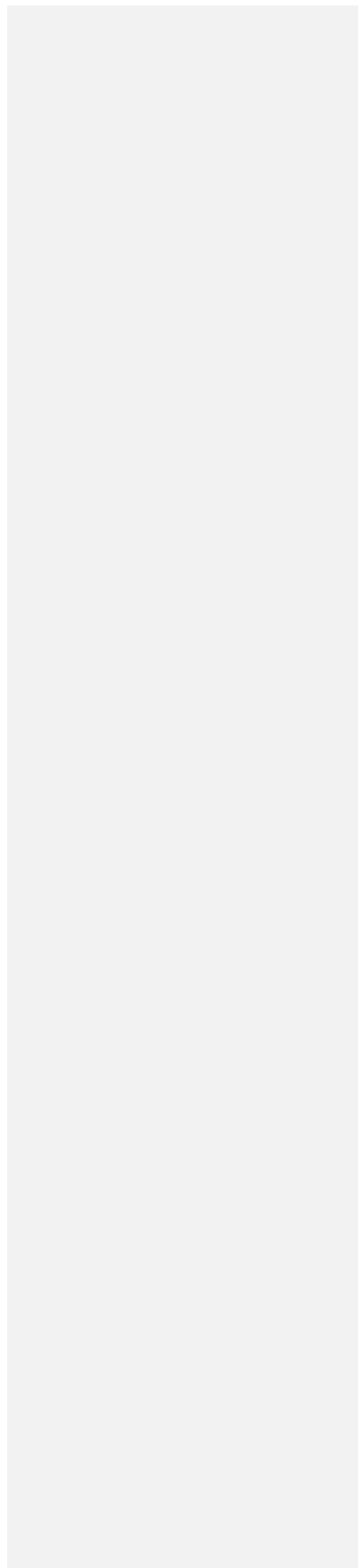


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Understanding Social Networks and Social Support Resources with Sports Coaches



24

Abstract

25

Objectives: Research on social support with sports coaches is limited, yet the benefits of social

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support within other occupations have been widely reported. This study explored **male and**

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female sports coaches' social network structures, the social support resources available to

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coaches, and the situations in which coaches use social support.

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Design: Cross-sectional.

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Method: Data were collected with **male (n=6) and female (n=7)** British coaches ($M_{age}=34.20$,

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$SD=13.37$; $M_{experience}=13.20$, $SD=10.41$) using semi-structured interviews and interviewee-aided

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sociograms. Interview data and sociograms were analyzed using abductive thematic analysis and

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social network analysis to create ego-network diagrams. The ego-network diagrams were created

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to provide information on the locality and influence of coaches' social network members.

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Results: The ego-network diagrams highlight that the structure of coaches' social networks

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encompasses support from peers, friends, family, and miscellaneous (e.g., media). The diagrams

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also demonstrate that support from friends tended to be perceived as most influential. The

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coaches called on their network for appraisal (e.g., affirmation), emotional (e.g., venting),

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informational (e.g., training), and or instrumental support (e.g., cooking dinner) for a variety of

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situations, such as training (e.g., drill ideas) and issues with athletes (e.g., venting about a

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misbehaving player).

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Conclusion: Given the pertinence of coaches' social networks and resources for performance and

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psychological well-being, coach education programs should include a focus on the importance of

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building relationships. Longitudinal research methods are warranted to, for example, explore the

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dynamic functions of coaches' social support. This will develop a more comprehensive base

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from which interventions can be developed.

