



LJMU Research Online

Wood, S, Richardson, D and Roberts, S

“Who’s Who?”: Identifying Cycling Coaches’ Biographies

<http://researchonline.ljmu.ac.uk/id/eprint/18043/>

Article

Citation (please note it is advisable to refer to the publisher’s version if you intend to cite from this work)

Wood, S, Richardson, D and Roberts, S (2021) “Who’s Who?”: Identifying Cycling Coaches’ Biographies. *International Sport Coaching Journal*, 9 (2). pp. 179-188. ISSN 2328-918X

LJMU has developed **LJMU Research Online** for users to access the research output of the University more effectively. Copyright © and Moral Rights for the papers on this site are retained by the individual authors and/or other copyright owners. Users may download and/or print one copy of any article(s) in LJMU Research Online to facilitate their private study or for non-commercial research. You may not engage in further distribution of the material or use it for any profit-making activities or any commercial gain.

The version presented here may differ from the published version or from the version of the record. Please see the repository URL above for details on accessing the published version and note that access may require a subscription.

For more information please contact researchonline@ljmu.ac.uk

<http://researchonline.ljmu.ac.uk/>

1 **‘Who’s who’: Exploring cycling coaches’ biographies**

2 **Abstract**

3 Consideration of a learners’ biography is deemed to impact on their engagement with formal
4 education and their connection with, and perceived relevance of, educational course content. It
5 is considered equally important to understand coaches who enrol on formal coach learning in
6 sport – their motivations, beliefs, values, existing knowledge and previous life experiences.

7 This research explored the individual biographies of eight neophyte cycling coaches over an
8 18-month period following the successful completion of a national governing body coach
9 award. Following 23 formal semi-structured interviews and 26 unstructured interviews,
10 deductive thematic narrative analysis revealed three different typologies of coach: the
11 ‘performance coach’; the ‘parent-coach’; and the ‘community coach’. Although the subjective
12 details of the life stories varied according to their idiosyncratic perspective, all participants’
13 stories broadly followed one of these three identifiable narratives. Identifying different
14 ‘typologies’ of cycling coaches answers calls from coach developers to account for the specific
15 backgrounds of coaches’ practices. It is hoped this research will begin the process of
16 developing more personalised approaches to coach education.

17 **Introduction**

18 Historically, coaching knowledge was constructed through trial and error, where
19 learning to coach occurred through a process of socialisation and networking (Day &
20 Carpenter, 2016). This approach created prevalent pedagogies – established practices and
21 process, and normalised behaviours – which became ingrained in some sporting and coaching
22 cultures (Walsh & Carson, 2019). Indeed, the knowledge developed through experience forms
23 the basis for expertise in coaching (Lyle & Cushion, 2017a). However, the processes learned
24 through experience might not represent best practice for novice coaches, or serve the coaching
25 profession in the future, meaning that preparation to coach cannot be left to myopic experience
26 alone (Lyle & Cushion, 2017b).

27 Formal coach learning programmes ‘typically’ define what knowledge is necessary for
28 coaches to practice; accelerating the learning that takes place from experience, and
29 differentiating between good and bad experiences (Lyle & Cushion, 2017b). For the last twenty
30 years, most formal coach education programmes in the United Kingdom (UK) have been
31 aligned to the United Kingdom Coaching Certificate (UKCC). However, some National
32 Governing Bodies of Sport (NGBs), have started to transition away from this framework,
33 following concerns of its ‘one-size-fits-all’ approach to learning, and the lack of opportunities
34 provided within the framework for coaches to take ownership of their own development
35 (Stodter & Cushion, 2017; Werthner & Trudel, 2009). Moreover, it is well established in the
36 literature, that learners who attend formal coach education courses have prior knowledge and
37 past experiences of the sport and its culture, as well as significant events experienced by the
38 individual over the life course (Trudel, Gilbert & Rodrigue, 2016). Thus, previous criticisms
39 of coach education suggest that coach developers have not fully embedded these considerations
40 into course content or assessment outcomes, and, consequently, are incongruous to the routines,

41 practices, and meanings gained from coaches' previous lived experience (Chesterfield et al,
42 2010; Entwistle & Peterson, 2004).

43 Coach education has, historically, attempted to patch new skills or knowledge onto
44 existing knowledge frameworks (Thompson & Zeuli, 1999; Cushion, 2013), rather than
45 transform an individual's beliefs, assumptions, knowledge, and habits to rebuild coaches'
46 practice (Harvey & Knight, 1996). Previous evidence would suggest that the relative success
47 of coach education begins with the learner's past experiences and networks of existing
48 knowledge, belief and values (Cushion et al, 2003; Stodter & Cushion, 2014; Werthner &
49 Trudel, 2009). For instance, Ludec et al (2012) reported that coaches validated, changed, or
50 intended to change, their practice, depending on their existing biography. Changes to practice
51 were a result of transformed biographies – cognitively, emotively, and practically – where
52 coaches linked new learning to previous cognitive structures. Stodter and Cushion (2017)
53 extended this work further, by proposing that learning occurs through a double-filter, where
54 the first 'level' refers to personal knowledge, beliefs, and practice, highlighting the active role
55 coaches take in their learning, and drawing attention to the prominent role that personal
56 biography plays in supporting and hindering change.

57 Crucially, this means that the same coach education opportunity has a different impact
58 on different individuals depending on each individual's unique starting point (Griffiths &
59 Armour 2013; Stodter & Cushion, 2017). Therefore, it is imperative for coach developers
60 responsible for designing formal learning programmes to understand "who" the learner is, and
61 appreciate an individual's previous knowledge and experience(s) (Trudel, Culver & Werthner,
62 2013; Paquette, Hussain, Trudel, et al, 2014). Evidence-based frameworks, for example Côté
63 and Gilbert (2009), reflect the coach as a finished article, leaving coach developers with an
64 image of the knowledge required, but no 'signposts' of how to navigate the journey (Walsh &
65 Carson, 2019). Paquette and Trudel (2019) suggested a collection of recommendations for

66 coach development administrators to better support learner-centred coach education. Yet, there
67 is a narrative of how coach education *could* be delivered, rather than evidence-informed insight
68 of how it *can* be delivered by considering what works and why (Cope, Cushion, Harvey &
69 Partington, 2020).

