

1 Running head: YOUTH SPORT GAME-STRATEGY EFFICACY

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7 **An exploration of game-strategy efficacy beliefs in UK youth sport coaches**

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24 **Abstract**

25 *Overview:* In the sport domain, game-strategy efficacy is the belief that coaches can
26 lead teams or athletes to a successful performance in competition. Developmentally focussed
27 youth sport coaches, however, may define success differently to those working in other
28 contexts. Researchers suggest that if youth sport coaches define successful performances in
29 terms of winning only, the psychosocial development of young athletes could be hindered.
30 Therefore, scholars and practitioners need to understand how developmentally focussed
31 youth sport coaches cultivate their game-strategy efficacy beliefs to improve coach education
32 and personal development programs. The purpose of this study was to explore UK
33 developmentally focussed youth sport coaches' development of game-strategy efficacy
34 beliefs and to examine the sources and outcomes of perceived efficacy. A secondary focus
35 was the generation of practically relevant and useable findings that developmentally focussed
36 youth sport coaches could utilize. *Method:* Data was obtained by interviewing 10 male youth
37 sport coaches and analysed using an interpretive description methodology. *Results:* Results
38 are presented as a representative bricolage from the perspective of two fictional coaches who
39 either have high or low game-strategy efficacy. These results highlighted sources of game-
40 strategy efficacy within the UK developmentally focussed youth sport context, including
41 acknowledgement, playing experience, relationships with athletes and peers, results, self-
42 image, and success. Additionally, two outcomes of game-strategy efficacy included releasing
43 control and self-evaluation. *Conclusions:* The findings offer coaches a chance to explore their
44 own game-strategy efficacy beliefs against others in similar positions while opening a
45 dialogue between research findings and those in the field.

46

47 *Key words; game-strategy efficacy; interpretive description; coach; developmental; youth*
48 *sport.*

49 **Introduction**

50 For almost two decades, researchers have investigated coach efficacy (Feltz, Chase,
51 Moritz, & Sullivan, 1999) and reported key findings that apply to coaches and those involved
52 in the coaching process (e.g., Malete & Feltz, 2000). Feltz and colleagues (1999) defined
53 coach efficacy as “the extent to which coaches believe they have the capacity to affect the
54 learning and performance of their athletes” (p. 765). Coach efficacy comprises motivation
55 efficacy (i.e., the belief that coaches can affect the psychological skill and states of athletes),
56 technique efficacy (i.e., the belief coaches can instruct skill and diagnose faults), character
57 building efficacy (i.e., the belief that coaches can influence the personal development of
58 athletes), game-strategy efficacy (i.e., the belief that coaches can lead teams of athletes to a
59 successful performance in competition), and the more recent addition, physical conditioning
60 efficacy (the belief that coaches can prepare athletes physically for sport; Myers, Feltz,
61 Chase, Reckase, & Hancock, 2008).

62 Several studies have identified sources of coaching efficacy, including: coaching
63 experience/preparation, prior success, perceived skill of athletes, school/community support
64 (Feltz et al., 1999), perceived ability of the team (Myers, Vargas-Tonsing, & Feltz, 2005),
65 and coach education and training (Malete & Feltz, 2000). Specifically for youth sport
66 coaches, playing and coaching backgrounds, perceived skill of athletes, and coach education
67 affected coaching efficacy (Sullivan, Paquette, Holt, & Bloom, 2012). Researchers have also
68 shown that improvements in coaching efficacy, as a combination of four or five dimensions,
69 can positively influence coaches’ behaviours and practices (Feltz et al., 1999; Feltz, Hepler,
70 Roman, & Paiement, 2009; Sullivan & Kent, 2003), athlete performance (Chase, Feltz,
71 Hayashi, & Helper, 2005; Myers et al., 2005) and athlete behaviours and attitudes (Chow,
72 Murray, & Feltz, 2009). Researchers have, however, rarely studied the four (or five)
73 dimensions separately, even though self-efficacy, and by association coach-efficacy, is the

74 personal belief that one can organize and execute a course of action to attain a specific
75 outcome (Bandura, 1977). In the case of coaching efficacy, researchers need to study the
76 dimensions separately as efficacy beliefs regarding each dimension are likely to be mutually
77 exclusive (see Feltz et al., 1999, for demonstration of exclusivity).

