Overcoming performance slumps: Psychological resilience in expert cricket batsmen

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Abstract

The purpose of this study was to explore the experience of performance slumps in cricket from the perspective of psychological resilience. Findings from a thematic analysis of a focus group (n = 4 athletes) and one-to-one interviews (n = 10 athletes) with fourteen expert cricket batsmen indicated that numerous factors associated with psychological resilience protected players experiencing poor performance from the negative effects of stress, enabling them to successfully implement strategies to overcome slumps. These strategies fostered the strengthening and acquisition of technical, tactical, and psychosocial resources that protected players against future slumps. The findings suggest practical strategies to aid players experiencing slumps to overcome their performance difficulties.

Keywords: Challenge appraisal; Confidence; Growth; Strengths; Stress

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There is a natural cycle of athletic performance in elite sport that ebbs and flows above and below an athlete's own expected levels (Mummery, Kerry, Schofield, & Perry, 2004). However, athletes regularly experience extended periods outside this natural cycle where performances are considerably below their usual standards (Patel, Omar, & Terry, 2010). These periods are often referred to as 'performance slumps'. Taylor (1988) suggests a slump is a decline in performance over an extended period that goes beyond normal cyclic variations. Furthermore, slumps are associated with physical, technical, and psychological changes to an athlete that can have negative cognitive, emotional, and behavioural consequences. Slumps have been recognised as a significant issue in the sport of cricket with anecdotal accounts (e.g., Waugh, 2006; Vaughan, 2009) and scientific research suggesting that the 'loss of form' and consistently lower than expected standards of performance are some of the most salient stressors experienced by cricket batsmen (Thelwell, Weston, & Greenless, 2007).

Persistent and/or reoccurring slumps can have significant detrimental effects on cricketers' wellbeing, and the need to overcome slumps and return to usual standards of performance is of great concern (Vaughan, 2009). In this respect, researchers have reported that cricket batsmen view resilience as a crucial attribute that enables them to overcome performance adversity (Weissensteiner, Abernethy, Farrow, & Gross, 2011). However, to the authors' knowledge, there is no existing research that has specifically explored experiences of overcoming batting slumps from the perspective of psychological resilience.

Early research on performance slumps placed the phenomenon within the context of the stress process. However, slumps are distinct from other phenomenon in sport that involves stress and performance decrement, such as 'choking' or the 'yips'. In these cases, athletes tend to experience more acute loss of performance and, especially in the case of the

'yips', with more pronounces physical antecedents and consequences (Mesagno & Hill, 2013).

Empirical work on slumps has tended to focus on the cognitive and behavioural strategies used to manage slump-related stress. Researchers have indicated that athletes used a variety of problem-focussed, emotion-focussed, and avoidant coping strategies in order to mitigate slump-related symptoms (Madden, Summers, & Brown, 1990). For example, Prapavessis and Grove (1995) found that semi-professional baseball players attempted to increase effort, maintain a positive outlook, return to the basics of skill execution, and use social support in order to overcome their slump.

More recently, research has found that the occurrence of slumps is associated with causal attributions for performance. Specifically, Ball (2013) conducted a study with elite athletes competing at national and international level in a variety of individual and team sports and found that athletes with a pessimistic explanatory style experienced more frequent performance slumps. Ball suggested internal and stable attributions for poor performance fostered negative emotional states, reduced motivation, and decreased confidence that further inhibited future performance. Thus, athletes with a pessimistic explanatory style can experience a downward spiral of performances that further reinforces their internal and stable attributions. This is consistent with attribution theory (see Weiner, 2010), which posits that individuals with a pessimistic explanatory style typically explain their poor performance with stable causes, such as a lack of ability. Furthermore, individuals with a pessimistic explanatory style anticipate that negative outcomes will be persistent and enduring, often leading to a reduction in expectations of success.

In contrast, research has shown that an optimistic explanatory style can facilitate future performance after failure (Martin-Krumm, Sarrazin, Peterson, & Famose, 2003). Individuals with an optimistic explanatory style explain negative outcomes with more

unstable/external attributions, such as a lack of effort, incorrect tactics, and/or bad strategy. This offers a context that facilitates relatively stable expectations for future performances. Therefore, athletes with an optimistic explanatory style are less likely to suffer a reduction in motivation and confidence following poor performance, and can avoid the downward spiral of negative emotions that are associated with failure (Martin-Krumm et al., 2003).

The research described above has provided some understanding of the psychological states and mechanisms associated with performance slumps. However, findings are dominated by studies using quantitative self-report data and a narrow focus on coping with the emotional consequences associated with a drop in performance (Ball, 2013; Prapavessis & Grove, 1995). Much less is known about the subjective experiences of slumps in specific sports, the psychosocial processes that may influence the way athletes' evaluate the potentially stressful experience of an extended period of poor performance, or the specific psychosocial characteristics that may influence the stress process.

Given that resilience has been identified as an important factor in overcoming performance adversity in cricket (Weissensteiner et al., 2011), recent theoretical and empirical developments on the concept of psychological resilience (see, Sarkar & Fletcher, 2014a, for a review) may offer a useful lens to advance the understanding of performance slumps in this sport. Several theories/models of resilience have been proposed in general psychology (see, for a review, Fletcher & Sarkar, 2013), and despite some differences, they contain a number of common features. Most theories/models acknowledge that resilience is a dynamic process that operates over time, rather than a static or unidimensional 'trait' (Richardson, 2002). Furthermore, resilience incorporates a constellation of psychosocial factors that interact to influence the process and outcomes of engaging with potential stressful situations (Fletcher & Sarkar, 2013).