70 To best incorporate an individual's biography into their formal learning experiences, it
71 is important to identify the individuals who attend formal coach education. This backdrop
72 presents a strong rationale to apply narrative inquiry to sport coaching. Implicit here, is our
73 understanding, that through creating and sharing personal stories, people make sense of and
74 bring meaning and coherence to their lives. This psychosocial approach to understanding
75 coaches' stories may help establish the existence of both complimentary and different narrative
76 types across the coaching workforce. The present study therefore aims to explore the different
77 individual biographies of cycling coaches enrolled on a British Cycling's (BC's) coach
78 education programmes. The importance of this work lies in its ability to help inform how
79 formal coach education can be effectively constructed and delivered, by accounting for the
80 different biographies of those attending coach education programmes.

81 **Methodology**

82 It is suggested that coaches' thoughts and actions are value-laden, situated in subjective, lived
83 experiences, which in turn creates individual, self-conscious, intentional, and reflective
84 learners (North, 2013). With these considerations in mind, this study was positioned within an
85 interpretivist research paradigm, as the focus was on understanding the experiences of
86 individuals, which are, naturally, subjective (Coe, 2012). Here, social reality is a product of
87 how people, both individually and collectively, make sense of their social world (Smith, 1989;
88 Markula & Silk, 2011). The interpretivist, qualitative research approach adopted in this study
89 infers, from specific instances, something about a culture or group of people – by seeing the
90 general in the particular (Berger, 1963). This means that the basis for 'moderate

91 generalisations' lie in the consistency between cultures in our respective social worlds
92 (Williams, 2000). Therefore, interpretive qualitative research, as reported in this study, is
93 packed with several 'layers of truth' and offers a representation of 'reality' by offering an
94 interconnected multi-dimensional narrative experienced by the individuals in question (Salla,
95 1993).

96 **Methods**

97 *Setting and context*

98 This research study tracked eight cycling coaches over an 18-month period and formed part of
99 a larger body of commissioned research designed to evaluate the coach education provision of
100 a large NGB in the UK (i.e., BC). For context, BC is the NGB responsible for all forms of
101 cycling within the UK, including bicycle motorcross (BMX), mountain biking, cyclo-cross,
102 road, track, and cycle speedway. At the time of writing, BC's formal education pathway
103 consists of 4 'Levels'. The first, Level 1, is for assistant coaches. The second, Level 2, is a
104 generic coaching qualification that enables coaches to operate in various coaching
105 environments, such as playgrounds and fields. There is then a Level 2 discipline specific
106 qualification, which qualifies coaches to operate in discipline specific environments. The
107 highest-level is a discipline specific Level 3 qualification.

108 *Participants*

109 Following institutional ethical approval, eight participants were purposively recruited, and
110 following informed consent and verbal assent agreed to participate in this study. Recruitment
111 criteria required each participant to be enrolled on the BC (generic) Level 2 qualification. The
112 eight participants were recruited from geographically diverse locations of the UK and all were
113 coaching cycling at least once per week. Below is a brief biographical introduction to each
114 participant. In the interest of confidentiality, all participants' names are replaced with
115 pseudonyms.

116 Joe lives with his wife and two young sons. In Joe’s own words “the boys have surpassed
117 constantly needing me”, meaning that he has more time on his hands, which he now wants to
118 fill. Following comprehensive school, he entered full-time employment and now works as a
119 General Manager. He has trained for triathlons, but due to injury, has spent the last five years
120 focused on cycling and has experimented with every cycling discipline

121 James lives with his wife and two teenage children. James’s daughter is a competitive road
122 and track cyclist. Following comprehensive school, James started a job in sales. He now owns
123 a successful company and plans to take early retirement to ease his transition into coaching.
124 He has tried most sports over the years, but is a self-confessed ‘weekend-warrior’ - cycling in
125 his spare time – on his road bike.

126 Oliver lives with his wife and three children, who have cycled as a family with the local
127 club for the last three and a half years. He attended state school, before studying biochemistry
128 at university, and then entering pharmaceuticals, where is currently a marketing director. He
129 played numerous sports in school, with cycling playing a role in commuting to work to improve
130 fitness and levels of habitual physical activity.

131 Peter and his wife are both retired teachers. After attending Grammar school, a selective
132 tier of the U.K. state-school system, he worked in industrial catering. Being a stay-at-home
133 Dad ignited Peter’s desire to work with children, which lead him to teaching. Peter played
134 numerous sports growing up and cycled as a means of commuting. He found his love for
135 cycling as he headed into retirement and joined a social cycling club. Combined with his desire
136 to work with children, coaching seemed a logical next step.

137 Chris lives with his wife and has two children, both in their 40s. He works full-time as a
138 self-employed architect. He attended grammar school, then university. He played numerous
139 sports growing up, and cycling was always a means of commuting. Aged 69, he fell back in

140 love with cycling and joined the same cycling club as Peter and volunteered for a coaching role
141 with the club.

142 Beth attended her local Comprehensive school, before studying an Art degree and then
143 turning to teaching, where she has worked for the last thirteen years. Beth became involved in
144 cycling through her husband. Preferring fast riding, she focuses on Downhill racing at a local
145 level.

146 Louise is single and works in sport full-time. On leaving school, Louise attended university,
147 and then trained in Law. She felt her job in sport influenced her coaching role. She became
148 involved in cycling as a means to commute, but found herself racing other riders when setting
149 off from traffic lights, which led her to seek out formal cycling activity and coaching. She races
150 competitively on a regular basis.

151 Adam is married with one daughter, now in her 30s. After leaving school, he qualified as a
152 personal trainer. He now works as a self-employed instructor. He has always cycled, initially
153 as a means of commuting, but became involved with competitive cycling after attending a time-
154 trial race as a spectator. He now rides the Track, and is focused on sprint events.

155 *Interviews*

156 Interviews are one of the most widely used qualitative data collection methods in sport and
157 exercise science (Smith & Sparkes, 2016). This is perhaps unsurprising, considering that
158 human beings are conversationalists, and it is through conversations that we get to know other
159 people (Brinkman, 2013). Interviews aim to create conversations that invite participants to tell
160 stories in relation to their perspectives or insights, experiences, feelings, emotions or
161 behaviours in relation to the study's research question (Smith & Sparkes, 2016). However,
162 interviewing is a craft, more than a prescribed technique (Demuth, 2015). Conducting one-to-
163 one interviews allows for an in-depth examination of an individual's attitudes, opinions, beliefs
164 and values when researching a particular phenomenon (Purdy, 2014).