78 Game-strategy efficacy (i.e., the belief that coaches can lead teams of athletes to a
79 successful performance in competition) is a valid dimension in the conceptual model of coach
80 efficacy (Feltz et al., 1999); however, the concept of a successful performance may be
81 different depending on which context coaches find themselves (Miller, Lutz, & Fredenburg,
82 2012). For example, for performance-oriented youth sport coaches, successful performances
83 likely reflect winning (Cumming, Smoll, Smith, & Grossbard, 2007), whereas for the
84 developmentally focused youth sport coach, a successful performance may represent
85 proficient execution of skill, demonstration of effort, or psychosocial development. The
86 nature of game-strategy efficacy is therefore potentially convoluted (Trudel & Gilbert, 2006).
87 Although it would be naive to say that winning is not important to coaches and athletes in all
88 levels of sport (Bortoli, Bertollo, Comani & Robazza, 2011), in the developmental youth
89 sport context (i.e., a formal competitive structure with an increased commitment from
90 athletes and coaches, a stable relationship between athletes and coaches, where athletes are
91 selected on skill try-outs, with specialized sport-specific training for athletes, and for some,
92 the primary context for talent identification to elite levels of sport performance; Trudel &
93 Gilbert, 2006), it is not necessarily the primary focus, but a consequence of the athlete's
94 physical and psychological development (Martens, 2004; Smith & Smoll, 2002; Thompson,
95 2003). It is necessary, therefore, to examine how coaches working within the developmental
96 youth sport context develop game-strategy efficacy beliefs because of the unique nature of
97 what may and may not be considered a successful performance. To this end, the purpose of
98 this study is to explore developmentally focused youth sport coaches' perceptions of their

99 game-strategy efficacy beliefs, and to examine the sources and outcomes of perceived
100 efficacy. A secondary focus was to provide developmentally focused youth sport coaches
101 with pertinent and applicable findings. We employed an interpretive description methodology
102 (Thorne, Kirkham, & MacDonald-Emes, 1997) because of its focus on the coherence
103 between applied research questions and the generation of practically relevant and useable
104 findings (Thorne, 2008). Within sport, interpretive description has been used to examine, for
105 example, physical activity experiences among adolescent girls (e.g., Clark, Spence & Holt,
106 2011) and the benefits and challenges of sport participation in low-income families (e.g.,
107 Holt, Kingsley, Tink, & Scherer, 2011).

108 **Methodology**

109 **Interpretive Description**

110 Interpretive description is an applied, disciplinary methodology that is inductive and
111 aims to create clinically relevant and applicable findings (Brewer, Harwood, McCann,
112 Crengle, & Worrall, 2014; Thorne, 2008). Thorne and colleagues (1997) originally developed
113 interpretive description (Thorne et al., 1997) for nursing practitioners in the 1990s, and since
114 then researchers have applied this methodology in sport, exercise, and physical activity (e.g.,
115 Clark et al., 2011; Holt et al., 2011). Interpretive description has a philosophical alignment
116 with interpretive naturalistic orientations (Thorne et al., 2004) and is informed by key axioms
117 of naturalistic inquiry (Lincoln & Guba, 1985), including: (a) there are multiple constructed
118 realities that can only be studied holistically, (b) the inquirer and the “object” of inquiry
119 influence one another to co-construct knowledge, and (c) no *a priori* theory could encompass
120 the multiple realities encountered, instead, theory will be grounded in the data. The aim of
121 interpretive description is to generate knowledge relevant for the context of applied
122 disciplines so people can apply it in situations that arise in real world practice (Thorne, 2008).

123 **Participants**

124 The sample consisted of 10 male coaches (see Table 1), aged between 22 and 59
125 ($M=37.10$, $SD=12.57$), who had been working or volunteering within developmentally
126 focussed youth sport contexts for at least five years ($M=14.80$, $SD=8.40$). The participants
127 had all undertaken formal education courses offered by their respected sporting governing
128 bodies. Following ethical approval from the researcher's Institutional Research Ethics
129 Committee, the first author approached the participants via email and invited them to
130 participate in the study. We sent participants an information sheet that explained the purpose
131 of the study and what their involvement would entail. Once participants agreed to take part,
132 we agreed a convenient time and place to conduct the interview.

133 **Procedure**

134 The first author conducted semi-structured interviews ($M=42.20$ minutes, $SD=16.00$) at
135 locations determined by the participants. Interviews were audio recorded and transcribed
136 verbatim immediately after each interview. We used semi-structured interviews because they
137 provided a guiding framework whilst allowing the participants to move the interview in the
138 direction they chose, allowing participants to report on their attitudes, experiences and
139 knowledge (Rowley, Jones, & Vassiliou, 2012). We devised the interview questions from
140 extant literature, thorough discussion amongst the research team, and by reflecting on
141 previous interviews. All the interviews started with a discussion to facilitate rapport. The first
142 author asked the participants about coaching (e.g., what were your best moments?) and then
143 shared his own experiences and informed participants when he had similar experiences^b.
144 Following these opening questions, the interviewer directed participants towards key
145 questions (e.g., what strategies do you use to maximize your athletes' strengths during a

^b Note, the experiences shared by the first author were in broad coaching terms and not about the topic of study specifically (i.e., game-strategy efficacy beliefs).

146 game/match?). Key questions changed across interviews as the coaches' stories unfolded and
147 analysis progressed.

148 We employed an iterative cycle of data collection and data analysis (Corbin & Straus,
149 2008), in which we conducted data analysis of an interview immediately after data collection
150 (once interviews were transcribed verbatim) and prior to the next interview. Thorne (2008)
151 stated that the researcher must remain sceptical of initial conceptualisations and begin to use
152 data collection as a way of challenging, rather than reinforcing, these notions. The iterative
153 process strengthened the data because interview questions were refined and changed to
154 challenge emerging concepts (Thorne et al., 1997), and we could identify and rectify possible
155 threats to methodological rigor (e.g., assumptions on the nature of success and its impact on
156 interview questions). Iterative data collection and analysis also provided evidence to inform
157 the point of data saturation (i.e., no new trends or themes are elicited by new participants,
158 meaning a thorough understanding of the phenomena under study is achieved and data
159 collection is ended; Kuper, Lingard & Levinson, 2008).