Specifically related to sport, Galli and Vealey's (2008) conceptual model of sport resilience was developed from the analysis of semi-structured interviews exploring the adversity-related experiences of ten current or former college and professional athletes. It describes resilience as a multi-dimensional process moderated by personal protective characteristics, and socio-cultural factors occurring over time in relation to specific person-environment interactions. The conceptual model of sport resilience has received support from Machida, Irwin, and Feltz (2013) when examining resilience in athletes with spinal-cord injury and from Brown, Lafferty, and Triggs's (2015) study of the adversity-related experiences of elite winter sport athletes.

However, Fletcher and Sarkar (2012, 2013) have been critical of the model of sport resilience due to Galli and Vealey's (2008) over reliance on Richardson's (2002) resilience model. Specifically, Fletcher and Sarkar (2012; 2013) argue that, although there has been some support for Richardson's model, it is limited by a linear stage framework that may not fully capture the dynamic nature of resilience process. Furthermore, Richardson's model is biased toward coping-oriented processes and fails to account for higher level meta-cognitive and emotive processes involved in appraisals of stress.

In recognizing the limitations of the conceptual model of sport resilience (Galli & Vealey, 2008), Fletcher and Sarkar (2012) developed a grounded theory model of psychological resilience derived from interviews with 12 Olympic champions. Results indicated that numerous psychological factors - relating to a positive personality, motivation, confidence, focus, and perceived social support - protected the world's best athletes from the potential negative effect of stressors by influencing their positive evaluation and meta-cognitions (knowledge of, and control over, cognitions) of stressors. These processes promoted facilitative responses (e.g., positive behavioural responses) that facilitated optimal performance. Resilience was conceptualised as the interactive influence of psychological

characteristics within the context of the stress process (cf. Fletcher & Sarkar, 2013) and thus, building on this perspective, psychological resilience was defined as "the role of mental processes and behaviour in promoting personal assets and protecting an individual from the potential negative effect of stressors (Fletcher & Sarkar, 2012, p. 675, 2013, p. 16)".

Notwithstanding the important advances that have been made in the study of psychological resilience in sport, existing research (e.g., Galli & Vealey, 2008; Fletcher & Sarkar, 2012) has focussed on somewhat heterogeneous adversity-related experiences (e.g., loss of form, personal tragedy, relationship difficulties) in single studies. As Fletcher and Sarkar (2012) argue, the stress-resilience-performance relationship is dynamic and is often influenced by a wide number of situational factors. The resilience process should, therefore, be considered in relation to specific stressors and the context in which they arise. Indeed, Brown et al. (2015) found that the resilience process was context-specific and was influenced by the type of adversity (e.g., career impacting injuries, funding issues, and performance setbacks) being experienced. This provides a strong rationale for a deeper investigation of the resilience process in response to distinct sporting stressors, such as batting slumps in cricket.

With this in mind, the purpose of the current study was to explore cricket batters' experiences of performance slumps from the perspective of psychological resilience. Specifically, we aimed to identify the psychosocial factors that facilitated resilience for these individuals, and also those factors that proved detrimental to their ability to overcome slumps.

Method

Methodology and philosophical underpinning

A qualitative approach was adopted due to the exploratory nature of resilience in a previously under-represented group. Ungar (2003) proposed that qualitative methods can make a substantial contribution to our understanding of resilience since this approach can be

particularly useful to highlight the sociocultural context in which resilience occurs. Data was collected in two stages: a focus group followed by individual interviews. The rationale for using this dual approach came from the desire to gain a rigorous and in-depth examination of a relatively underexplored phenomenon (i.e., performance slumps in cricket). It has been suggested that focus groups can facilitate new insights into phenomena as participants explore similar experiences and shared understanding (Wilkinson, 2003). Conducting one-to-one interviews provided further context to the emerging themes from the focus group and facilitated understanding of personal experiences of performance slumps.

The present research was conducted from a critical realist perspective. Wiltshire (2018) suggests critical realism offers a way of transcending persistent paradigmatic debates that constrain the impact of research in the field of sport and exercise psychology by bridging the gap between realist and constructivist–interpretivist approaches. Critical realism proposes a stratified ontology that distinguishes between three domains of reality, these domains are referred to as *the real, the actual, and the empirical* (Bhaskar, 1979). The real domain contains relatively enduring biochemical, economic, and social structures that can generate events and phenomena. These social structures exist and exert causal influence irrespective of whether people are aware of them or not, and are thus 'mind-independent' (Parker, 1998). The actual domain consists of events and phenomena that are generated when the causal mechanisms of the real are activated (Archer, Bhaskar, Collier, Lawson, & Norrie, 2013). In the empirical domain, lived experiences of events are conceived of as being separate from the actual events themselves. This is because critical realism argues that scientific activity is inherently fallible and laden with subjective beliefs and values. There is no way of knowing the world, therefore, except under particular, more or less transient historical and cultural descriptions (Danermark, Ekstrom, & Jacobsen, 2005).

In describing a stratified ontology, critical realism recognises interactions between relatively enduring 'real' social structures of reality *and* the ways that human beings engage with, interpret, and make sense of the world (Elder-Vass, 2012).Thus, in the present study, the participants' experiences are viewed as being subjective, but also real for them; and, at the same time, their experiences are influenced by complex cultural and social factors that exert causal influence (Christ, 2013). For example, in an environment such as an all-male professional cricket team, socially constructed, but relatively enduring, ideas around masculinity are likely to influence individual perceptions and experiences of stressors and adversity (Douglas & Carless, 2009).

