

Overcoming performance slumps: Psychological resilience in expert cricket batsmen.

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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

43 Overcoming performance slumps: Psychological resilience in elite cricket batsmen

44 There is a natural cycle of athletic performance in elite sport that ebbs and flows
45 above and below an athlete's own expected levels (Mummery, Kerry, Schofield, & Perry,
46 2004). However, athletes regularly experience extended periods outside this natural cycle
47 where performances are considerably below their usual standards (Patel, Omar, & Terry,
48 2010). These periods are often referred to as 'performance slumps'. Taylor (1988) suggests a
49 slump is a decline in performance over an extended period that goes beyond normal cyclic
50 variations. Furthermore, slumps are associated with physical, technical, and psychological
51 changes to an athlete that can have negative cognitive, emotional, and behavioural
52 consequences. Slumps have been recognised as a significant issue in the sport of cricket with
53 anecdotal accounts (e.g., Waugh, 2006; Vaughan, 2009) and scientific research suggesting
54 that the 'loss of form' and consistently lower than expected standards of performance are
55 some of the most salient stressors experienced by cricket batsmen (Thelwell, Weston, &
56 Greenless, 2007).

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

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

68 ‘yips’, with more pronounced physical antecedents and consequences (Mesagno & Hill,
69 2013).

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

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

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

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

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

106 Given that resilience has been identified as an important factor in overcoming
107 performance adversity in cricket (Weissensteiner et al., 2011), recent theoretical and
108 empirical developments on the concept of psychological resilience (see, Sarkar & Fletcher,
109 2014a, for a review) may offer a useful lens to advance the understanding of performance
110 slumps in this sport. Several theories/models of resilience have been proposed in general
111 psychology (see, for a review, Fletcher & Sarkar, 2013), and despite some differences, they
112 contain a number of common features. Most theories/models acknowledge that resilience is a
113 dynamic process that operates over time, rather than a static or unidimensional 'trait'
114 (Richardson, 2002). Furthermore, resilience incorporates a constellation of psychosocial
115 factors that interact to influence the process and outcomes of engaging with potential stressful
116 situations (Fletcher & Sarkar, 2013).

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

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

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

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

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

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

162 **Method**

163 **Methodology and philosophical underpinning**

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

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

175 The present research was conducted from a critical realist perspective. Wiltshire
176 (2018) suggests critical realism offers a way of transcending persistent paradigmatic debates
177 that constrain the impact of research in the field of sport and exercise psychology by bridging
178 the gap between realist and constructivist–interpretivist approaches. Critical realism proposes
179 a stratified ontology that distinguishes between three domains of reality, these domains are
180 referred to as *the real*, *the actual*, and *the empirical* (Bhaskar, 1979). The real domain
181 contains relatively enduring biochemical, economic, and social structures that can generate
182 events and phenomena. These social structures exist and exert causal influence irrespective of
183 whether people are aware of them or not, and are thus ‘mind-independent’ (Parker, 1998).
184 The actual domain consists of events and phenomena that are generated when the causal
185 mechanisms of the real are activated (Archer, Bhaskar, Collier, Lawson, & Norrie, 2013). In
186 the empirical domain, lived experiences of events are conceived of as being separate from the
187 actual events themselves. This is because critical realism argues that scientific activity is
188 inherently fallible and laden with subjective beliefs and values. There is no way of knowing
189 the world, therefore, except under particular, more or less transient historical and cultural
190 descriptions (Danermark, Ekstrom, & Jacobsen, 2005).

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

200

201 **Participants**

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

207 In the first stage of the study, four male participants aged between 22 and 28 years (M
208 = 26.52, $SD = 5.43$) took part in a focus group. The participants began playing cricket in
209 childhood and were currently playing at a semi-professional level. One of the participants in
210 the focus group had previous experience of playing at a professional level. The other three
211 had ambitions to play at a higher level and had been selected for training camps, or had trials
212 for professional teams, but had not been offered a contract. The sample was selected due to
213 their extensive playing experience at a high standard of cricket ($M = 6.05$, $SD = 1.87$ years),
214 therefore, they were able to provide detailed descriptions of the technical (e.g., skill
215 execution), psychological (e.g., cognitive processes/emotions) and practical (e.g., strategies

216 used to overcome slumps) aspects of batting performance slumps.

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

224 **Procedure**

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

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

241 understanding of the players' accounts and, in the case of the focus group, the players were
242 also encouraged to highlight and discuss shared understandings of slumps. The focus group
243 lasted 65 minutes and the individual interviews lasted between 37 and 75 minutes ($M = 51.5$,
244 $SD = 12.1$).

245 **Data analysis**

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

265

266 **Research quality**

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

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

289 **Results**

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

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

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

307 **Appraisal of the slump**

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

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

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

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

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

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

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

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

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

350 **Controlling performances states**

351 Controlling performances states related to the awareness of, and ability to master,
352 psychological processes *during* innings. This dimension was comprised of three higher-order
353 themes: 'controlling cognitive processes', 'maintaining focus', and 'regulating arousal'.

354 Controlling cognitive processes is the higher-order theme that refers to the players' attempts
355 to regain control of their performance by using a variety of cognitive-behavioural strategies,
356 such as best performance imagery, and positive self-talk. This was expressed in quotes such
357 as; "I try to visualise the performances when I've actually gone through a good run" and "I
358 try to get myself going...so I'll say to myself 'come on' and try talking myself up". Chris, a
359 first year professional player, described how he developed a particular motivational and
360 instructional cue phrase, "happy feet", during one particular performance slump that
361 reminded him to stay positive when batting. This allowed him to block out any negative
362 invasive thoughts and concentrate on the execution of his skills.

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

366 me concentrate.

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

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

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

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

390 **Personal protective factors**

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

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

404 Confidence was one of the most salient individual differences in the data analysis.

405 Players viewed confidence as a protective resource against stress, but acknowledged
406 that they were vulnerable to a drop in confidence after a run of low scores. Despite relying on
407 good performances as a source of confidence, there was wide recognition amongst the players
408 that breaking the link between their performances and their confidence was the key to
409 mitigating the negative effects of stress during slumps. Alex, a particularly insightful player
410 with over 10 years’ experience in English ‘county’ cricket, described the following:

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

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

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

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

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

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

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

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

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

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

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

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

474 **Context of the slump**

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

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

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

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

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

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

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

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

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

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

581 The cognitive processes involved in resilience against performance slumps were often
582 related to the players' explanatory style. Specifically, an optimistic explanatory style was
583 facilitative for resilience. This is consistent with previous findings on slumps (e.g., Ball,
584 2013), but extends resilience research by identifying the specific attributions made by high
585 level cricket batsman in relation to a specific performance-related stressor. To illustrate,
586 players who had an optimistic explanatory style recognised that periods of low scoring were a
587 natural part of a performance cycle. The players were always striving for a consistent level of
588 high level performance, but they recognised that this was difficult to maintain. Moreover,
589 they were aware of a multitude of factors that could influence their performance that were

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

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

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

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

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

633 **Practical Implications**

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

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

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

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

665 2008) that seek to explore ‘high-point experiences’ (e.g., best performances) and ‘possible
666 selves’ to highlight relevant skills and personal beliefs associated with perceived strengths.

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

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

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

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

703 **Strengths and Limitations**

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

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

718 **Future Research**

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

731 **Conclusion**

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

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

744

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