160 The interviewer took notes while interviewing to highlight concepts that warranted
161 further investigation and followed up the interview and data analysis with periods of
162 memoing (Corbin & Strauss, 2008). Qualitative methodologists encourage memoing because
163 it allows the researcher to "immerse themselves in the data, explore meanings that this data
164 holds, maintain continuity, and sustain momentum in the conduct of research" (p.69).
165 Furthermore, memoing in interpretive descriptive allowed data to be sorted into themes that
166 were less rigid than traditional codes (Thorne, 2008).

167 **Data Analysis Process**

168 Generating new constructions through data analysis is the most crucial element in
169 producing a credible interpretive description study (Thorne, 2008). Morse (1994) described
170 several steps in the analytic process that researchers can adopt within an interpretive

171 descriptive study. The steps included comprehending data, synthesizing meanings, theorizing
172 relationships, and re-conceptualizing data into findings. The first author read each transcript
173 and tentatively identified relevant passages. Memoing allowed the first author to comprehend
174 passages while keeping a record of initial thoughts on what these passages meant. These
175 thoughts also lead to relationships between passages being identified, meaning the first author
176 could begin to build what eventually became the final themes. If needed, the first author
177 could challenge emerging themes by reviewing memos, to ensure a coherent, logical, and rich
178 interpretation (Thorne et al., 2004).

179 Thorne et al. (2004 p. 15) stated that the “credibility of the findings will derive largely
180 from the way the specific analytic decisions are presented and contextualised within the
181 larger picture.” Researchers have suggested that credibility occurs when the research process
182 - especially the analytic process - and all its complexities, are made visible and transparent
183 while articulating an openness that acknowledges a certain hesitance regarding the final
184 research outcomes (Emden & Sandelowski, 1999). To provide a visible and transparent
185 description of data analysis, we have provided an example in Table 2. The first author also
186 recorded his analysis in tables that included sources and outcomes of coach’s game-strategy
187 efficacy, an inclusion criterion for the source or outcomes, and an exemplar quote. The first
188 and second author then used the tables as a basis for discussion and refinement of the data
189 analysis.

190 As with all qualitative research, the researcher must be honest and prudent (Emden,
191 Hancock, Schubert, & Darbyshire, 2001) and take a risk by committing to, and taking
192 ownership of, interpreting the data in the analytic process (Sandelowski & Barosso, 2002). As
193 the ultimate outcome of interpretive description is applied knowledge that practitioners can
194 use, the presentation of data should be clear to practitioners (i.e., coaches). Practitioner
195 focussed knowledge is not necessarily the outcome of existing qualitative methods, so

196 presentation of an interpretive description may not follow discipline conventions (e.g., visual
197 coding frameworks). We present our results, therefore, as a diagram and a representative
198 bricolage. Denzin and Lincoln (2000) defined a bricolage as a complex, interpretive structure
199 of interconnected representations, describing a bricolage “like a quilt, a performance text, a
200 sequence of representations connecting the parts to the whole” (p. 6). Kincheloe, McLaren,
201 and Steinberg (2011) suggested that a bricolage “implies the fictive and imaginative elements
202 of the presentation of all formal research” (p.168). In other words, a bricolage allowed us to
203 present results in a clear way that both researchers and practitioners (i.e., coaches) can find
204 understandable and relatable because without this, the central principle of interpretive
205 description (i.e., understandable knowledge that is applicable in real world practice) could not
206 be achieved. The stories represent a composite of all participants and were constructed by
207 taking the clearest examples of each result to craft easily readable, coherent stories that
208 demonstrated the differences between the two extreme positions of coaches high and low in
209 game-strategy efficacy.

210 **Results**

211 Data obtained from our interpretive description revealed that sources of game-strategy
212 efficacy within the UK developmentally focussed youth sport context included
213 acknowledgement, playing experience, relationships with athletes and peers, results, self-
214 image, and success. Additionally, two outcomes of game-strategy efficacy were highlighted:
215 releasing control and self-evaluation (see Table 3 for inclusion criteria and exemplar quotes
216 from coaches).

217 To stay true to the practice focussed knowledge aspects of interpretive descriptors, the
218 results are presented as a diagram (see Figure 1) and a representative bricolage (Denzin &
219 Lincoln, 2000) of two fictional coaches: John, who has high-perceived game-strategy, and
220 Andrew, who has low-perceived game-strategy efficacy.

221 John

222 John is high in game-strategy efficacy. He is a 34-year-old youth sport coach working
223 in the developmental context. He has a level two qualification in his sport while working on
224 his level three and, as such, believes he has a high level of knowledge. These qualifications
225 have been obtained over a 14-year coaching career. Together with his long, established
226 playing career, he believes he has a large amount of previous experience that contributes to
227 the confidence he has in leading his athletes to what he refers to as, “success”. However, in
228 this sense, success challenges the common notion of simply scoring more points than an
229 opponent or winning. Although John felt that winning was still important, he valued athlete
230 development more (which is what he calls success).