Participants

Purposive sampling (Patton, 2002) was used to select and recruit participants. Players were invited to take part if their primary role within their team was as a batsman, and they had played at a high level of cricket with significant demands associated with performance and competition for places. As such, players competing at semi-professional ('Minor Counties') and professional level ('County Cricket') were invited to take part.

In the first stage of the study, four male participants aged between 22 and 28 years (M = 26.52, SD = 5.43) took part in a focus group. The participants began playing cricket in childhood and were currently playing at a semi-professional level. One of the participants in the focus group had previous experience of playing at a professional level. The other three had ambitions to play at a higher level and had been selected for training camps, or had trials for professional teams, but had not been offered a contract. The sample was selected due to their extensive playing experience at a high standard of cricket (M = 6.05, SD = 1.87 years), therefore, they were able to provide detailed descriptions of the technical (e.g., skill execution), psychological (e.g., cognitive processes/emotions) and practical (e.g., strategies

used to overcome slumps) aspects of batting performance slumps.

In the second phase of the study, ten male participants aged between 19 and 42 years (M = 27.12, SD = 7.97) took part in one-to-one interviews. Eight of the participants were active players currently contracted to professional teams in the UK, with professional experience ranging from one to ten years (M = 6.00, SD = 3.51). Two participants were recently retired professional cricketers each with over twelve years playing experience. The final participant was currently playing semi-professional cricket overseas and had previous experience of professional level cricket in the UK.

Procedure

After institutional ethics approval, the purposive sample (Patton, 2002) of experienced cricketers was recruited from cricket clubs in northern England. Contact was made with each individual to explain the scope and purpose of the focus group/interview and gain consent to take part. All data was collected by the first author face-to-face except one individual interview involving the overseas participant, which was conducted via video telephone software.

Participants were informed at the beginning of the focus group/interview that the aim of the study was to explore their experiences of 'losing form' (a common term in cricket). A semi-structured focus group/interview guide was used during all stages of data collection. As the purpose of the interviews was to explore each athlete's personal experiences, definitions or descriptions of performance slumps were not provided. The questions were designed to illicit information on the participants' own experiences of performance slumps (e.g., Can you tell me about a time when you have experienced a significant drop in your performance?), strategies used to overcome the slump(s) (e.g., Can you tell me how you responded to this?), and perceptions of how the slump affected them as a player/person (e.g., What impact did this have on you?"). Follow-up questions and probes were used in order to gain a deeper

understanding of the players' accounts and, in the case of the focus group, the players were also encouraged to highlight and discuss shared understandings of slumps. The focus group lasted 65 minutes and the individual interviews lasted between 37 and 75 minutes (M = 51.5, SD = 12.1).

Data analysis

The focus group was transcribed before the individual interviews took place and helped to provide an initial understanding of the phenomenon. Once all interviews had been completed, the focus group and interview data was combined for further analysis. This enabled a more contextualised and comprehensive analysis to be conducted (Shaw & Yueng-Hsiang Huang, 2005). The analysis was conducted using the guidelines for thematic analysis presented by Braun and Clarke (2006). After the transcripts were thoroughly read several times, initial coding was carried out inductively and aimed to explore the participants subjective experience through their own perceptual filters (Christ, 2013). This led to primarily sematic codes, however, latent content that moved beyond what was explicitly said was also identified (Braun & Clarke, 2006). The second stage of the analysis had more of a deductive element (Fereday & Muir-Cochrane, 2008), using previous literature (e.g., Fletcher & Sarkar, 2012) to inform the analysis process. The integration of subjective and objective knowledge, a process that is referred to as retroduction by critical realists, was designed to facilitate a deeper understanding of the phenomenon of slumps in the context of psychological resilience (Danermark et al., 2005). Moving toward the final structure of the analysis, similar codes were clustered around a central organising concept to form themes, before a second level of abstraction produced higher-order themes. The higher-order themes were used to develop general dimensions, which structured the analysis around fundamental ideas related to the players' perceptions and experiences of resilience.

Research quality

Researchers using qualitative methods have been encouraged to present procedures that promote 'rigour' in their data collection and analyses and 'trustworthiness' in their findings. In this respect, a variety of research quality criteria have been developed (see, Tracy, 2010, for an example). Recently, researchers have been encouraged to select criteria to promote quality in their work based on relevance to the study, rather than a defined 'checklist' applicable to all qualitative research (Leung, 2015). With this in mind, criteria for judging the quality of this research were selected because they were appropriate for the study, and included: Worthy topic; resonance; rich rigor; significant contribution; meaningful coherence; and sincerity (Tracy, 2010).

The topic was selected in order to make an original contribution to the emerging research on resilience in sport. It was hoped that the findings would also make a significant contribution to the field of applied sport psychology and, resonate with players, coaches, and support staff in cricket by providing practical knowledge of resilience in the context of a relevant performance-related stressor. The aim was to enhance rich rigor by engaging with participants with the appropriate knowledge and experience of the phenomenon using appropriate data collection methods. Furthermore, throughout the research process, two colleagues acted as 'critical friends' (Smith & Sparkes, 2012). This involved reading and, in some cases, coding transcripts, and reviewing passages of text that were presented to support emerging themes. Critical friends also helped with coherence and reflection through exploration of theoretical, methodological, and philosophical aspects of the research process. In order to support the goal of sincerity, a reflexive diary was used by the first author to document analytical decisions and to facilitate a reflexive approach to the research.

