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 pronounces 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 sematic 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.

Appraisal of the slump

307

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

490   their cricketing goals. One of the retired players commented:

491   Once the next slump came, I almost didn't have the energy for it. I thought, 'I don't

492   think I can do this again', because it took an enormous commitment for me to get

493   myself in a place where my performance was good enough.

494   Career status was closely linked to the theme of life experience. That is, the more

495   experienced/older players were able to place their sporting difficulties in the context of the

496   things that mattered to them the most. This reduced their perceptions of performance related

497   stress. For example, one of the retired players talked about how a family member's illness led

498   him not only to overcome a slump, but then enabled him to play some of his best cricket of

499   his career:

500   My wife's mother had been very, very sick so I was having a tough professional

501   period but I was having a much more difficult personal period and my cricket

502   became of secondary importance to me, until then it was everything. It was the first

503   time in my life that a personal thing had put the whole thing into perspective for me,

504   and what happened? I got runs. I'd just got this mentally that I'd got to do what's

505   right for the people close to me and I'm not going to worry too much about it

506   (slump) and for a time that's when I played my best cricket, and it was largely due to

507   that gravitas of the situation with my wife's mum and the situation just putting the

508   whole thing into perspective.

509   **Discussion**

510   Via a combination of qualitative methods (i.e., focus group and interviews), the

511   purpose of the current study was to explore the experiences of performance slumps of expert

512   cricket batsmen from the perspective of psychological resilience. In doing so, the present

513   findings identified the psychosocial factors that facilitated resilience, and also explored those

514   factors that proved detrimental to the participants' ability to overcome slumps.

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 threating 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 farther, 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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