231 Throughout his coaching career, John has received various amount of
232 acknowledgement from those around him (such as his athletes, peers, and community) which
233 has added to his game-strategy efficacy. The degrees of this acknowledgement ranged from a
234 simple “thank you” from one of his athletes to his entire community backing him when times
235 were hard during a rift with his employers (i.e., club director) at his club. Another long-term
236 contributor to John’s game-strategy efficacy are the “results” he has witnessed first-hand.
237 More specifically, results in this sense relate to visually observing the outcome of an aim or a
238 goal, which is often his athletes executing a skill, showing an understanding of why they are
239 doing it, or simply developing as athletes.

240 John has had several affiliations over the years but the two most significant to
241 contribute to the confidence he has in leading his athletes to success are the relationships with
242 his athletes and his peers. Both these relationships are multidimensional in nature, meaning
243 athletes and peers can influence his confidence and vice versa. During his time as a coach,
244 John’s game-strategy efficacy has been increased because of the support and positive
245 feedback he has received from his peers. Although the same increases in his game-strategy

246 efficacy have happened from his relationships with his athletes, he feels more of an increase
247 in game-strategy efficacy from the support and feedback from peers. The increases in John's
248 game-strategy efficacy in these relationships are from actual encounters with his athletes and
249 peers. However, John's self-image affects his game-strategy efficacy through his perception
250 of himself or how he believes his athletes and peers perceive him. In this sense, John
251 perceives himself as a good coach who can lead his athletes to success and believes his
252 athlete and peers feel the same way.

253 As a result of John's high game-strategy efficacy, he has two specific coaching
254 behaviours. Firstly, John has come to realise that not everything within his sport and his team
255 can be influenced by him. During a game, for example, John does not try to influence the
256 referee. Instead, he leaves his athletes to win the game for themselves because he is confident
257 that he has prepared his athletes to succeed. John gives his athletes a lot more independence
258 (i.e., independent learning) when it comes to their own training and has decided to accept
259 influence (i.e., feedback from athletes) from the athletes themselves rather than trying to
260 control every aspect of their development. In addition to releasing control, John's high game-
261 strategy efficacy has allowed him to practice self-evaluation. This means that when
262 something goes wrong with his athletes' performances, John has chosen to reflect, evaluate,
263 and change his own strategies and tactics, rather than blaming the athletes themselves. In
264 other words, John has the confidence to change the way he is leading his athletes to success,
265 rather than sticking to a coaching practice that is not showing the results he wants and
266 blaming his athletes for the lack of success.

267 **Andrew**

268 Andrew is low in game-strategy efficacy. He is younger than John at 25 and has been
269 coaching in the developmental youth sport context for six years, eight less than John. Andrew
270 has not had an illustrious playing career (i.e., short and at amateur level) which, when

271 combined with his limited amount of coaching experience, has led him to believe he only has
272 a small amount of quality previous experience. Andrew holds a level two qualification,
273 though he is not pursuing any higher levels or any other qualifications. He believes he has
274 some level of knowledge but because he does not feel it is that high, he questions himself on
275 the decisions he makes. However, even though Andrew is not hugely confident in leading his
276 athletes to success, he also holds the view that “success” is about the development of his
277 athletes and not just about winning games.

278 During Andrews’s coaching career, he has rarely had any acknowledgment from his
279 athletes and peers. Andrew has seen some results (i.e., visually observing the outcome of an
280 aim or a goal) but not as many as he would have hoped. Throughout his coaching career,
281 Andrew has had several relationships with athletes and peers. Most of these, however, have
282 not always been positive. Furthermore, Andrew has not received the support and feedback
283 from his peers, athletes, and club that he would have liked. Also, because of poor
284 relationships with peers, his self-image is particularly negative. In particular, he feels that his
285 peers judge him when they watch him coaching and talk behind his back (even though there
286 is no proof of this), causing him to question his ability to lead his athletes to success.

287 A consequence of Andrew’s low game-strategy efficacy is that he behaves in certain
288 ways relating to his coaching. Andrew feels that it is not enough to simply prepare his
289 athletes to succeed through training and matches during a season. He feels he needs to try and
290 influence (or perceive to influence) as much as he possibly can. For example, he shouts at
291 referees and opposition players and coaches to try and influence their decisions to suit him.
292 Andrew believes he must not release control of any aspect of his sport and his team,
293 including mapping every aspect of his athletes’ development (i.e., taking away their
294 independence). In addition, when something goes wrong with his athletes’ performance,
295 either in training or during matches, he immediately blames them. For example, if his athletes

296 fail to perform a drill as he would like, Andrew would blame them rather than being self-
297 evaluative and analysing his own coaching practices.