165 The interpretive paradigm acknowledges that researchers cannot come to a study with a
166 pre-established set of neutral procedures to investigate a given problem. Here, the researcher
167 is the primary research tool with which they must find, identify and collect data (Ball, 1990).
168 Therefore, data collection is an ‘inquiry process carried out by human beings’ (Wolcott, 1990,
169 p.202). In line with the interpretivist approach, the focus of data collection was on depth of
170 detail from small populations (Howell, 2013) and highly detailed accounts – evoking ‘thick
171 descriptions’ of the what, why, where, when, who and why (Potrac et al, 2014, p.34). From an
172 interpretivist and constructivist perspective, I (Sam) played an active role in the co-construction
173 of knowledge, as it was impossible to separate myself, as the researcher, from the researched,
174 because I played a part in creating the truth (Smith, 2009; Smith & Deemer, 2000). Interviews
175 are often criticised for only consisting of one interview (Smith & Sparkes, 2016). As such, this
176 research employed multiple interviews, both semi-structured and unstructured, longitudinally.
177 Semi-structured interviews were used at the start of coaches’ participation, to ensure all topics
178 were covered, and structure the conversation to help build rapport. However, once rapport had
179 been established, and participants began to diverge, unstructured interviews were deemed more
180 appropriate. Both are discussed in more detail below.

181 *Semi-structured interviews*

182 The semi-structured interviews totalled 1,390 minutes ($N=23$ interviews), ranging from 30.72
183 minutes to 101.62 minutes in length ($M=60.45$; $SD=16.84$). They included pre-determined
184 questions, informed by both the existing literature and the primary research aim. A pre-
185 determined interview guide was developed, highlighting the main topics of conversation to be
186 covered. This still allowed for a degree of flexibility, exploring areas which emerged through
187 the discussion (Purdy, 2014). Likewise, the phrasing of questions was adaptable, allowing the
188 discussion to follow the issues that emerged during the interview, rather than restricting the
189 interview to a fixed agenda, as a structured interview would (Purdy, 2014).

190 *Unstructured interviews*

191 The unstructured interviews totalled 1,349 minutes ($N=26$ interviews), ranging from 13.42
192 minutes to 89.85 minutes in length ($M=51.88$; $SD=20.49$). The spontaneous nature of these
193 interviews accommodates for the broad range of interview duration. They focused on the key
194 areas under investigation, but were more spontaneous – more conversational in tone –
195 emphasising the natural flow of the interaction, knowledge and experience of, and between,
196 myself and the participants. This was achieved by varying the question order and being flexible
197 in my approach to the interviews. I adopted the rules of everyday conversation: turn-taking,
198 relevance; and entrance and exit talk (Riessman, 2008). As a neophyte qualitative researcher
199 this initially created a sense of anxiety, as control of the interview was handed to the participant;
200 they were able to discuss anything that they felt was important or relevant, reworking questions
201 to discuss what they felt was important, rather than simply responding in scripted ways to
202 planned questions (Riessman, 2008). Although identifying participants' biographies was at the
203 heart of the study, it was only considered to be part of the participant's 'self', which meant they
204 were free to discuss whatever they considered important, however much it digressed from the
205 interview agenda.

206 *Data Capture*

207 All the interviews were audio recorded to capture the topic and dynamics of the conversation;
208 however, the true interpretative process began during the interview itself (Riessman, 2008).
209 Through the chosen probes, whether to gain further clarification on a given point, or to delve
210 deeper into the participants' response, it was important to effectively participate in the
211 interview and actively contribute to the data collected. This created multiple layers of truth, as
212 each person's character, values, and idiosyncrasies across various situations were uncovered.
213 The audio files however, provided an opportunity to reflect, review and re-listen to the

214 interview dialogue and make sense of the participants wider experiences (Kvale and
215 Brinkmann, 2009).

216 *Data analysis*

217 All audio recordings were transcribed verbatim, producing 694,070 words across 1,380
218 pages of single-spaced text. Transcripts highlighted the ‘actual words spoken’ by participants
219 (Riley, 1990, p.25) as well as the culture of specific disciplines across the sport of cycling.
220 They presented dynamic talk in a linear, written form, which meant the transcript could not
221 capture the fluid dynamics of words and gestures (Riessman, 2008). Researchers cannot stand
222 in a neutral, objective position during the transcription process, and, as such, the transcript was
223 constructed in line with the interpretivist and constructionist perspective (Riessman, 2008). In
224 this way, the transcripts played a role in creating the narrative, more than simply “finding” the
225 narratives discussed in the interview.

226 Deductive thematic analysis (TA) developed themes through an analytic process, following
227 six phases (Braun & Clarke, 2006; Braun, Clarke & Hayfield, 2019). This analysis developed
228 over time via a recursive process, back and forth, between: the entire, larger data set; coded
229 extracts of data being analysed; and the data being produced. This analysis highlighted
230 similarities between participants’ cycling experience, motivations, beliefs, and values.
231 However, TA fragmented the narratives. Therefore, thematic narrative analysis (TNA), the
232 most commonly used narrative analysis in sport and exercise science (Riessman, 2008), was
233 employed. The focus was on the themes in stories and the patterns and relationships among
234 these (Smith, 2016). TNA followed a similar iterative process to TA, but *with*, rather *on*, the
235 stories within transcripts (Smith, 2016). This facilitated patterns that ran through the set of
236 stories identified. To ensure stories were kept intact, the focus was the thread of each story and
237 the recurrent instances within the whole story. Themes were developed by making notes on the
238 thread of the story and regular occurrences throughout the story, highlighting key sentences

239 and phrases, summarising apparent and underlying meanings in the data (Smith, 2016). The
240 process focused on more than the themes developed, focusing on describing themes of the story
241 and, therefore, what the story was about (Smith, 2016). This process continued to write, revise,
242 and edit the interpretations of these descriptions.

243 *Research quality, trustworthiness, and transparency of data*

244 Positioning this research within the interpretivist paradigm, interviews were socially
245 constructed, with the researcher and participants playing equal roles in creating the narrative
246 (Smith, 2009; Smith & Deemer, 2000). Accounts, stories and conversations constituted
247 experience, reflecting their narrative truth, rather than objective truth in some pristine form
248 (Smith & Sparkes, 2016). Member-checking was avoided because the ontological assumptions
249 clashed with the ontological relativism of the study. To increase credibility, participants' points
250 were clarified during interviews and consequent probes were used to clarify certain points. In
251 addition, the time frame of data capture and prolonged engagement with participants increased
252 the trustworthiness and credibility of data.

