performance in Training

Competition Performance

1 2 3 ④ 5 6 7 8 9 10
Belief in Team-Mates and Captain to do Their Job

Additional Sources of Sport Confidence

High Team Spirit

Starting Tournament Well (beating very good teams)

Easier Semi-Final Draw

Really Good Team Preparation

Involved in the Team (important player)

Figure 2 — Sources and types of sport confidence identified by participant two.

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process and alert them to the strengths and potential limitations in adopting this method of assessment in applied practice (cf. Anderson et al., 2004). Consequently, the reflective account is based upon the author's experiences of profiling all 7 of the athletes that participated in this study. However, due to space constraints, in-depth descriptive information was provided for only two of the athletes, alongside presentation of their respective confidence profiles. The second section contains the reflections of the two additional sport psychology consultants when using confidence profiling for the first time. Participants 1 and 2 were chosen as the case studies discussed in the first section, and participants PR and AB chosen for the consultant reflections, to provide the reader with an in-depth account of confidence profiling with a male and female team and individual athlete.

Section One

Participant One.   Participant one was a female international javelin thrower who had been competing nationally for six years and internationally for the previous year. As highlighted in Figure 1, this participant identified 13 types of sport confidence which were derived from training performance, competition performance (both pre, during-, and postcompetition), competition experience and positive coach feedback. With the exception of 'ability to achieve performance outcome', 'ability to remain self-focused' and 'competition preparation', all types of sport confidence identified by this athlete could be classified as technical or physical and were derived from only three areas; training and competition performance, competition experience, and positive coach feedback. The confidence profiling process also highlighted that the factors responsible for debilitating her sport confidence were linked to her confidence sources, or lack thereof. For example, participant one was not mentally preparing for competition and was experiencing difficulty remaining self-focused in the competition environment, often finding herself distracted by other competitors. This is of particular relevance given that this participant identified loss of self-focus as the primary factor responsible for debilitating her sport confidence. The remaining confidence debilitators highlighted by this athlete included; 'lack of coach presence for a time period of several months', 'inability to handle nerves', 'injury niggles before competing', 'family issues', 'reducing training time due to college exams', and 'lack of motivation' caused by her training partners leaving the training group. Finally, this participant identified that her levels of sport confidence would often fluctuate during a meet depending upon her performance. For example, she identified that achieving a good throw would often cause her to question how she had managed to achieve the recorded distance, resulting in reduced feelings of sport confidence.

Prompting this athlete about her least confident career moments, and confidence debilitators, encouraged a wealth of information that would not have been detected by simply asking her to identify her confidence sources and types. For example, an over-reliance on training as a source of confidence seemed to contribute to this athlete's tendency to over-train during the period before competition, and subsequent injury niggles then reduced her confidence on competition day. As was the case with all of the participants, this highlights the importance of these additional questions to the process as a whole.

While participant one felt confident about her physical and technical capabilities, reflected by her high ratings in these areas, the confidence profiling process indicated that this athlete was not preparing mentally for competition which was detrimental to her levels of sport confidence in the competitive environment. The implementation of scaling rulers enabled this athlete to not only assess her current confidence levels but also begin to generate her own strategies to help enhance her sport confidence. For example, this athlete identified that a first step to improve her sport confidence would be to develop precompetition routines and, with the help of a sport psychologist, a method of controlling the negative thoughts she sometimes experienced during competition. Thus, intervention work with this athlete would likely involve developing a more holistic approach to competition, encouraging the development of additional sources and types of sport confidence, particularly related to psychological attributes.

Participant Two.   Participant two was a male cricketer who had played at County level (equivalent to U.S. state honors) for the previous three years. In contrast to participant one, participant two derived confidence from a range of sources, but indicated low levels of the six types of sport confidence he identified (see Figure 2). Identification of his sources of sport confidence showed that he derived confidence from a range of internal and external factors and that his team-mates were fundamental to his confidence. Indeed, when describing his most confident career moment, the factors responsible for facilitating his confidence were directly related to 'the team'. Thus, intervention work with this athlete would likely require developing strategies to enhance his confidence levels in the areas he identified as important.