Comment [NL1]: Feedback no. 7

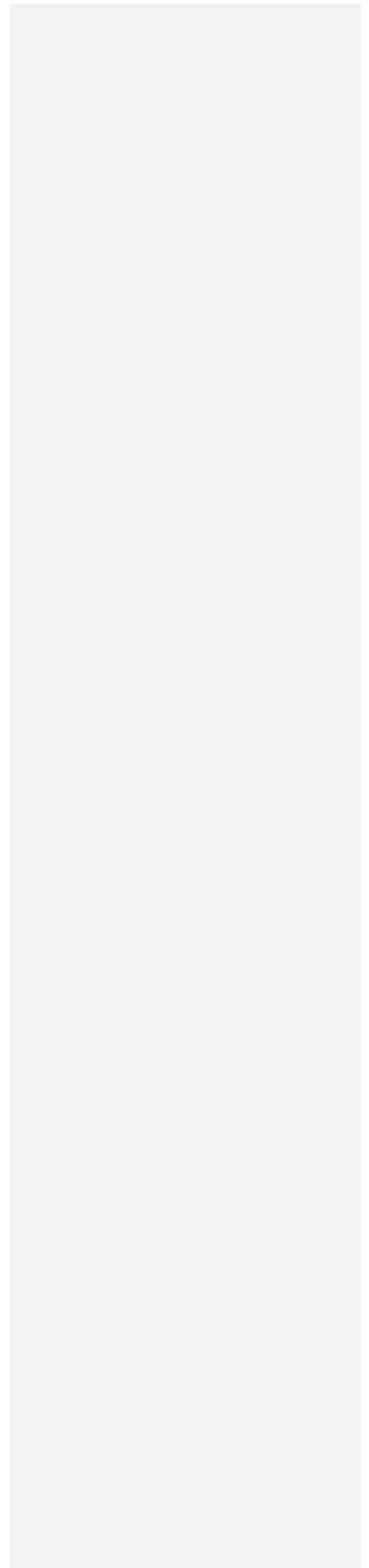
Comment [NL2]: Feedback no. 7

SOCIAL SUPPORT NETWORKS AND RESOURCES

3

47

Keywords: community, mentor, relationships, trust, stress management



48 Understanding Social Networks and Social Support Resources with Sports Coaches

49 Since early works by Barrera (1986) and Thoits (1995), social support has become one of
50 the most well-documented psychosocial factors that influences health outcomes (Thoits, 2011).
51 In particular, research in this area has found that higher levels of social support are related to
52 more positive psychological well-being (PWB; e.g., Thoits, 2011). Despite the influence of
53 social support on health and PWB being largely agreed, consensus regarding how to
54 conceptualize social support has not yet been reached (e.g., Rees & Hardy, 2000). Indeed, Veiel
55 and Baumann (1992) stated that “if asked, almost every researcher in the field will present a
56 more or less precise definition of support, but, more than likely, it will be different from that of
57 his or her colleagues” (p. 3). This quote points to the multifaceted nature of social support, which
58 is reflected in the varied definitions found in published literature (e.g., Cohen & Wills, 1985;
59 Holt & Hoar, 2006).

60 Social support has often been defined to include both the *structure* of an individual’s
61 network (e.g., existence of family ties) and the explicit *resources* that one’s interpersonal
62 relationships may provide (Cohen & Wills, 1985). The structure of social networks refers to the
63 number of relationships a person has within his or her network, the frequency of contact with his
64 or her network members, and the density (e.g., strength) of those relationships (Thoits, 1995).
65 Network members typically consist of significant others such as family, friends, and peers
66 (Thoits, 1995). These significant others can provide social support resources in the form of
67 appraisal (e.g., different point of view), emotional (e.g., feeling loved), informational (e.g.,
68 receiving advice), and instrumental support (e.g., physical resources; Rees & Hardy, 2000).
69 Amidst the various definitions of social support provided in the literature, structure and resources
70 has been frequently used in sport research (e.g., Rees & Hardy, 2000). The current study will

71 permeate gaps in published literature by exploring social network structures and resources with
72 sports coaches. This will make a novel and valuable contribution to extant knowledge by offering
73 insight to how lasting social relationships that support coaches during potentially stressful
74 periods (e.g., a losing streak) and enhance PWB and performance can be built and maintained.

75 While limited research exists that focuses on social support among sports coaches,
76 research with athletes has demonstrated positive links between social support and performance
77 (Rees & Hardy, 2000; Tamminen, Sabiston, & Crocker, 2018). Athletes have been advised to not
78 feel that they must 'go it alone' (Rees & Hardy, 2000) but, instead, be pro-active with their use
79 of social support and understand that it is not a sign of weakness to ask for help. Despite
80 coaching being reported as a particularly stressful, complex, and demanding occupation
81 (Thelwell, Weston, Greenlees, & Hutchings, 2008), the same level of academic attention that has
82 been paid to social support among athletes has not been afforded to coaches. On a day-to-day
83 basis, coaches across all performance levels are expected to develop engaging and winning
84 training programs, recruit athletes, cope with performance (e.g., competition outcomes) and
85 organizational (e.g., travel to events) stressors, and manage relationships with different
86 stakeholders (e.g., athletes, administrators, officials, media, and parents; Chroni, Diakaki,
87 Perkos, Hassandra, & Schoen, 2013; Knights & Ruddock-Hudson, 2016; Thelwell et al., 2008).
88 In a recent systematic review on stressors, coping, and well-being among coaches, social support
89 was mentioned in over 50% of the 38 studies that were included in the final sample (Norris,
90 Didymus, & Kaiseler, 2017). The findings of this review suggest that coaches frequently use
91 social support and that, when there is a lack of social support, coaches report higher perceptions
92 of stress and reduced performance.