298 **Discussion**

299 The purpose of this study was to explore developmentally focussed youth sport
300 coaches' perceptions of their game-strategy efficacy beliefs and what experiences have
301 influenced their perceived efficacy. Interpretive descriptive researchers aim to develop useful
302 knowledge for those working in applied settings (Thorne et al., 1997). Therefore, it is
303 important to discuss the findings of this study in light of this goal. Furthermore, although
304 research to date has highlighted a number of sources and outcomes of coaching efficacy,
305 most results are restricted to coaches within North America (Trudel & Gilbert, 2006).
306 Therefore, the current study offers coaches the chance to learn about, and relate to, other
307 developmentally focussed youth sport coaches within the UK, which could improve their
308 understanding of the importance of particular experiences.

309 Before the sources and outcomes of high, or low, game-strategy efficacy are
310 discussed, it is important to outline the current participants' views of "success". As the
311 common notion in sport is that success equals winning and failure equals losing (Cumming et
312 al., 2007), the importance of examining coaches' beliefs of success in developmentally
313 focussed youth sports is clear. The current participants defined success in terms of athlete
314 effort, cooperation, learning, improvement, social relations, and a positive approach to
315 mistakes viewed as naturally associated with the learning process. The coaches felt winning
316 was an important part of youth sport, but they explained how winning was not necessarily the
317 most important objective, which is consistent with the literature (e.g., Smith & Smoll, 2002).
318 One coach gave an example of creating a task-involving climate by reducing the ultimate
319 importance of winning relative to other prized participation motives (in this case, learning,
320 and improvement). Coaches' descriptions of success also corresponded with scholars' calls to

321 move away from the “win at all costs” attitude (e.g., Smith & Smoll, 2012) that encompasses
322 players, coaches, and parents alike.

323 Although results show that coaches have differentiated views of success, they may not
324 understand how to implement coaching strategies coherent with their coaching philosophies
325 (e.g., McCallister, Blinde & Weiss, 2000). Therefore, coaches who define success in terms of
326 positive development might need information to help them create task-orientated
327 environments and build psychosocial competencies. Coach education providers could offer
328 coaches information about differentiated views of success and the associated possible
329 outcomes. Coaches could be encouraged to consider that success is about results and positive
330 psychosocial development rather than simply about winning.

331 Almost all the coaches stated they felt more confident in their own ability to lead their
332 athletes to success once they had completed formal education courses. While there is
333 evidence that links coach education with coach efficacy as a whole (e.g., Campbell &
334 Sullivan, 2005; Malete & Feltz, 2000; Sullivan et al., 2012), the current results demonstrate a
335 link between coach education and game-strategy efficacy specifically. As national governing
336 bodies primarily offer coach education (Nash & Sproule, 2011), results from the current
337 study have potentially important implications for policy makers and program designers as
338 they have the power and resources to change current coaching provision which, in turn,
339 would influence coach learning. The reasons that coaches felt more confident varied. For
340 example, Coach 6 suggested his knowledge had improved as he completed his coaching
341 courses whereas Coach 10 said he attended formal education courses because he learns from
342 other coaches attending the course, not necessarily the course content itself.

343 These results indicate that less formal learning opportunities (in this case informal
344 discussions with, and observations of, other coaches during coach education courses)
345 contribute to boosting coaches’ game-strategy efficacy beliefs. Although further investigation

346 may be needed to understand the true value of less formal learning opportunities and its
347 impact on game-strategy efficacy (and coach efficacy in general), the power of less formal
348 learning opportunities has already been demonstrated (e.g., Gilbert, Gallimore, & Trudel,
349 2009). Furthermore, coaches in the current study reflected previous issues with formal
350 education courses (Mallett, Trudel, Lyle, & Rynne, 2009), re-emphasizing the need for
351 national governing bodies to have a serious review of their coach provision for
352 developmentally focussed youth sport coaches. Although only half of all coaches in the UK
353 have a coaching qualification (and therefore exposed to coach provision; North, 2009), the
354 current study highlights an opportunity for change.

355 A source not highlighted in previous literature that affected game-strategy efficacy,
356 both positively and negatively, were peers. For example, coaches felt uncomfortable when
357 they believed other coaches were judging them during their coaching sessions. This even
358 occurred when there was no “objective” evidence (e.g., hearing what other coaches were
359 saying) to suggest this. While it is not a new phenomenon that an individual’s self-efficacy
360 can be affected by what they perceive others to believe about their capabilities (Lent &
361 Lopez, 2002), the current study suggests this also happens between youth sport coaches.
362 Coaches in the current study discussed how they would compare their abilities and skills with
363 their peers and it would have a negative impact on their game-strategy efficacy beliefs if they
364 felt inferior. The effect of peer comparison within young athletes has been a topic of interest
365 (e.g., Smith, 2003), but again, the concept of peer comparison with youth sport coaches has
366 yet to be the focus of any study. Every coach included in this study reported instances of a
367 peer negatively and/or positively influencing game-strategy efficacy beliefs. Researchers and
368 practitioners, therefore, need more research to understand the effects of peers on game-
369 strategy efficacy.