When questioned about his least confident career moments, this athlete gave a clear account of the factors responsible for debilitating his sport confidence. For example, he identified that a disagreement with his coach had resulted in him being given limited time in the nets and poor batting positions in matches. Since he perceived the coach to favor certain players, participant two felt under increasing pressure to prove himself. However, he also felt that he was not being given a fair opportunity to do so. Consequently, he began to experience negative thoughts about 'getting out' early on in matches and became increasingly nervous about batting. At the time of the consultancy he was experiencing cognitive (negative thoughts) and somatic (sweating, shaking) anxiety symptoms 40 min before a game which he identified as debilitative to his performance. Additional confidence debilitators identified by participant two included poor quality practice or lack of practice, lack of confidence in the coach, lack of confidence shown from the coach (i.e., being second choice to play), lifestyle factors and a shift from a team focus when he was confident, to a focus on himself and concerns about the perceptions of others now that his confidence was low. This athlete seemed to have become preoccupied with trying to prove himself to others and had lost focus on 'the greater good of the team'. Recent to the time of the consultancy, a shoulder injury had also impinged upon the athlete's physical training, further reducing his levels of sport confidence.

Identifying his sources and types of confidence, and confidence debilitators, enabled this athlete to suggest several methods by which he might improve his sport confidence. For example, he recognized that a team-focus was conducive to high sport confidence for himself, whereas a focus on the perceptions of others

was detrimental to his confidence. As a result, he highlighted the importance of employing clearly defined goals for his matches that would help him focus his attention, particularly as he had found specific targets set by his captain to be effective in the past. Participant two also highlighted the importance of developing strategies to control his anxiety and negative thoughts in the competitive environment. He recognized that regaining his physical conditioning was a priority and thought playing for the second team through his rehabilitation would enable him to regain confidence since he would be less concerned about the expectations of others playing at a lower competitive level.

Due to the breadth and depth of information generated, one consultancy was not sufficient to effectively profile this athlete's sport confidence. Consequently, the process was completed across two consultancy sessions. The first consultancy was spent generating sources and types of confidence, including the athlete's descriptions of his most and least confident sporting experiences. This information was entered into a profile before the second consultancy, which was spent assessing the athlete's levels of confidence and enabling him to generate strategies to enhance his sport confidence.

Reflections of the First Author.   The confidence profiling process enabled each athlete to give an in-depth account of their sources and types of confidence and consider how their sources of confidence might influence their levels of confidence and subsequent competition performance. The use of MI style questions and scaling rulers enabled the athletes to identify reasons that confidence might sometimes be low, and identify strategies that they could implement to enhance their feelings of sport confidence. Furthermore, by encouraging athletes to think about their reasoning behind a particular confidence rating, additional sources of confidence were often identified. Enabling the athletes to describe their most and least confident career moments was a vital part of the process since this resulted in the identification of confidence debilitators. This was particularly important as the factors responsible for debilitating an athlete's sport confidence provided a basis from which intervention strategies might be generated.

The participants were all readily able to make the distinction between sources and types of confidence; however, some athletes found it more difficult than others to identify what their sources and types of confidence were. This was rectified by asking the athletes to talk about their sporting experiences. Once they could consider their sport confidence in context (i.e., why they had felt confident on a particular day, or what had happened in the lead up to an event that had facilitated/ debilitated their confidence) they were better able to identify their sources and types of sport confidence.