253 **Findings**

254 The present study set out to explore the different types of coaches attending formal
255 qualifications based on their personal beliefs and values, their motivations for coaching, and
256 their knowledge and previous experience(s). A narrative type (Frank, 1995) is the 'most general
257 storyline that can be recognised underlying the plot and tensions of particular stories' (p.75).
258 Douglas and Carless (2006, 2009, 2015) used Frank's (1995) concept of narrative types to
259 identify three narratives types in sport contexts and we use these types as a theoretical frame
260 here. Although the specific details of different individual's stories varied according to
261 participants' life circumstances, participants' stories broadly followed one of these three
262 identifiable plots. These typologies are described: 1) performance narratives, whereby the story
263 plot is oriented towards achieving specific goals, such as winning and/or being the best. The

264 ultimate dream or destination in the story is to win; 2) discovery narrative, which revolves
265 around exploration of the full and multidimensional possibilities of life. There is no single
266 destination, rather a multiplicity of potential journeys that become available through the
267 storyteller's openness to new experiences; and 3) relational narrative, which is characterised
268 by a story of complex interdependent connection between two or more people in which sport
269 performance is a by-product. The plot of relational stories revolves around creating,
270 experiencing and sustaining relationships with others. Unlike performance stories, there is no
271 single destination in the relational plot (Douglas & Carless, 2015).

272 **Louise and Adam**

273 These coaches aligned to a performance narrative (Douglas & Carless, 2006, 2009, 2015).
274 They were focused on achieving specific goals, professional development, and being the best.
275 "Good" coaching was perceived to orient towards explaining 'what [the rider] could improve
276 on' - 'highlighting the teaching points' (Adam). However, this was balanced with a need for
277 'emotional intelligence' to 'read' how what coaches are doing impacts the person in front of
278 them, highlighting the need for coaches to be empathetic, good communicators, and good
279 listeners (Louise). They emphasised an 'athlete-centred' and 'athlete-led' approach, believed
280 that coaches should be supportive and dynamic in their delivery, and stressed the 'need to be
281 able to flex' to 'meet the needs of the athlete [they're] coaching' (Louise).

282 These coaches were motivated to qualify as coaches so they could take their coaching more
283 seriously. They viewed BC's formal qualifications as a series that needed accomplishing –
284 certificates that needed collecting, because 'if there's a level it needs achieving' (Louise).
285 However, they were also a 'means to an end' for their progression, and served as a way of
286 legitimising their knowledge, giving them the ability to 'stick [their] head above the parapet'
287 and say, "'I'm endorsed!'... more than a maverick trying to coach' (Louise). More importantly,
288 however, these coaches were motivated to improve the future of competitive cycling. They

289 centred on the way coaching improves performance, developing riders' technical skills.
290 Additionally, Louise was passionate about women coaches being represented at competitive
291 levels, and about increasing female participation:

292 I'm really interested in women cycling, and generally, equality across the board. I'm a woman
293 and feel that we get treated like crap... we're horrendously underrepresented... there's amazing
294 talent that people at the top hasn't even heard of. Cycling is male, pale and stale in terms of the
295 NGB and the international federation... There aren't enough women – female leaders – in sport,
296 and that means there are so few female riders at the Club level, there's no competition for them,
297 so they end up racing against boys, and they can't compete, so they become despondent, and
298 drop out... we need to be doing more to keep the girls we have, without adding more barriers
299 for them.

300 *Louise*

301 These coaches had a history of competitive cycling and had ambitions of coaching at the
302 highest levels. They had received formal coaching and felt that their knowledge was superior
303 to their peers, and therefore, 'more qualified' than their peers:

304 What they should do, really, is have you send in your qualifications, send in your accreditation
305 and all that for the Track – how long you've been riding at the Track, your background on the
306 Track, whether you've raced or not... At least if you've raced you can at least give people the
307 information you've learned through racing, so when you go on the course you've got even more
308 information, whether it's to do with power meters on the pedals, or the lines on the track, or
309 what gear you're using... To me, it's a bit like one cap fits all, if you understand what I mean?
310 *Adam*

311 In addition, they saw coaching as a career:

312 I teach spin classes... A few people that came to my class started coming to the Track because
313 I said, "You want to go on [the Track], it's really good"... then it got about that I was teaching
314 the [local] spin classes [...] and then I was speaking to the Track manager at [the local
315 velodrome], and I said, "What do I need to get this coaching qualification on the Track?" And
316 he said, "You just go on this site", so that's where we are now.
317 *Adam*

318 These coaches were frustrated by BC's lack of focus on elite coach education. They felt
319 'elite coach education is often side-lined to UK Sport's apprentice programme, because it's
320 there and it's free' (Louise), rather than taking an active role in developing coaches at that part
321 of the coaching pathway. Moreover, Louise, stressed how even club coaches develop riders'
322 skills at an early, 'formative' stage, which impacts at a higher level:

323 I'm not sure what BC want from [their] coaches. Is it damaged limitations [sic], like the
324 minimum standards in as many coaches as possible around the country, versus making
325 incredibly good coaches who do x, y and z, and demonstrate a, b and c? [...] If you want that,
326 you need to be more harsh on whether or not every single candidate becomes a coach straight
327 away. People should probably fail... I don't want to do the tutor a disservice, but nobody is
328 going to get failed, right? I suspect BC just want lots of coaches across the country delivering
329 the minimum standard... But coaching is a huge responsibility. If you want coaching to be
330 professionalised and have more recognition for the impact it has, there needs to be certain
331 qualities - certain standards – that are upheld.

332 *Louise*

333 Again, this links to these coaches' assumption that they are above average, and highlights
334 a clear disconnect between what they thought BC's role *should* be and what they perceived
335 BC's role to be. The 'performance coach' biography is summarised in Figure 1.

336 [Insert Figure 1]

337 **Joe, James, and Oliver**

338 These coaches aligned to a discovery narrative (Douglas & Carless, 2006, 2009, 2015).
339 They cited their children's involvement in cycling as the reason for their involvement in
340 cycling, and were motivated by exploring new possibilities, a new role, and a new identity –
341 the opportunity to be '[Oliver] the coach', rather than '[Oliver] the Dad, or '[Oliver] the work
342 colleague'. In this way, coaching offered these participants a journey of self-discovery and
343 personal growth:

344 I've reached a point now where the kids don't need me constantly, so I have a bit more free
345 time now, and I sort of want to fill it... and I feel good about coaching at sessions. There's a
346 need for me to coach, and I get something out of it too - that feel good factor.