370 Other interpersonal sources of coaches' game-strategy efficacy beliefs also emerged.
371 For instance, some coaches explained that their athletes' behaviour (such as following
372 instructions and acknowledgement) affected their game-strategy efficacy beliefs which later
373 influenced coaches' behaviour (such as releasing control). This extends previous findings as
374 Erickson, Côté, and Deakin. (2011) suggested that positive environments characterized by a
375 deliberate pattern of coach-athlete interactions might be associated with youth sport settings,
376 producing more satisfied athletes and, according to the current study, coaches.

377 Apart from parents, coaches described examples of situations where they have been
378 acknowledged and felt supported by their clubs and communities. Interestingly though,
379 coaches also discussed what the effect acknowledgement and support from athletes had.
380 Specifically, athlete support and acknowledgement seemed to give the coaches high game-
381 strategy efficacy beliefs by athletes expressing their desire to continue to work with the coach
382 and to identify them as important in their development. These results reflect findings from
383 Chase et al. (i.e., player support was a source of coaching efficacy; 2005) and support the
384 multidirectional conceptualization of coach-athlete interactions (Cushion, Armour, & Jones,
385 2006) whereby athletes may have more of an effect on coaches' efficacy, and in turn
386 behaviour, than previously thought. Player support and the coach-athlete relationship,
387 therefore, may be an important source of game-strategy efficacy.

388 Along with a number of sources of coach efficacy, two outcomes emerged that related
389 to coaches' behaviour. Previous evidence shows a direct link from coach efficacy to coach
390 behaviours (e.g., Horn, 2008), yet no study has linked game-strategy efficacy with specific
391 coach behaviours. The current study found that coaches who reported high game-strategy
392 efficacy beliefs described how they have released some control of their coaching to athletes
393 (e.g., independent learning) and allowed their athletes to be more independent (e.g., free to
394 question the coaches' decisions). These coaches also believed that they were competent in

395 leading their athletes to success while at the same time thought that when their athletes were
396 not successful, it was because of reasons outside their control. These coaches simply
397 demonstrated self-evaluative techniques when something, such as athlete performance, went
398 wrong. Rather than blaming the athletes themselves (which low game-strategy efficacy
399 coaches did), coaches described how they would evaluate their own techniques and strategies
400 and refine them to suit the needs of the athletes. On the other hand, coaches who reported
401 lower game-strategy efficacy described the need to control coaching and the athletes learning
402 while at the same time not accepting their advice and opinions. While praise and
403 encouragement are effective (and positive) coaching behaviours with adolescent athletes
404 (Smith & Smoll, 1990), these results show that low game-strategy efficacy can lead to
405 coaches exhibiting negative coaching behaviours (i.e., controlling and close-minded).
406 Coaches high in game-strategy efficacy though demonstrated positive coaching behaviours
407 (i.e., relaxed, flexible, and self-evaluative). Coaches both high and low in coach efficacy
408 displaying different behaviours is not a new phenomenon (e.g., Sullivan & Kent, 2003), yet
409 the notion that game-strategy efficacy is specifically linked with these behaviours is. Further
410 research, however, would be needed to examine this link.

411 **A Message for Coaches**

412 There are two key points the authors wish to convey to coaches working within the
413 developmental context. The first being what is, and is not, considered success. Although all
414 the coaches felt that winning is an important aspect of sport, they also suggested that it is not
415 the only characteristic of a successful performance. According to these coaches, athlete
416 success meant displaying effort, cooperation, learning, improvement, social relations, and a
417 positive approach to mistakes viewed as naturally associated with the learning process.
418 Secondly, the authors offer coaches a list of sources and outcomes of their game-strategy
419 efficacy beliefs. Coaches can use this list to identify situations occurring both inside and

420 outside of their coaching duties that can potentially influence their game-strategy efficacy.
421 Furthermore, situations that negatively affect game-strategy efficacy can then be avoided (or
422 at least recognised).

423 **Limitations and Future Research**

424 Although key results emerged, it is important to consider the limitations of the current
425 study. For instance, coaches occasionally found it difficult to distinguish between general
426 coaching efficacy beliefs and game-strategy efficacy beliefs (i.e., differentiate between
427 beliefs formed in and out of competition). While the interviewer was careful to keep coaches
428 discussing beliefs formed in competition, results should be interpreted with this in mind.

429 Although well-grounded as a methodology within the nursing discipline (Thorne,
430 2008), the use of interpretive description in sport is relatively new (Clark et al., 2011; Holt et
431 al., 2011). The current study contributes to the literature by adding to the small number of
432 studies that have successfully utilized the interpretive description methodology within sport.
433 We also understand the presentation of a bricolage is not the discipline norm for coaching or
434 sport and exercise psychology, but we hope that an alternative presentation of qualitative
435 results provides the reader (both academic and practitioner) with an easily digestible account
436 of the research that is comprehensible by individuals who may not have advanced research
437 skills (e.g., coaches). Most participants interviewed were highly experienced, both in a
438 practical and educational sense. Therefore, recruiting less experienced participants may have
439 revealed a clearer picture of when and where the sources and outcomes of game-strategy
440 efficacy came from. Furthermore, as previous research highlighted the differences in game-
441 strategy efficacy between genders (Marback, Short, Short, & Sullivan, 2005), the inclusion of
442 female coaches could further highlight and increase our understanding of key differences.