Constructing the actual profile and current ratings was a straightforward process. Each athlete's types of confidence were entered into the profile as they were identified, and then once these had been exhausted, the athletes' sources were added. If additional sources and types of sport confidence were identified by the athletes' through consideration of their sporting experiences, the profile was updated. All of the athletes broadly identified training, their coach, and competition performances, among their confidence sources; and skill execution, ability to achieve goals, and physical and psychological attributes among their confidence types. However, while some parallels can be drawn between the athletes participating in this study in terms of their sources and types of sport confidence, the resulting profiles were specific

to the individual athlete and also specific to the sport in which they competed. The confidence profiling process also supported the emergence of individual differences in the way in which confidence was developed and maintained. For example, some athletes were more confident than others, some athletes were more confident in specific areas, some athletes were over-reliant on specific sources and types of confidence, and some athletes were unable to transfer their confidence in training to competition. Furthermore, factors related to 'team-mates' were fundamental to the sport confidence of the team sports participants which is of obvious importance when designing interventions with such athletes. Indeed, the focus of any intervention would need to reflect the individual needs of the athlete and might be targeted toward increasing the range of sources and types of confidence, enhancing confidence in the areas already identified, introducing controllable sources of confidence as opposed to a reliance on uncontrollable sources, or facilitating the transfer of confidence from training to competition.

The MI style questions encouraged the athletes to implement a reflective and in-depth, thought engaging process which served several purposes. For example, the athletes' often identified additional types of confidence while explaining why they had chosen a particular rating. For example, when asked to explain why they have given themselves a rating of 7 rather than 1, athletes were required to reflect upon their strengths in that area. Further, the athletes were given the opportunity to reflect upon the strategies that they could employ to enhance their confidence. Each athlete was able to do this and naturally referred back to the factors that were responsible for debilitating their confidence, demonstrating an enhanced self-awareness and understanding of their confidence needs. Enabling the athletes to provide an accurate account of their viewpoint and have an active role in decision-making is in accordance with the central tenets of personal construct theory, and provides the foundation from which to develop a client-centered intervention.

Undertaking in-depth thought engaging reflections was on occasions a time consuming process for the athletes. Consequently, one consultancy session might not prove to be adequate time to complete the confidence profiling session. Indeed, one consultancy was not sufficient to effectively profile the sport confidence of participant two. For this athlete, the process was completed across two consultancy sessions meaning he was afforded time to reflect on the initial consultancy (i.e., identification of types, sources and debilitators of sport confidence) and approach the second consultancy ready to fully engage in the thought and reflection required for MI style questioning. This was probably a more effective method since it reduced the risk of the athlete becoming tired and disengaged from a long consultancy session.

Section Two

Consultant 1: Consultant Reflections*.*   The client (PR) was a 26-year-old female field hockey player who competed at county level. Initial consultation work with PR and her coach had established that in general she lacked self belief in her ability and frequently experienced self doubts. At the time of initiating confidence work, I had been providing sport psychology support to PR for approximately one month. In line with the profiling procedures, to help PR identify and elicit her types and sources of sport confidence, I followed a series of questions that engaged the athlete in conversation regarding her confidence in field hockey. In

addition, PR was asked to recall the time that she had been most confident in field hockey.

Although PR appeared to struggle when initially eliciting her types and sources of confidence, once she had identified the time in which she felt she had been most confident in field hockey, she was able to construct her types and sources more readily. Following this line of questioning, PR was also asked to recall a time when she felt least confident in field hockey and discussed the factors responsible for debilitating her sport confidence.

Constructing the actual profile and current ratings was a smooth process. This was due to the extensive discussions that initially took place because they encouraged deeper thoughts and reflections on behalf of the athlete. The critical question leading to a successful profile was asking the athlete to recall her types and sources of confidence relating to the most confident time in her field hockey career. Specifically, this line of questioning enabled PR to rate her current levels of sport confidence accurately because she was able to make comparisons between her current sport confidence, and a time when she felt most confident.

In viewing the profile, MI questioning followed and focused on the lowest confidence ratings. The lowest confidence ratings (out of 10) were; accepting team player comments (1); accepting coach comments (1); receiving the ball from team players (1); involvement in game play (1); passing and distribution (2); positioning on the pitch (3); and shooting at goal (4).