Results

The aim of the study and subsequent data collection and analysis was to explore the

players' experiences of performance slumps and to highlight the psychosocial factors that influenced the process of resilience during these periods of low performance. Throughout the focus group and interviews, the players used colloquialisms to describe a loss of form, such as being "out of nick" or "on a bad trot". Participants in the focus group agreed that performance slumps were "not performing to your potential" and "not being up to your usual standards". The exact duration of performance slumps varied from slump to slump and from person to person, but generally the players related a slump to a period that went beyond four or five innings of lower than expected performance.

To address our primary research aims, the data derived from the focus group and interviews were collated and analysed to produce four general dimensions: appraisal of the slump, controlling performance states, context of the slump, and personal protective factors. The four general dimensions were comprised of ten higher-order themes that were categorised from 27 lower-order themes. General dimensions, higher-order themes, and lower order themes are presented in Figure 1. Findings are organised under each general dimension and are presented below with illustrative examples from the data. All the names used in the results are pseudonyms.

Appraisal of the slump

This dimension was related to the players' evaluation and assessment of performance-related stress when faced with an extended period of low scores. Appraisal of the slump contained three higher-order themes: 'maintaining a positive mind-set', 'causal attributions', and 'challenge/threat appraisal'. Through the analysis of the data, it became clear that extended periods of low scores were pertinent stressors for the professional cricketers since their place in the team, and ultimately their livelihood, was dependant on them scoring runs. A negative interpretation of stress often led to a loss of judgement, anger, and frustration, making action to address the slump more difficult. However, there was a strong view that "a

positive mind-set" in the face of low scores could mitigate negative cognitive and emotional responses. David, a player with experience of playing international cricket, described how he worked with his coach to avoid putting a "label" on a period of low scores:

> We'd try and stay away from the word 'form' and we'd try to talk about 'mind-set'…positive mind-set and thinking, discarding the last innings if it didn't go too well and very much looking at the present to get them [emotions] as consistent as I could.

Attributions for periods of low scores were also an important factor in the way that players' viewed their experiences. When they were going through a slump the players' would sometimes doubt and question their own ability. This stable, internal attribution increased negative cognitive and emotional responses, and prevented the players from formulating strategies to overcome their slump. In contrast, accepting that performance was cyclical and slumps were "just part of the game" (i.e., an external and unstable attribution) helped to reduce cognitive and emotional distress. Tony had played professional cricket for over 10 years and had developed a pragmatic attitude towards slumps: "they happen to us all, that's professional cricket, that's sport, and you've got to recognise that, and just focus on the next innings".

The players' challenge/threat appraisal was also a key factor in the resilience process. All of the players said they felt the pressure of performing at an elite level and this was magnified during a period of low scores. However, several players indicated that they were able to embrace and thrive on the pressure they experienced when in a performance slump, which helped them to increase their focus and strengthen their determination, as the following quote from Robert illustrates:

> Some people can thrive off them [slumps]. Pressure can make you more determined and focussed, whereas other people might crumble when they are under pressure and

they do silly things when they are out there [batting]… I think for me, the pressure gets me more focussed.

Central to the resilience process was the ability to view slumps as opportunities for personal growth and learning. This helped the players to develop self-awareness and enabled them to become better equipped to deal with future performance-related stress. Carl, a former professional cricketer who took part in the focus group commented:

Rough patches are just as good as your better patches in a way, because it's teaching you the game…because you're not thinking about your game when you're doing well…it's your rough patches where you find out where your game is strong.

Controlling performances states

Controlling performances states related to the awareness of, and ability to master, psychological processes *during* innings. This dimension was comprised of three higher-order themes: 'controlling cognitive processes', 'maintaining focus', and 'regulating arousal'. Controlling cognitive processes is the higher-order theme that refers to the players' attempts to regain control of their performance by using a variety of cognitive-behavioural strategies, such as best performance imagery, and positive self-talk. This was expressed in quotes such as; "I try to visualise the performances when I've actually gone through a good run" and "I try to get myself going…so I'll say to myself 'come on' and try talking myself up". Chris, a first year professional player, described how he developed a particular motivational and instructional cue phrase, "happy feet", during one particular performance slump that reminded him to stay positive when batting. This allowed him to block out any negative invasive thoughts and concentrate on the execution of his skills.

I talk to myself, say things like 'get busy', 'see the ball', but the big one is 'happy feet', so I feel light on my feet. Yeah, 'happy feet', then I'm focussed and I know I'm going to hit the ball there, I'm going to do that, and those sort of positive words help

me concentrate.

The importance of managing concentration levels and attention during innings was also discussed by Martin, who played professionally for 12 years before his retirement. He described how focussing on short term goals during slumps helped him to stay in the moment, concentrate on what was required in the game situation, and do whatever it took for him to 'grind out' a score for his team:

> You break it down to each ball, and each ball you say I'm going to deliver my skills here, just concentrate on every ball and just compete, just compete and think what does this team need right now, that's the most important thing.

'Regulating arousal' concerns the importance of being able to access an optimum state of personal readiness to perform. A couple of players described being under aroused if they were experiencing a performance slump, such as Alan who said he "struggled to get butterflies" after becoming so demotivated during a slump. However, the majority of players described becoming over aroused during slumps, usually driven by desperation to get back to how they had previously performed. Kevin described how he was so over aroused during a slump "every ball felt like a massive thing" and "batting for half an hour felt like a day", but this experience had helped him to become more aware of his ideal performance state, and better equipped him for future slumps:

> I got to a point where I just couldn't get myself up for it anymore because I thought that was the right thing to do. I thought if I can get as up for it as I possibly can be, even if my technique's not quite right, then I'll be alright. But in hindsight I should have tried to do the opposite……but at the time it was just hard to think like that, I couldn't think clearly…rather than now, I just stay calm, think clearly and that helps me to focus a lot more and be able to concentrate.