347 *Joe*

348 These coaches' newly established social status of 'coach' granted them the 'Coach' title,
349 which they balanced alongside their 'parent' role: 'my son thought it was amazing that Daddy
350 was helping during the sessions' (Joe):

351 My kids are riding bikes, and I'm going along to the session, so I'm there anyway. Instead of
352 standing around, moving cones, I might as well get involved and help with the session. I've felt
353 a bit of a spare part, on the sidelines of the Club. But the Level 2 will make me more useful -
354 I'll get insurance, and the ability to do it on my own.

355 *Joe*

356
357 For James, coaching built a closer relationship with his daughter, who was a competitive
358 cyclist, and he was ‘excited to gain more knowledge’ so that he could ‘help to improve’ her
359 cycling. Here, formal qualifications built a foundation for their new journeys. Yet these
360 participants were motivated to coach by more than their parental role in sport. Firstly,
361 qualifying as Level 2 coaches increased their club’s capacity:

362 We’ve got kids wanting to be involved and wanting to participate in cycling, and we’ve got the
363 facilities, we just don’t have the coaches to coach them. Unfortunately, a lot comes down to
364 funding the quals, and the lack of funding available to attend coaching quals... You need a rich
365 club who can afford to fund your course. Of course, you can self-fund your way through it, but
366 that’s a barrier to some looking to get involved... it means there’s a regional shortage of
367 coaches, and that needs addressing... The Level 1 remit is quite limiting. The club wanted me
368 to do the Level 2 qualification because it allows me to lead a session on my own, within the
369 club, which means they can take on more riders.
370 *Joe*

371 Equally, James discussed how a formal qualification added weight to what he was saying
372 when he coached. These coaches did not value personal cycling experience, believing that it
373 did not matter how skilled they were as riders. They were experienced cyclists – and had always
374 been involved in cycling – but they were self-taught, having not received any formal coaching.
375 Consequently, these coaches’ ideas of coaching were based on what they had ‘witnessed first-
376 hand’ (Oliver) when assisting in their clubs and they felt their cycling knowledge was ‘above
377 the national average’. Oliver was excited to share knowledge, motivated by seeing ‘someone
378 who didn’t have a clue, just get it’. This links to these coaches’ beliefs that coaching is about
379 influencing people and creating an encouraging environment, where riders left happy and
380 wanting to come back. They valued riders’ efforts, ‘good rapport and communication with
381 riders’ (James), and working to meet riders’ needs. The ‘parent-coach’ biography is
382 summarised in Figure 2.

383 [Insert Figure 2]

384 **Peter, Chris, and Beth**

385 These coaches aligned with the relational narrative (Douglas & Carless, 2006, 2009, 2015).
386 They were social riders who casually and socially engaged with cycling. They valued how
387 cycling offered the opportunity to keep fit, be outdoors, and meet new people. However, these
388 coaches also believed that coaching had the power to develop people:

389 You know that you are helping them to build confidence and their abilities so that,
390 hopefully, they will be safer when they ride [...] I'm really pleased, particularly for the
391 ones who aren't confident, that they're able to do it... it brings about relationships
392 between the children of helping the ones that are weaker and looking after each other,
393 and being responsible... There are so many things that come out of [coaching] that
394 you're not aiming for, but they just happen anyway.

395 *Peter*

396
397 These participants saw coaching as a way of empowering people. They were invested in
398 the growth and broader development of individuals. They valued their friendships formed
399 through cycling and were motivated to extend the friendships that cycling offered. Therefore,
400 their narratives oriented towards people; on creating and sustaining relationships with others
401 through cycling, as well as their shared experiences of cycling with others. For example, Beth's
402 relationship with cycling started because of her boyfriend – now husband – and a group of
403 female riders who she rode and raced with. Beth's organic transition into coaching occurred
404 after she developed, technically. As a strong rider she was asked by friends for help and advice
405 on cycling technique and enjoyed helping people. Peter and Chris were two friends who, having
406 established and strengthened their friendship through cycling, ventured on their coaching
407 journeys together.

408 These coaches were motivated to coach so that they could spread their enjoyment of cycling
409 and grow cycling within their local community. They focused on 'investing in people' first and
410 cycling second. They believed that coaches should give learners something to work towards
411 and develop riders' interest to create lifelong cyclists who love the sport. Here, coaching was
412 not about bettering the sport on a national level, but simply about bettering cycling within their
413 immediate community:

414 I want to introduce cycling to youth riders, but it's bigger than just building the club numbers.
415 I want kids on bikes, riding safely - that real-life aspect to cycling is a high priority for me. And
416 although the focus is on young riders, it would be great to get parents on their bikes too, maybe
417 organise a few evening social rides with everyone out together... Maybe even look at
418 connecting with other clubs in the area?
419 *Peter*

420 These coaches struggled to balance coaching with their own riding, missing the social
421 element of cycling and the friendships they had made: Peter discussed trying to 'temper'
422 coaching alongside his riding; Chris declined the offer of more coaching because it would
423 impact his 'own session midweek'; and Beth felt coaching on weekends prevented her from
424 riding with friends:

425 My friends are like "What are you doing at the weekend? We're going to such and such
426 a place", and I'm, like, "I can't come, I'm coaching"... I'll try and keep it so that I've
427 got at least one day at the weekends, maybe, where I can ride.
428 *Beth*

429 The 'community coach' biography is summarised in Figure 3.

430 [Insert Figure 3]

431 **Discussion**

432 Deductive thematic analysis, and thematic narrative analysis, identified similar narratives
433 across participants, aligning participants to one of the three typologies (Frank, 1995; Douglas
434 & Carless, 2006, 2009, 2015) – performance, discovery and relational. This created three
435 groups of participants; essentially, three types of coaches: the 'performance coach'; the 'parent-
436 coach'; and the 'community coach'. Coaches were broadly grouped based on certain
437 similarities allowing contrasts to be drawn across each 'type'.