443 Future researchers may wish to investigate the four other dimensions of coach efficacy
444 and the sources and outcomes. Based on our current findings, there could be a conceptual

445 overlap between game-strategy efficacy and character building efficacy. These two constructs
446 may not represent mutually exclusive factors if a coach defines successful performance in
447 terms of the acquisition and maintenance of positive psychosocial values (i.e., character
448 traits). Furthermore, existing measurement models of coach efficacy (in developmental
449 contexts) might need refining if conceptual overlaps emerge, considering the participants'
450 views of success.

451 **Conclusion**

452 The purpose of this study was to explore coaches' perceptions of their game-strategy
453 efficacy beliefs and what experiences have influenced their perceived efficacy. Although
454 other ways of measuring and evaluating game-strategy efficacy may have been available, the
455 applied nature of coaching and the purposes of this study led the authors to interpretive
456 description as the most relevant research methodology. Data obtained from our interpretive
457 description revealed that sources and outcomes of game-strategy efficacy within the UK
458 developmentally focussed youth sport context included acknowledgement, playing
459 experience, relationships with athletes and peers, results, self-image, and success.
460 Additionally, two outcomes of game-strategy efficacy included releasing control and self-
461 evaluation. This study provided a unique contribution to the literature on coaching by
462 analysing game-strategy efficacy with a novel and unique methodology, highlighting sources
463 and outcomes of game-strategy efficacy within the UK developmentally focussed youth sport
464 context, and demonstrating coaches' views on the relationship between winning and success.
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1 Table 1. Summary of participants

Age	Gender	Ethnicity	Sport(s)	Experience	Qualification(s)
27	Male	White British	Rugby League	10 years	UKCC Level 2, RFL Level 2
58	Male	White British	Rugby League	37 years	RFU Level 2, FA Level 1, Swimming Level 1, AGA Coach, RFL
34	Male	White British	Rugby League/Union	14 Years	RFU Level 3, RFL Level 2, , A1 Qualified,
32	Male	White British	Rugby League	12 years	RFL Level 2,
30	Male	White British	Karate	17 years	Level 2 NGB Award, Sport UK Work Shops, Sport UK Talent B
59	Male	White British	Soccer	15 years	FA Level 3
22	Male	White British	Soccer	6 years	UEFA B Goalkeeping, UEFA B Outfield, FA Youth Module 3
44	Male	White British	Rugby Union	14 years	RFU Level 3, Swimming Level 2, UKSCA Accredited S&C Coa
33	Male	Asian Caribbean British	Rugby Union	13 years	RFU Level 2, Currently undertaking UKCC Level 3
32	Male	White British	Soccer	10 years	FA Level 2

2

3

1 Table 2. Example of Analytic Process

...and let them get on with it. so I think I've got a lot more confidence...I think as my abilities as a coach has got better and I think I'm a much better coach than I used to be uhh as I progress umm I think I have much more confidence in the guys who are playing the match than I did have before...does that make sense? Yeah so I tend not to try and influence or be a part of it in a big way, I just think 'right let them do it, they know what they're doing let them get on with it'

Comprehending data There are five important parts to this quote: (1) the perception of his abilities improving, (2) his confidence increasing as his abilities improve, (3) more confidence in his athletes, (4) he is not trying to influence the game as he used to and as a result, (5) lets his athletes get on with it.

Synthesizing meanings As the perception that he is improving as a coach increases, his confidence in his own abilities and his athletes' abilities also increases. As a result, he reduces the amount of influence he tries to exert onto a match.

Theorizing relationships There is a relationship between the coaches' confidence and the attempted influence on a match.