Personal protective factors

Throughout the data analysis, it appeared that various individual differences and personal characteristics influenced the ways in which the players dealt with performance stressors related to their poor form and protected them from the potentially negative effects of their experiences. This dimension consisted of two higher-order themes: 'personal resources', and 'awareness of strengths'. The personal resources that were facilitative for the resilience process included determination, a strong work ethic, competitiveness, confidence, and perceived social support. Enjoyment of and passion for cricket was cited by a number of batsmen as playing an important role in their response to performance stressors, and often acted as a powerful motivational resource behind positive behaviours and actions to address a series of low scores. For example, Matt, one of the established professional players, said:

> I just enjoy playing cricket, it's something I've been brought up on and it's something I would like to be involved in for as long as possible. If that means dragging myself down the nets, or improving my fitness to get me through a bad run, then so be it.

Confidence was one of the most salient individual differences in the data analysis. Players viewed confidence as a protective resource against stress, but acknowledged that they were vulnerable to a drop in confidence after a run of low scores. Despite relying on good performances as a source of confidence, there was wide recognition amongst the players that breaking the link between their performances and their confidence was the key to mitigating the negative effects of stress during slumps. Alex, a particularly insightful player with over 10 years' experience in English 'county' cricket, described the following:

> I try to link my confidence to my effort, not my performance. So I'm doing everything I can to give myself the best chance of performing, and effort being the measure of your confidence level would give you more stability, because with the best will in the world, if you just base your confidence on your performance, it's just the nature of the

> game, you could be in the best 'nick' [form] of your life and still get nought if you get a good ball.

The higher order theme 'awareness of strengths' was comprised of the lower-order themes: 'cricket knowledge, 'back to basics', and 'batting with a plan'. These themes captured the players' view that a deep knowledge of their personal cricketing skills and their personal strengths helped to protect them against the negative effect of stress that slumps can cause by giving them a basis to develop specific strategies to address their loss of form. These strategies were employed in practice and in games and enabled them to quickly rediscover their expected levels of performance. This helped to minimise the "poor judgement", "loose shots" and the "mental blocks" that were identified as symptomatic of batting slumps.

Crucially for the resilience process, the experience of overcoming a performance slump often helped the players to become more aware of their personal strengths, and cricket skills. This learning and sense of growth allowed them to develop a method of batting that they could rely on during periods of low scoring and, in the longer term, facilitated more consistent performance. Gary, a first year professional, discussed how experiencing a slump in professional cricket for the first time helped him to improve:

> I wasn't really aware of where I was strong before...but I've sort of got my game plan against spinners and my game plan against seamers [types of bowling] now that just works for me. But in the past I'd not really thought about it, I'd just gone out and batted and not really thought about what I was trying to achieve.

The process of reflection evident in Gary's quote above can also be seen in the following quote from Matt when discussing how he reflected on the cognitive, emotional, and practical aspect of batting during slumps. This appears to have given him some clarity and perspective on his performance (e.g., reframing slumps as "ebbs and flows") that helped him

to become a better player. It is interesting to note, however, that this process of reflection was not easy and Matt needed support to facilitate the process.

> My own personal struggle was the ability to just replicate the mental processes more consistently, so I would do some reflection so I knew my thoughts, my feelings, and the outcomes I wanted as I go into the next session. But on my own I find it very difficult and that's where John (sport psychology consultant) helped me to get a few things down in that period… I think that experience was vital and the longer that goes on the more you begin to notice the perhaps ebbs and flows of performance and assuming that you get the opportunity to speak to the right people or you are reflecting in the right ways you should become a better batter for them (slump).

The type and timing of social support was a salient theme throughout. All but one of the players discussed the importance of a trusting relationship in their life, which helped them to keep their slump experiences into perspective. Often, support came from people not directly involved in the day-to-day aspects of playing cricket, and conversations were not always related to the players' performance issues. In the following quote, Mike talks about the importance of his relationship with his father during slumps. The idea of "family time" invokes a sense that Mike feels cared for and safe in this environment, and interactions with his Dad helped him to feel more confident about his situation.

> If I'm not performing well then I speak to my father, family time. It doesn't have to be cricket related… I will just go and speak to my dad just about life or other things…it's important to have someone you can go to when you are going through bad form, whether that's a family member, a friend, someone that you are very close to that you trust…my Dad will just talk to me and give me a lot of confidence he just says to me you know 'keep going', 'you're good enough', it give me that inner confidence because he knows me, he's known me all my life.

Some of the players discussed how a strong relationship with their coach and senior teammates facilitated informational support regarding specific technical aspects of batting, which offered new insight into the perceived issue. However, a number of players found accessing social support within the team environment more difficult. This was highlighted by the following quote from John, who spent almost ten years as a professional cricketer:

> You had to be perceived to be a man, you know, you couldn't say I'm struggling here…you couldn't really show any weaknesses otherwise you'd be perceived as being soft. I would have never have had that conversation with a senior player because they would have thought 'he's soft, get him out of the team, chuck him out'.