438 Coaches who aligned to each narrative had previous knowledge, experience(s), beliefs
439 and values specific to their narrative type. Stodter and Cusion (2017) highlighted the active
440 role that coaches take in their learning, drawing attention to the prominent role that personal
441 biography plays in supporting and hindering change. Subsequently, coaches' biographies act
442 as a lens through which they view and interpret new knowledge – filtering, guiding and

443 influencing what is learned (Cushion et al, 2003; Trudel et al, 2013). This relates to the first
444 'level' of Stodter and Cushion's (2017) double-filter model, where learning passes through this
445 first, 'biography' filter. The current research findings highlight three potential types of
446 'biographical filters', relevant to the participants in this study, suggesting that it is possible to
447 frame these 'biography filters' as the 'performance coach', 'parent-coach', and 'community
448 coach', which act as a frame of references and serve a 'guidance function' (Mezirow, 2009;
449 Moon, 2001).

450 Formal coach education is often criticised for not recognising the adult learner. Race's
451 (2005) summary of effective learning environments highlights how formal education works
452 best when coaches want to learn; when they realise content is relevant to them; and when they
453 can relate content to what is already known. This also links to Paquette and Trudel's (2019)
454 calls for learner-centred coach education to prioritise making content meaningful for coaches.
455 In addition, Jacobs, Claringbould and Knoppers (2016) call for more practice-oriented coach
456 education which takes into account the specific context and backgrounds of coaches' practices;
457 and Lyle (2007) called for personal models of coaching to be developed.

458 Findings from this research propose coaches could be aligned to one of the three typologies
459 identified. Here, coaches would be grouped according to similarities in previous experience,
460 both in cycling and coaching, their values and beliefs. As such, it seems possible to generate
461 three streams, or pathways, each embracing the general background of the individuals aligned
462 to that narrative and emphasising the skill areas deemed important to that group. Moreover, it
463 would be possible to make educational content relevant for coaches by linking it to existing
464 knowledge, drawing out relevant connections between material and their own practice and
465 interests (Paquette & Trudel, 2019). This would avoid learners rejecting valuable information
466 (Stodter & Cushion, 2017) and create a stronger alignment between the expectations of the
467 coaches and their actual educational experiences (Paquette & Trudel, 2019). This would

468 positively impact coaches' willingness and capacity to learn, reducing their disengagement and
469 potential drop-out (Voldby & Klein-Døssing, 2019). Further, research into the impact of these
470 identified typologies on learning experiences could potentially recognise coaches' views of
471 learning, offering a better understanding of learner centred teaching (Paquette & Trudel, 2019).

472 Conversely, these findings offer a 'soft start' to informing changes to the course material
473 of formal coach education. It would be possible for coach developers to use pen-portraits to
474 help trainees align themselves to one of the three different 'types' of coach identified. Here,
475 learners would be empowered with increased autonomy and learning options, providing
476 learners with decisional input, individualising their educational experiences in a somewhat
477 inflexible qualification (Paquette & Trudel, 2019). This would save overhauling the whole
478 pathway of qualifications, but still gives the course content purpose at the point of delivery.
479 Moreover, this would allow trainees and coach developers to consider the different reasons for
480 taking part in the formal education, beyond the superficial introduction tasks normally seen on
481 training courses. This recommendation would reshape the validation of coaches' formal
482 qualifications and illustrate credibility that NGBs were not preaching a one-size-fits-all award.

483 **Conclusion and recommendations for future research**

484 This research identified three types of coaches: the performance coach; the parent-
485 coach; and the 'community' coach. Ontologically and epistemologically positioned within the
486 interpretivist paradigm, these findings are the result of subjective, multiple realities and do not
487 therefore represent an absolute truth. As such, there is caution required in translating these
488 findings across other sports and to other NGBs. Therefore, the implications discussed are not
489 intended to generalise these findings, but rather to suggest a developmental framework for the
490 planning and delivery of formal coach education, moving forward.

491 Strengths of this work lies include the length of time tracking and monitoring the
492 coaches and their continued engagement with the research study. However, this work also

493 contains some limitations. The sample size, although offering a deeper insight into the
494 experiences of these participants, was modest at best and future studies may consider
495 expanding the number of participants. It is also feasible that there are more identifiable
496 narratives, which a larger sample might identify and is worthy of further exploration. Similarly,
497 it might be possible for coaches to transition from one narrative to another, however at the
498 moment this is empirically untested. For example, Beth was made redundant mid-way through
499 this particular study, which resulted in coaching taking a more important role in her life, leaving
500 her contemplate the prospect of coaching full-time and generating an income from her coaching
501 business. In the end, it was not a course of action that she pursued, but it highlights the potential
502 for life events (e.g. overcoming adversity) to create transitions between narratives. Although
503 transitions between narratives is worthy of further exploration, the current findings are not
504 intended to suggest that coaches are ‘fixed’ into a narrative ‘for life’. Rather, the practical
505 implications of this research relate to a coach’s typology when attending formal education in
506 an attempt to increase the effectiveness of formal coach education and move away from a one-
507 size-fits all approach to their delivery. Future research should therefore consider how
508 differences in how the different ‘types’ of coaches identified in this study experience future
509 coach education provision.

510 **Acknowledgement**

511 This paper has been written with the full support of British Cycling. In particular, we would
512 like to thank Dr Vincent Webb for his insights and expertise. Our thanks also to Professor Dave
513 Morley for setting up the initial research project with British Cycling, and to the late Arvinder
514 Kaur for her contribution to this work. Finally, we would like to thank the anonymous
515 reviewers for their insightful and informative comments. This study is part of a larger body of
516 funded research in partnership with British Cycling.

517

518 **Author Biographies**

519 Dr. Samuel Wood is an Educational Development Officer, contributing to the design,
520 development, and creation of educational products to support British Cycling's Education
521 programme. Dr. Wood's research interests centre on qualitative exploration of sport coaches'
522 education to address work-based developments and problems.

523 Professor Dave Richardson is Pro Vice Chancellor Science (interim) and Director of
524 Sport and Exercise Sciences at Liverpool John Moores University. Professor Richardson
525 specialises in social science research predominantly in youth development, organisational
526 culture, and community contexts.

527 Dr. Simon Roberts is a Reader in Sport and Exercise Pedagogy and the Programme
528 Leader for the Professional Doctorate in Applied Sport and Exercise Sciences at Liverpool
529 John Moores University. Dr. Roberts's research is translational in nature and includes a variety
530 of methods and disciplines to support sporting practitioners deal with work-based
531 developments and problems.