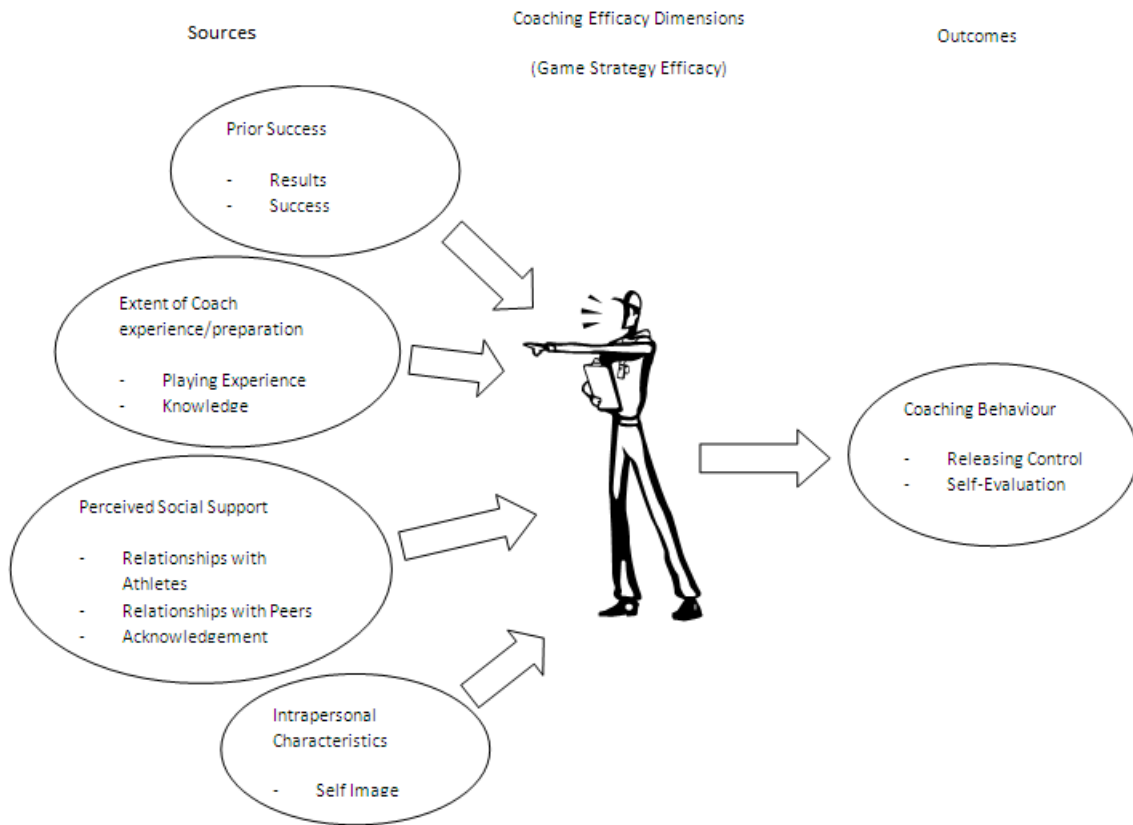
Reconceptualizing data
into findings As a coach's confidence in his own abilities increases, he releases the amount of control he perceives himself to have.

1 Table 3. Inclusion criteria and exemplar quotes from coaches on sources and outcomes of game-strategy efficacy

Sources and Outcomes	Inclusion Criteria	Exemplar Quote from Coaches
Acknowledgement	A situation where coaches game-strategy efficacy (GSE) is boosted from external feedback or recognition	Coach 1: <i>Acknowledgement, that's...just to be acknowledged...sometimes that's all you need...just to be told "you know what...thank you." Just thank you from time to time does wonders for people</i>
Knowledge	Where any level of knowledge is perceived to affect the coaches GSE	Coach 4: <i>In certain environments it [a feeling of inadequate knowledge] has done in the past. You know in a performance environment within...rugby league at times it does knock you, it doesn't knock me down here because I know more about rugby league than anyone else in the building</i>
Playing Experience	Playing experiences that have a direct, or thought to have a direct, effect on GSE	Coach 3: <i>Of course I care about winning...but compared to people in sport I'm not that bothered...and that came from my own personal playing. If I lost I wasn't devastated if I played well...and I'm the same with my coaching</i>
Relationships with Athletes	The perceived effect that athlete management and behaviour has on a coaches GSE	Coach 5: <i>If I wanted to speak to a fighter...and they didn't maybe want to acknowledge what I had to say to them...I would feel that I've lost...the fighter lost confidence in me</i>
Relationships with Peers	Any situation where a coaches GSE is affected by the behaviours and actions, both real and perceived, of a peer	Coach 8: <i>Obviously how other people perceive you...like the elite coach department how they view me or how I perceive that they view me...it's gunna affect my confidence</i>
Results	A situation whereby the coaches observes the result of an goal previously made	Coach 9: <i>Things that really boost my confidence are...seeing things that we've taught them...execution of skills or...understanding of what they are doing and why they are doing it</i>
Self-Image	The way in which coaches believe they are being perceived by their athletes and peers	Coach 4: <i>I don't think it [lack of playing career] affects my coaching, I think it affects the perception of my coaching, of other people</i>

Success	An athlete developing and demonstrating a newly acquired skill or knowledge which affects a coaches GSE	<i>Coach 7: I think maybe if you've made a difference to that individual umm...so if you've seen someone come in, you've started working with them and they're not so good but then you've worked with them and they've progressed and they're now a good player, I think that's a success</i>
Releasing Control	Coaches empowering their athletes to be more independent while accepting influence from athletes	<i>Coach 6: I think as my abilities as a coach have got better and I think I'm a much better coach than I used to be uhh as I progress umm I think I have much more confidence in the guys who are playing the match than I did have before...does that make sense? Yeah so I tend not to try and influence or be a part of it in a big way, I just think "right let them do it, they know what they're doing, let them get on with it"</i>
Self-Evaluation	A situation in which the coach reflects on their own GSE as a result of an athlete's poor performance (as opposed to blaming the athletes themselves)	<i>Coach 5: It was a silly mistake. However, that silly mistake had happened before, you know, so...from what we had done, I clearly hadn't reinforced that enough, or I had and it hadn't worked so I have to change my tack on it and then it's not just then about me, because they need to change or they wouldn't move any further. So I think it's about what you do with it as opposed to...you don't take it personally, you've just gotta come back, reflect on it and make it right next time</i>

1 Figure 1. Summary of Results



2