Questions included: Why do you feel you are a 1 on this construct? What changes do you think you need to make to raise your current rating? What will you do to make these changes? What would be a good first step? Initially, it appeared that these questions were problematic for the athlete; not because the questions were difficult to understand, but because they required deeper thought and reflection on behalf of the athlete (i.e., asking about changes and steps to be taken was a challenging part of the profiling process for the athlete).

When initially asking PR to identify changes she might need to make to raise her confidence ratings, one possible addition to the profiling approach would have been to include the comparison rating from the athlete's most confident time. Specifically, including a comparison rating would have been beneficial at this time as a way to assist the athlete in identifying 'what changes she might need to make to raise her rating from 1 to 6' (e.g., if 6 was her comparison rating from a previous confident time in field hockey). The MI related questions provided detailed information and explanations surrounding the athlete's thoughts about her types and sources of confidence, and allowed her to discuss them in specific field hockey situations. For example, PR mentioned that involvement in play early on in games was a crucial source of confidence. Through the profiling process, PR was able to further explain that being involved in play early in the game makes her feel confident as team mates have confidence in her to pass her the ball. However, not receiving the ball was interpreted by PR as team mates thinking she will make an error and consequently choosing to not pass her the ball.

The initial questions asked before constructing the profile were extremely useful and helped the player delve deeper into thinking about her field hockey confidence (and factors debilitating it). Recalling a previous most confident time period was crucial in helping the athlete elicit her types and sources of confidence as well as providing current ratings/levels (including skill execution ratings) for the visual

profile. The method was easy to follow, and the athlete understood the profiling process. I gained an in-depth and thorough understanding of the athlete's types and sources of confidence for field hockey. Through MI questioning, PR was able to think about the changes she could begin to make to raise her confidence levels and regain the levels she had during her most confident time.

An action plan to improve the process might include comparison ratings (most confident time/game) into the visual profile which can be revisited during the MI questions. Finally, the consultation session itself was a long session and I was not sure whether the player remained fully focused during the MI phase of the profile. Specifically, this stage required a lot of deep thought, reflection, and problem solving on behalf of the athlete. In addition, from a consulting perspective, I perhaps would have benefited from conducting two sessions on generating the confidence profile. Specifically, in session one, the athlete would elicit her types and sources of confidence, and current ratings. In the second session, the athlete would have been able to view her visual profile and then be ready to fully engage in the thought and reflection needed for MI.

Consultant 2: Consultant Reflections.   AB was an 18-year-old male golfer with five years competitive experience who had competed internationally within elite junior amateur golf. His handicap at the time of the session was +0.8. At the time of initiating work on confidence, I had worked with AB for approximately four months primarily providing education on basic psychological skills and aspects of motivation (goal setting) and emotional control. An initial needs analysis with AB indicated that he had a lack of confidence in certain aspects of his game (e.g., short game) that were compounded by some recent poor results within the elite junior game. Previous discussions with AB had revealed that his levels of confidence were a current concern that was affecting him both in practice and tournament play. However, AB did highlight that during previous times within his elite junior career his levels of confidence had been fine, and he recognized the importance about feeling confident with his whole game to take these feelings into the competitive environment. The fact that he did not feel this currently about his game was creating a concern for him that stimulated negative thoughts and feelings before, and during competitive performance.

In line with the procedures of the study, the first phase of the session focused on stimulating AB's thoughts on confidence in golf. On reflection, AB responded well to these questions and they stimulated a discussion on confidence in golf that could be directed toward his particular ideas on confidence. The next section of the profiling technique involved eliciting AB's sources and types of confidence specific to his golf game. In line with the conceptual pathway through the profile (i.e., sources help form types) I asked AB to outline the areas of his golf game he was confident about (i.e., types of confidence). These types of confidence were used to elicit information about the areas he used to source his confidence (e.g., where does that 'type' of confidence in yourself as a golfer come from). The use of comparisons between AB's most and least confident periods within his competitive career helped to facilitate this process. Once AB had identified his types of confidence (i.e., what he was confident about) it became an easier process for him to communicate to me where this confidence came from (i.e., was sourced from). The background contextualization provided by telling me what he was confident about

helped him convey to me where that confidence was sourced from; an important consideration for future consultancies using the technique.