532
533
534

535
536
537
538
539
540
541
542
543
544
545
546
547
548
549
550
551
552
553
554
555
556

References

Ball, S. J. (1990) ‘Self-doubt and soft data: Social and technical trajectories in ethnographic fieldwork’, *International Journal of Qualitative Studies in Education*, 3(2),157-71.
DOI: <https://doi.org/10.1080/0951839900030204>

Berger, P. (1963) *Invitation to Sociology*, New York: Anchor Books

Brinkman, S. (2013) *Qualitative interviewing*. Oxford: Oxford University Press

Braun, V. and Clarke, V. (2006) Using thematic analysis in psychology, *Qualitative Research in Psychology*, 3(2), 77-101. DOI:
<https://doi.org/10.1191/1478088706qp063oa>

Braun, V., Clarke, V. and Hayfield, N. (2019) ‘A starting point for your journey, not a map’: Nikki Hayfield in conversation with Virginia Brain and Victoria Clarke about thematic analysis, *Qualitative Research in Psychology*, DOI:
<https://doi.org/10.1080/14780887.2019.1670765>

Chesterfield, G., Potrac, P. and Jones, R. (2010) ‘Studentship’ and ‘impression management’ in an advanced soccer coach education award. *Sport, Education & Society*, 15(3), 229-314. DOI: <https://doi.org/10.1080/13573322.2010.493311>

Coe, R. (2012) ‘The nature of educational research: Exploring the different understandings of educational research’. In J. Aruther, M. Waring, R. Coe and L.Hedges (eds) *Research Methods and Methodologies in Education*, London: Sage Publications. 5-14

Cope, E., Cushion, C.J., Harvey, S., Partington, M. (2020) Investigating the impact of a Freirean informed coach education programme, *Physical Education and Sport Pedagogy*, DOI: 10.1080/17408989.2020.1800619

- 557 Côté , J. and Gilbert, W. (2009) An integrative definition of coaching effectiveness
558 and expertise. *International Journal of Sport Science & Coaching*, 4(3), 307-323,
559 DOI: <https://doi.org/10.1260/174795409789623892>
- 560 Cushion, C.J., Armour, K.M., and Jones, R.L. (2003) Coach education and
561 continuing professional development: Experience and learning to coach,
562 *Quest*, 55, 215-230. DOI: <https://doi.org/10.1080/00336297.2003.10491800>
- 563 Cushion, C. J. (2013) “Applying Game Centered Approaches in Coaching: A Critical
564 Analysis of the ‘Dilemmas of Practice’ Impacting Change.” *Sports Coaching Review*
565 2 (1): 61–76. doi:10.1080/21640629.2013.861312.
- 566 Day, D. and Carpenter, T. (2016) *A history of sport coaching in Britain: overcoming*
567 *amateurism*. London, UK: Routledge. DOI: <https://doi.org/10.4324/9781315775067>
- 568 Demuth, C. (2015) “Slow food” post-qualitative research psychology: Old craft skills in new
569 disguise? *Integrative Psychological and Behavioural Science*, 49, 207-215. DOI:
570 <https://doi.org/10.1007/s12124-015-9304-8>
- 571 Douglas, K., & Carless, D. (2006) Performance, discovery, and relational narratives among
572 women professional tournament golfers. *Women in Sport and Physical Activity*
573 *Journal*, 15(2), 14–27. DOI: <https://doi.org/10.1123/wspaj.15.2.14>
- 574 Douglas, K. and Carless, D. (2009) Exploring taboo issues in professional sport through a
575 fictional approach. *Reflective Practice*, 10, 311-323, DOI:
576 <https://doi.org/10.1080/14623940903034630>
- 577 Douglas, K. and Carless, D. (2015) *Life Story Research in Sport: Understanding the*
578 *experiences of elite and professional athletes through narrative*, Routledge Research

579 in Sport and Exercise. Abingdon, Oxon: Routledge. DOI:
580 <https://doi.org/10.4324/9781315885810>

581 Entwistle, N.J. and Peterson, E.R. (2004) Conceptions of learning and knowledge in higher
582 education: relationships with study behaviour and influences of learning
583 environments. *International journal of educational research*, 41, 407-428. DOI:
584 <https://doi.org/10.1016/j.ijer.2005.08.009>

585 Frank, A. (1995) *The Wounded Storyteller: Body, Illness and Ethics*, Chicago, University of
586 Chicago Press

587 Griffiths, M.A. and Armour, K.M. (2013) Volunteer sport coaches and their learning
588 dispositions in coach education. *International journal of sports science and coaching*,
589 8 (4), 677–688. DOI: <https://doi.org/10.1260/1747-9541.8.4.677>

590 Harvey, L., and Knight, P. (1996) *Transforming Higher Education*. Buckingham: Open
591 University Press and Society for Research into Higher Education.

592 Howell, K. (2013) *An Introduction to the Philosophy of Methodology*, London: Sage
593 Publications. DOI: <https://doi.org/10.4135/9781473957633>

594 Jacobs, F., Claringbould I., and Knoppers, A. (2016) “Becoming a ‘Good Coach’” *Sport,*
595 *Education and Society*, 21(3), 411-430, DOI:
596 <https://doi.org/10.1080/13573322.2014.927756>

597 Kvale, S. and Brinkmann, S. (2009) *InterViews: Learning the craft of qualitative research*
598 *interviewing*, California: SAGE

599 Ludec, M., Culver, D.M., and Wethner, P. (2012) Following a coach education programme:
600 Coaches’ perceptions and reported actions. *Sports coaching review*, 1(2),135-150.
601 DOI: <https://doi.org/10.1260/174795407783359768>