Context of the slump

This dimension refers to external factors, largely outside the players' control, that influenced their slump experience and the resilience process. Specifically, 'timing of the slump' and 'career status' were the two higher-order themes. The timing of the slump during the season was particularly important for the players' ability to mobilise the personal resources that protected them against performance stress. This was related to the nature of the cricket season where a player may be playing five or six days per week for six months. Players experiencing slumps during the middle of the season often found it difficult to deal with their performance-related stress and were often "dropped" (deselected) after continued poor performance. In comparison, those suffering a performance slump toward the end of the season were in a better position to "think rationally" and were able to successfully implement strategies to overcome their slump.

Career status also had a major influence on players' capacity to demonstrate resilience. The players described lacking the resources (e.g., confidence) to deal with initial experiences of slumps in their early career stages, but also lacking the motivation to deal with the stress of slumps toward the end of their careers, when they had already achieved many of

their cricketing goals. One of the retired players commented:

> Once the next slump came, I almost didn't have the energy for it. I thought, 'I don't think I can do this again', because it took an enormous commitment for me to get myself in a place where my performance was good enough.

Career status was closely linked to the theme of life experience. That is, the more experienced/older players were able to place their sporting difficulties in the context of the things that mattered to them the most. This reduced their perceptions of performance related stress. For example, one of the retired players talked about how a family member's illness led him not only to overcome a slump, but then enabled him to play some of his best cricket of his career:

> My wife's mother had been very, very sick so I was having a tough professional period but I was having a much more difficult personal period and my cricket became of secondary importance to me, until then it was everything. It was the first time in my life that a personal thing had put the whole thing into perspective for me, and what happened? I got runs. I'd just got this mentally that I'd got to do what's right for the people close to me and I'm not going to worry too much about it (slump) and for a time that's when I played my best cricket, and it was largely due to that gravitas of the situation with my wife's mum and the situation just putting the whole thing into perspective.

Discussion

Via a combination of qualitative methods (i.e., focus group and interviews), the purpose of the current study was to explore the experiences of performance slumps of expert cricket batsmen from the perspective of psychological resilience. In doing so, the present findings identified the psychosocial factors that facilitated resilience, and also explored those factors that proved detrimental to the participants' ability to overcome slumps.

Overall, the findings indicate that overcoming slumps was associated with a psychosocial process that allowed players to access and promote personal resources in order to protect against the potential negative effect of stressors related to an extended period of low scoring. This enabled the players to respond to a loss of form in a facilitative way by successfully implementing strategies that enabled them to return to expected levels of performance. Furthermore, this process helped the players to strengthen and acquire technical, tactical, and psychosocial resources that could protect them against future slumps.

The present findings offer a new way of conceptualising responses to performance slumps that move beyond the coping perspective that has dominated previous research. Although studies on coping with performance slumps (e.g., Madden et al., 1990; Prapavessis & Grove, 1995) have highlighted the different strategies that athletes use to manage their performance-related stress, they overlook important aspects of the stress-performance relationship. More specifically, coping is related to the selection of strategies to manage an event *after* it has been perceived to be stressful and can include both adaptive and maladaptive responses (cf. Fletcher & Sarkar, 2013). In contrast, the present findings demonstrate the importance of the players' initial appraisals of their slump. That is, when players were able to disassociate themselves from the 'numbers' (i.e., their low scores) they were able to see a slump as "just part of the game" or the "ebbs and flows of performance". This enabled them to maintain physical, technical, and tactical functioning, and this facilitated a return to their accepted levels of performance. This was discussed by, for example, Tony who avoided putting a "label" on a period of low scores in order to maintain a positive mind-set and a more consistent emotional response to his slump.

The importance placed on positive appraisals of potential stressors in the present findings supports extant models concerning the stress process in sport. For example, the theory of challenge and threat states in athletes (Jones, Meijen, McCarthy, & Sheffield, 2009)

outlines how athletes' respond to competitive situations through a process that determines challenge and threat states. A challenge state arises when appraisals of competitive demands and available resources to meet these demands result in high self-efficacy, a perception of control over the situation, and desire to demonstrate competence. Therefore, an athlete experiencing a challenge state is able to maintain motivational, attentional and physical functioning despite potentially threating situations like, for example, competing during a performance slump.

For several of the players in the present study, central to the appraisals of slumps was the ability to see them as an opportunity for personal development and growth. Overcoming lower than expected performances involved interactions between cognitive, affective, and relational processes that enable the players to evaluate a period of low scoring as an experience that could have potential benefits. This was demonstrated, for example, by the experiences of Carl, who commented that he saw "rough patches" as the opportunity to learn, grow and become a better player through a greater understanding of his game. This finding is line with the findings of Fletcher and Sarkar (2012), who found that Olympic champions had a tendency to see stressors and adversity as opportunities to demonstrate mastery and develop skills to give them a competitive edge.

The present findings offer broad support to the grounded theory of psychological resilience and optimal sport performance (Fletcher & Sarkar, 2012), in that the process of resilience is influenced by a constellation of psychological factors (positive personality, motivation, confidence, focus, and perceived social support) that influences athletes' challenge appraisal and metacognitions. What the present findings add to this perspective is closer analysis of the process of resilience gained from exploring the experiences of a specific stressor and a specific sport (i.e., batting slumps in cricket). For example, regarding the players' meta-cognitions, a key message from the current findings relates to the players'

ability to use reflective thinking to evaluate their performances and develop effective strategies to address their run of low scores. The process of resilience was facilitated when players were able to reflect on previous positive performances and current performance difficulties to gain a comprehensive understanding of the technical, tactical, and psychological aspects of their 'loss of form'. For example, Gary's ability to recognise that he needed to change his approach to batting when facing different types of bowling. A higher level of evaluation and assessment fostered feelings of control and mastery, and helped the players to initiate successful strategies to shorten the duration and depth of their slump.