Constructing of the actual profile and current ratings was a relatively simple process following the initial indecision in the early portion of the consultation. On reflection, this process was facilitated to a great extent by recalling information about AB's most confident time within his career. In relation to rating himself on the types of confidence currently experienced, the natural comparison from 'then to now' assisted him to create a score from 0 to 10. The use of the MI questions such as 'why have you scored yourself a 4 rather than a 1' for confidence type were extremely beneficial for AB gaining an understanding of his current confidence profile, and eliciting information to help foster confidence.

When reflecting on the whole profiling process, I felt as though some preparation by AB before the session would have helped maximize the time within the consultation. For example, asking him to recall and document the times when he was most and least confident within his game, and identify perceived ideas on what caused him (i.e., why) to be high or low in confidence during these times would have assisted the efficiency of the consultation session. The actual consultation turned into a long session for both the client and practitioner where client engagement was at times lost. Asking the client to better prepare for the session might have prevented this.

The conceptual flow of the profile requires that types are elicited before identifying types of confidence. Reflection in, and on action, realized that AB found it much easier to articulate information about sources once he had elicited information about types, thus, outlining information about type helped contextualize information on source. Finally, the creation of a profile from the clients' most confident period within their career, combined with the MI questions used, could possibly assist the client driven problem solving process of eliciting information and techniques to help raise their current levels of confidence.

Discussion

The purpose of this study was to develop an applied method of assessing athletes' sport confidence regardless of their age, gender, sport level, or sport type. More specifically, performance profiling was adapted and extended to the assessment of sport confidence. In contrast to traditional nomothetic measures developed to assess athletes sport confidence in research settings, the confidence profiling process adopted within this study fits with the Kellyan view that if we wish to know something about a person, then the best approach is to ask that person (Kelly, 1955). Consequently, each athlete was encouraged to give an in-depth account of their sources and types of confidence, and identify the factors that were debilitative to their confidence levels. This more idiographic approach to the measurement of sport confidence allowed the confidence needs of athletes to be assessed at the individual level.

The participants did not seem to experience any difficulty in making the distinction between sources and types of confidence, providing supporting evidence for the multidimensional nature of sport confidence. Furthermore, once the athletes' had identified their types of confidence (i.e., what they were confident about) it became easier for them to identify where there confidence came from (i.e., was

sourced from), supporting Hays et al.'s., (2007) proposal that types of sport confidence might best be viewed as evidence based beliefs grounded in an athlete's sources of sport confidence.

The findings of the current study support previous research (e.g., Hays et al., 2007; Vealey et al., 1998) which has indicated that athletes' sources and types of confidence are sport specific and influenced by demographic and organizational factors. To this end, the confidence profiling procedure provides a depth of information not possible to gain from generic questionnaires, and enables individual differences in confidence to emerge. Indeed, while some parallels can be drawn between the athletes participating in this study in terms of their sources and types of sport confidence; the confidence needs of each athlete were very different, illuminated by their self-assessments and by identification of their confidence debilitators. Thus, in accordance with personal construct theory (Kelly, 1955), the three consultants were afforded the opportunity to understand the athlete's individual perceptions and interpretations about their experiences. By allowing the athlete to identify what they felt to be important, an in-depth assessment of their sport confidence emerged, providing a potential basis for the design and development of interventions targeted toward their individual confidence needs.