- 602 Lyle, J. (2007) Modelling the complexities of the coaching process: A commentary.
603 *International Journal of Sports Science & Coaching*, 2(4), 407-409
- 604 Lyle, J. and Cushion, C.J. (2017a) Coach education and coaching practice. J. Lyle and C.J.
605 Cushion (Eds) *Sport coaching concepts: A framework for coaching practice* (2nd ed.).
606 Oxon: Routledge. 297-326
- 607 Lyle, J. and Cushion, C.J. (2017b) The professionalisation of sport coaching. In J. Lyle and
608 C.J. Cushion (Eds) *Sport coaching concepts: A framework for coaching practice* (2nd
609 ed.). Oxon: Routledge. 281-296
- 610 Markula, P. and Silk, M. (2011) Qualitative research for physical culture. Basingstoke, UK:
611 Palgrave Macmillan. DOI: <https://doi.org/10.1057/9780230305632>
- 612 Mezirow, J. (2009) An overview of transformative learning. In K. Illeris (ed.) Contemporary
613 theories of learning. Abingdon: Routledge. 90-105
- 614 Moon, J. (2001) Short courses and modules: improving the impact of learning, training and
615 professional development. London: Kogan Page
- 616 North, J. (2013) “Philosophical Underpinnings of Coaching Practice Research”, *Quest* 65(3),
617 278-299, DOI: <https://doi.org/10.1080/00336297.2013.773524>
- 618 Paquette, K.J., Hussain, A., Trudel, P., Camire, M. (2014) A sport federation’s attempt to
619 restructure a coach education program using constructivist principles. *International*
620 *Sport Coach Journal*, 1, 75–85. DOI: [10.1123/iscj.2013-0006](https://doi.org/10.1123/iscj.2013-0006)
- 621 Paquette, K. and Trudel, P. (2019) Learner-Centered Coach Education: Practical
622 Recommendations for Coach Development Administrators, *International Sport*
623 *Coaching Journal*, DOI: <https://doi.org/10.1123/iscj.2017-0084>

- 624 Potrac, P., Jones, R., and Nelson, L. (2014) 'Interpretivism', in L. Nelson, R., Groom and P.
625 Potrac (eds.) *Research Methods in Sports Coaching*. Oxon: Routledge. 31-41. DOI:
626 <https://doi.org/10.4324/9780203797549-4>
- 627 Purdy, L. (2014) 'Interviews', in L. Nelson, R., Groom and P. Potrac (eds.) *Research*
628 *Methods in Sports Coaching*. Oxon: Routledge. 161-170. DOI:
629 <https://doi.org/10.4324/9780203797549-15>
- 630 Race, P. (2005) *Making learning happen: A guide for post-compulsory education*. London:
631 Sage
- 632 Riessman, C. K. (2008) 'Constructing Narratives for Inquiry' in C.K Riessman (ed.)
633 *Narrative Methods for the Human Sciences*, London: Sage Publications. 21-51
- 634 Riley, J. (1990) *Getting the Most from your Data: A handbook of practical ideas on how to*
635 *analyse your qualitative data*, Bristol: Technical and Educative Services Ltd.
- 636 Salla, M.E. (1993) 'There is no nonviolent future', *Social Alternatives*, 15(3), 41
- 637 Smith, J. (1989) *The Nature of Social and Educational Enquiry: Empiricism versus*
638 *Interpretation*, Norwood, NJ: Albex Publishing Corporation
- 639 Smith, J. (2009) 'Judging research quality: From certainty to contingency'. *Qualitative*
640 *Research in Sport, Exercise and Health*, 1, 91-100. DOI:
641 <https://doi.org/10.1080/19398440902908928>
- 642 Smith, B (2016) 'Narrative analysis in sport and exercise: how can it be done?' In B. Smith and
643 A.C. Sparkes (Eds.) *Routledge Handbook of Qualitative Research in Sport and*
644 *Exercise*, Abingdon, Oxon: Routledge, 260-273. DOI:
645 <https://doi.org/10.4324/9781315762012>

- 646 Smith, J. and Deemer, D. (2000) The problem of criteria in the age of relativism. In N.
647 Denzin and Y. Lincoln (Eds.) Handbook of qualitative research (2nd ed.). London:
648 Sage. 877-896
- 649 Smith, B. and Sparkes, A.C. (2016) Interviews: Qualitative interviewing in the sport and
650 exercise sciences. In B. Smith and A.C. Sparkes (Eds.) Routledge Handbook of
651 Qualitative Research in Sport and Exercise. Abingdon, Oxon: Routledge. 103-123.
652 DOI: <https://doi.org/10.4324/9781315762012>
- 653 Stodter, A. and Cushion, C.J. (2014) Coaches' learning and education: a case study of
654 cultures in conflict. *Sports coaching review*, 3(1), 63-79. DOI:
655 <https://doi.org/10.1080/21640629.2014.958306>
- 656 Stodter, A. and Cushion, C.J (2017) What works in coach learning, how, and for whom? A
657 grounded process of soccer coaches' professional learning, *Qualitative Research in*
658 *Sport, Exercise and Health*, 9(3), 321-338, DOI:
659 <https://doi.org/10.1080/2159676X.2017.1283358>
- 660 Thompson, C. L., and J. S. Zeuli. (1999) "The Frame and Tapestry: Standards-Based Reform
661 and Professional Development." In Teaching as the Learning Profession: Handbook
662 of Policy and Practice, edited by L. Darling-Hammond and G. Sykes, 341–375. San
663 Francisco: Jossey-Bass.
- 664 Trudel, P., Culver, D., and Werthner P. (2013) Looking at coach development from the
665 coach- learner's perspective: Considerations for coach development administrators.
666 In: Potrac P, Gilbert W and Denison J (eds) Routledge handbook of sports coaching.
667 London: Routledge, 375–387.

668 Trudel, P., Gilbert, W. and Rodrigue, F. (2016) The journey from competent to innovator;
669 Using Appreciative Inquiry to enhance high performance coaching, *AI Practitioner*,
670 18(2), 40-46, DOI: <https://doi.org/10.12781/978-1-907549-27-4-5>

671 Voldby, C.R. and Klein-Døssing, R. (2019) “I thought we were supposed to learn how to
672 become better coaches”: Developing coach education through action research,
673 *Education Action Research*, DOI: <https://doi.org/10.1080/09650792.2019.1605920>

674 Walsh, J. and Carson, F. (2019) Searching for a signature pedagogy in novice coach
675 education. *International Sport Coaching Journal*, 6, 349-353. DOI:
676 <https://doi.org/10.1123/iscj.2018-0049>

677 Werthner, P. and Trudel, P. (2009) Investigating the idiosyncratic learning paths of elite
678 Canadian Coaches. *International Journal of Sports Science and Coaching*, 4, 433-
679 449. DOI: <https://doi.org/10.1260/174795409789623946>

680 Williams, M. (2000) Interpretivism and generalisation. *Sociology*, 34(2), 209-224. DOI:
681 <https://doi.org/10.1177/S0038038500000146>

682 Wolcott, H. (1990) ‘Ethnographic research in education’, in R. Jaeger (ed.) *Complementary*
683 *Research Methods for Education*, Washington, DC: American Educational Research
684 Association, 327-53

685

686