The present research supports work by Andersen, Hansen, and Haeren (2015) who suggested that elite athletes have four different styles of reflection, with some styles more conducive to productive learning than others. Andersen et al. (2015) argued that the most desirable style of reflection involves a rich appraisal of specific situational demands, the ability to put to one side previously held assumptions and beliefs, and the awareness to react to specific feedback signals with appropriate actions. Thus, purposeful reflection can accelerate learning by providing people with a means to generate self-awareness and empowering them to implement change (Sarkar & Fletcher, 2014b).

The cognitive processes involved in resilience against performance slumps were often related to the players' explanatory style. Specifically, an optimistic explanatory style was facilitative for resilience. This is consistent with previous findings on slumps (e.g., Ball, 2013), but extends resilience research by identifying the specific attributions made by high level cricket batsman in relation to a specific performance-related stressor. To illustrate, players who had an optimistic explanatory style recognised that periods of low scoring were a natural part of a performance cycle. The players were always striving for a consistent level of high level performance, but they recognised that this was difficult to maintain. Moreover, they were aware of a multitude of factors that could influence their performance that were

outside of their control (e.g., good performance by the opposition, poor officiating, and adverse playing conditions). Thus, players demonstrating resilience viewed low scores as 'blips', had a more optimistic assessment of their ability to overcome their performance-related stressor, and were therefore confident they would quickly return to their best form. This enabled the players to remain distanced and detached from the negative aspects of their situation, allowing them to mitigate emotional distress, and remain focussed on strategies to overcome their current loss of form (Sarkar, Fletcher, & Brown, 2015).

Relatively little attention has been given to the specific psychological processes involved in resilience during the physical act of performance (Fletcher & Sarkar, 2012; Brown et al., 2015). Thus, the findings from the current study offer some unique insights into the psychological performance states related to the experience of slumps in cricket. Although ideal performance states were highly idiosyncratic, players that had positive expectations of success, control over their cognitive and emotional reactions, and feelings of being relaxed yet energised, were best placed to overcome performance slumps (Harmison, 2006). For example, Martin discussed that even when he struggled to execute his skills fluently, the ability to regulate his performance state through cognitive-behavioural strategies allowed him to 'grind-out' an innings. These experiences often encouraged the learning and utilisation of new skills and approaches to batting that offered protection from stress, and equipped the players with additional knowledge that could be utilised when the next run of low scores came.

Similar to previous findings (e.g., Brown et al., 2015; Fletcher & Sarkar, 2012; Galli & Vealey, 2008) social support played a vital role in the process of resilience for these cricket players. Social support has been identified as a key factor for the well-being and sporting success of athletes (e.g., Freeman & Rees, 2010), and the players in the present research discussed the importance of emotional, esteem, informational, and tangible support. The

players often discussed the details of the specific types of support they received; it was the way that this support led to a more positive appraisal of their situation that influenced the resilience process. For example, the support Matt received from his sport psychology consultant helped him to reframe slumps as natural "ebbs and flows" of the game. Furthermore, as demonstrated by Mike when he discussed the importance of have a caring and trusting relationship with his farther, perceptions of support from family members often helped the players to place their performance slumps in perspective, reaffirmed that they were loved and cared for regardless of how they performed in sport. This helped them to approach their slump with a greater sense of self-esteem and confidence that often facilitated resilience.

It is important to note that some of the players highlighted difficulties in accessing social support and this would often hinder the resilience process. This appeared to be related to traditional masculine attitudes within an all-male team environment and the reluctance to ask for support. This supports research from Mitchell, Neil, Wadey, and Hanton (2009) who found that men recovering from serious sporting injuries tended to perceive social support as less available than women in similar circumstances. This is congruent with studies from the healthcare literature, which suggests that men can face barriers as receivers and providers of support during times of stress, often linked to difficulties in expressing feelings without undermining masculine identity expectations (Love, Thompson, & Knapp, 2014).

Practical Implications

Recently, Fletcher and Sarkar (2016) presented an evidence-based approach to developing psychological resilience that seeks to promote the personal qualities, facilitative environment, and challenge mind-set that enables high level performers to withstand pressure. This framework, alongside the context-specific knowledge provided in the present research, could be used by coaches and practitioners working within elite cricket to implement individual and team-level resilience training and education programs. These

strategies could be part of a holistic approach to help players develop and foster the resilient characteristics and processes that can protect them from the potential negative effects of stress during periods of low scoring.

Specifically, the ability to positively evaluate and interpret pressure (challenge state) - that appeared to be so crucial for resilience in the present research - could be developed by implementing pressure inurement training (PIT; Fletcher & Sarkar, 2016). Pressure training systematically manipulates the training demands an individual is facing (e.g., by introducing constraints on the rules of play) and/or the salience of an activity (e.g., by manipulating the players' perceptions of being judged) to help athletes engage with potential performance stressors. The aim is to support athletes to become 'comfortable feeling uncomfortable' in situations that simulate their competitive environment and help them to develop strategies for self-regulation. Given that self-regulation during batting performances was a key aspect of the resilience process for the cricketer in the present research, a PIT approach may help players to identify, develop, and test their personal strategies in a proactive approach to developing resilience.