The reflections of the three consultants provided a knowledge based account of how the confidence profiling process might be used most effectively, and in accordance with the sentiments of Anderson et al. (2004), it is hoped that this knowledge-in-action might prove useful to other sport practitioners. Each of the three consultants were in agreement that asking the athlete to recall their most confident sporting experiences was critical to the identification of their sources and types of confidence, and the development of an in-depth and accurate confidence profile. The athletes seemed more able to elicit the required information when able to draw on specific sporting experiences. Further, the athletes were readily able to identify the factors responsible for debilitating their sport confidence while recalling moments in their career when they had lacked confidence.

The reflection process also emphasized the usefulness of adopting MI style questioning within a sporting context. The consultants were in agreement that the use of the MI questions was extremely beneficial for the athletes in terms of them gaining an understanding of their current confidence profile and eliciting information to help them foster their confidence. However, their reflections also illuminated action which might facilitate the confidence profiling process. For example, although not required to compare ratings when constructing the profile, some athletes automatically made comparisons between their current confidence levels and a period of time when they had experienced low or high levels of confidence. This seemed to help these particular athletes rate their current levels accurately. Thus, the use of a retrospective profile reflecting an athlete's most or least confident career moment, or highlighting where they would like to be, could be included as part of the process (to supplement current confidence ratings). Indeed, during the original development of the performance profile (Butler & Hardy, 1992), athletes were asked to provide two ratings for each of the constructs they elicited; the first, 'now', referred to where the athlete regarded him/herself at that moment in time. The second rating related to either 'top performance' (elicited by asking the athlete to consider one of his/her best performances over the past 12 months) or 'ideal' (where the athlete would ideally like to be). While the MI style questions encouraged the

athletes to engage in deeper thought and reflection, at times this process was time consuming. The reflections of the three consultants suggested that the assessment phase might be implemented more effectively if separated from the initial profile development stage. Consequently, the process might be best completed across two consultancy sessions: An initial consultancy to generate the athlete's sources and types of confidence, including the athlete's descriptions of their most and least confident sporting experiences; followed by a second consultancy to assess the athlete's levels of confidence and enable them to generate potential strategies to enhance their sport confidence. This would reduce the risk of the athlete becoming tired and disengaging from the process.

Despite the value of MI style questioning, and the use of scaling rulers within a sporting context, no reviews of MI effectiveness have yet been performed in behavioral domains outside substance abuse (Dunn, Deroo, & Rivara, 2001). The purpose of the current study was to adapt and extend performance profiling to the assessment of sport confidence. The scaling rulers and motivational questions used by MI proved to be an appropriate method to assess the athletes' confidence levels and generate confidence enhancing strategies targeted toward their perceived confidence needs. However, the authors' recognize MI is an approach, rather than simply the utilization of a series of skills (Rollnick & Miller, 1995). Since athletes sometimes experience ambivalence, for example, committing to training schedules or adhering to support work interventions, the effectiveness of MI in sport psychology consultancy might provide a fruitful line for further research in professional practice settings.

In summary, confidence profiling provides an alternative confidence assessment method specifically developed for use within an applied sporting context. The use of scaling rulers was shown to facilitate this process and provide an accurate understanding of the athlete's viewpoint. Furthermore, the varied participant sample demonstrated the versatility of confidence profiling and provides some support for the usability of this method regardless of an athlete's demographics, sport type, or the organizational culture to which they belong. Indeed, while the profiles generated by each of the athletes shared some common themes, this move toward a more idiographic and practical measurement approach allowed individual differences in confidence to emerge, providing an in-depth assessment of an individual athlete's specific confidence needs. Thus, completed profiles could form a strong foundation from which athlete driven interventions could be developed.

In accordance with the sentiments of Vealey and Garner-Holman (1998) the applicability of the confidence profiling process to the development of confidence enhancing interventions needs to be explored in practical settings. Given that the scaling rulers and motivational questions used by MI proved to be an appropriate method by which to assess the athletes' confidence levels, and generate confidence enhancing strategies targeted toward their perceived confidence needs, the authors advocate their use in future sport psychology consultancy.

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