In the present study, an acute awareness of one's own tactical and technical cricketing strengths was a key resource that protected the players from the potential negative effects of stressors related to their low scoring. Therefore, personal qualities to promote resilience could be enhanced using a strengths-based approach to coaching (see, Ludlam, Butt, Bawden, Lindsey, & Maynard, 2016). This may encourage a heightened awareness of strengths that could foster a subjective feeling of control and mastery over their experiences, and enable players to formulate specific practice and performance strategies to overcome their slump. The specific techniques used to illicit players' strengths could include helping them to identify their desired role within the team as part of traditional performance profiling (Butler & Hardy, 1992), and techniques from appreciative enquiry (Cooperrider, Whitney, & Stavros,

2008) that seek to explore 'high-point experiences' (e.g., best performances) and 'possible selves' to highlight relevant skills and personal beliefs associated with perceived strengths.

Support for strengths-based approaches comes from research that suggests that developing athletes' 'super-strengths' is a useful technique to build robust sport confidence (Beaumont, Maynard, & Butt, 2015), which, in the present study, was an important attribute that helped to facilitate the resilience process. Moreover, wider research from positive psychology indicates that people who use their strengths more frequently are more likely to achieve their goals (Linley, Nielsen, Wood, Gillett, & Biswas-Diener, 2010), have higher self-confidence, experience less stress, and are more resilient than individuals that use their strengths less often (Proyer, Gander, Wellenzohn, & Ruch, 2015).

When developing suitable interventions, the findings from the present study also suggest that it is vital to take into account the environmental factors that influence the resilience process. For example, when the players in this study demonstrated resilience during slumps, they perceived that appropriate social support was available to them. This helped them to withstand the pressure of the slump they were experiencing and underpinned their ability to maintain their sense of self-esteem. Therefore, ensuring that athletes feel like they are supported can help to promote the facilitative environment that appears to be so crucial to the processes involved in resilience (Fletcher & Sarkar, 2016). Specific attention should be given to athletes support structure within and outside the immediate sporting environment. Family and close friends appear to be particular important for a sense of wellbeing since the close bonds they hold with athletes helps to reinforce feelings of self-worth.

Regarding social networks within sport, team structures should enable and encourage players to develop positive relationships with teammates and support staff to create opportunities to share experience and knowledge that can be drawn on during difficult times (Morgan, Fletcher, & Sarkar, 2013, 2015; 2017). Moreover, given the findings of this study,

particular attention should be given to the masculine attitudes that may be present within a male dominated environment that may undermine support structures and prevent athletes from seeking the support that they would like and potentially need. Previous research has also pointed to the possibility that elite male performers project 'bravado' as a means to obscure any issues and underlying concerns that they may have about their performances and status within a team (e.g., Wei-Ong, McGregor & Daley, 2018). It is therefore important that the culture within a team challenges these attitudes and behaviours and promotes an empathic and supportive environment. A potential intervention approach to achieve this is through Personal-Disclosure Mutual-Sharing (PDMS). PDMS involves individuals publicly disclosing personal stories and experiences to members of their team (Holt & Dunn, 2006). This process may provide the means for developing trust, empathy, and team cohesion (Evans, Slater, Turner, & Barker, 2013), guard against the formation of masculine norms and promote the supportive environment that facilitates resilience (Fletcher & Sarkar, 2016)

Strengths and Limitations

To the best of the authors' knowledge, this is the first study to investigate the resilience process in relation to a specific sporting stressor (i.e., a performance slump). By investigating the resilience process in this way, the study has offered context-specific knowledge to existing models of resilience in sport (e.g., Fletcher & Sarkar, 2012), and has proposed specific strategies that may protect cricket batsmen against the potential negative effects of stress in the face of performance slumps. However, these findings should be evaluated in the context of the study's limitations. In particular, each player gave a single account of their slump experiences, either in the focus group or interview, which may not be sufficient to fully understand the dynamic processes involved in resilience. Furthermore, the players' discussions about their experiences were wide ranging and diverse, with some focussing on slumps from some years in the past and others discussing more recent

experiences. It is possible therefore that those reflecting on more recent slumps, predominantly those in earlier in their career, may have lacked the perspective to fully appreciate what they had learned from their experience.

Future Research

Although the focus on performance slumps was a potential strength of the present study, stressors in elite sport do not occur in isolation and it is common for athletes to experience a number of competitive, personal, and organisational stressors in combination (Fletcher & Sarkar, 2012). Research on resilience in mainstream psychology has distinguished between resilience against long-term chronic adversity, termed a 'trajectory of emergent resilience', and acute traumatic events, referred to as a 'trajectory of minimal-impact resilience' (Bonanno & Diminich, 2013). With this in mind, research on resilience in sport may wish to examine how resilience against enduring competitive and organisational stressors interacts with, and influences, resilience against acute personal stressors (cf. Sarkar & Fletcher, 2014a). This type of research could be operationalised with longitudinal designs to provide a greater understanding of the dynamic process involved in resilience and the temporal nature of the development of resilient qualities.

Conclusion

The current study has provided insight into the resilience process involved in batting performance slumps in elite cricket. Findings indicated that the players' subjective appraisal of the slump, personal protective factors, ability to control performance states, combined with the context of the slump (e.g., timing of the slump and career status), were important factors that enabled cricket batters to not only overcome slumps but to learn and grow from them. Reflecting on slump experiences served to strengthen existing protective resources and provide new ways of shielding players from performance-related stressors. Applied strategies that may be useful to develop resilience include a strengths-based approach to practice and

performance that could increase the awareness and utility of an individual's unique tactical and technical skills. Future research in sport should take a holistic approach to the study of resilience to explore how overcoming long-term chronic stressors (e.g., competitive, organisational) interact with, and influences, acute stressors (e.g., performance stressors).

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