93 The use of social support has also been discussed by limited other researchers (e.g.,
94 Bruening & Dixon, 2007; Chroni et al., 2013) who have highlighted that coaches draw on family,
95 friends, assistant coaches, and other staff members for support. Family, for example, have been
96 shown to be a social support resource for head coaches who were also mothers during
97 unexpected situations (e.g., an unexpected tournament) and during special circumstances (e.g.,
98 extended road trips; Bruening & Dixon, 2007). More recent research with male Olympic level
99 coaches reported that having friends outside of sport was important because it allowed coaches to
100 get away from the job and achieve a sensible work-life balance (Olusoga, Butt, Maynard, &
101 Hays, 2010). Receiving social support is important because a lack of support has been shown to
102 be significantly related to perceived stress. Judge et al. (2015), for example, found that social
103 support had a significant negative relationship with task-based stress (e.g., completing paperwork
104 on time) among American college coaches. However, there have been limited studies that focus
105 specifically on coaches' PWB, and the work that does exist, is quantitative in nature (see, for a
106 review, Norris et al., 2017). The findings of the quantitative research show that lower work-life
107 conflict is associated with psychological need satisfaction, which in turn increases PWB
108 (Stebbing, Taylor, Spray, & Ntoumanis, 2012). More recently, other researchers have used self-
109 determination theory (Alcaraz, Torregrosa, & Viladrich, 2015; Bentzen, Lemyre, & Kentta,
110 2016) to explore PWB among team sport coaches. The findings from this questionnaire research
111 highlight that coaches' self-determined motivation mediates relationships from relatedness need
112 satisfaction and basic psychological need thwarting to coaches' PWB. In addition, coaches' PWB
113 was found to decrease over the course of a season. Collectively, the research that has focused on
114 social support and psychological stress among coaches has demonstrated the potential positive
115 and or negative influences that social support can have for an individual. Therefore, it seems

Comment [NL3]: Feedback no. 11

Comment [NL4]: Feedback no. 12

116 crucial to understand the structure of and resources for social support among sports coaches so
117 that guidance can be offered about how to use support to enhance development and PWB in a
118 particularly demanding profession.

119 Many different methods can be used to investigate social support. One such method is
120 social network analysis (SNA; Marin & Wellman, 2009), which focuses on the “relationships
121 among social entities, and on the patterns and implications of these relationships” (Wasserman &
122 Faust, 1994, p. 3). Previous research using SNA has been predominantly quantitative in nature,
123 despite knowledge that quantitative techniques alone do not provide thorough understanding of
124 social support beyond its structure (Crossley, 2010). Qualitative methods (e.g., interviews) that
125 provide additional information about the structure of and resources for social support do,
126 therefore, need to be employed (Marin & Wellman, 2009). One method that allows network
127 structures to be illustrated and can facilitate discussions (e.g., during interviews) is interviewee-
128 aided sociograms (Crossley, 2010). Sociograms are a data collection tool that can examine how
129 people perceive the structure of their social network and the resources offered by the ties within
130 that network (Ryan, Mulholland, & Agoston, 2014). Visually representing social networks using
131 sociograms can facilitate memory recall from interviewees and, thus, gather additional relevant
132 information that may not be reported if solely using interviews (Ryan et al., 2014). Sociograms
133 are analyzed and turned into ego-network diagrams to provide visual representations of
134 individuals’ social networks. The current study uses interviews, sociograms, and ego-network
135 diagrams to provide novel, in-depth data on coaches’ social networks and the attributes
136 (characteristics) that connect the network members (Marin & Wellman, 2009).

137 It is apparent that social support could be a helpful tool for coaches, particularly when
138 coping with stressors (Knights & Ruddock-Hudson, 2016), because stressors can have significant

139 implications for coach PWB (e.g., depression) and performance outcomes (e.g., reduced
140 concentration leading to less effective observations). Published literature has focused on the
141 affiliation between social support and stressors (see, for a review, Norris et al., 2017) but lacks
142 specific explorations of coaches' social network structures and resources. Indeed, whilst social
143 support has been studied as an antecedent to various coaching outcomes (e.g., performance and
144 PWB), it is surprising that, after extensive searches of electronic databases (e.g., Web of
145 Knowledge, PsycINFO, PsycARTICLES), no published literature was found that focuses solely
146 on the structure and types of social support among sports coaches. The current investigation
147 presents a unique opportunity to address these voids and, in doing so, expand scientific
148 understanding of social support whilst developing important evidence for interventions that focus
149 on development and maintenance of social networks for performance enhancement. The aim of
150 this study was, therefore, three-fold: to examine **male and female** coaches' social network
151 structures, to explore the social support resources that are available to these coaches, and to
152 better understand the situations in which coaches use social support.

Comment [NL5]: Feedback no. 7

153 **Methodology and Methods**

154 **Philosophical Assumptions**

155 The first named researcher's ontological stance is best described as relativist and,
156 therefore, believes in multiple, constructed realities. **It** is recognized that our values and previous
157 experiences as researcher-practitioners may influence our understanding of the coaches'
158 experiences. The epistemological stance is underpinned by constructionism, which suggests that
159 the researcher and the researched are interdependent in such a way that findings are co-
160 constructed (Sparkes & Smith, 2014). These form the paradigmatic assumption of social
161 constructionism (Burr, 2015). In line with this assumption, it is believed that knowledge is

Comment [NL6]: Feedback no. 13

162 constructed via interactions between people during the course of life. The primary author's first
163 named researcher's paradigmatic assumptions also relate to elements of critical theory (Creswell
164 & Miller, 2000). This paradigm encourages reflections on what shapes interpretations of the
165 world so that we can challenge individuals' social practices (Sparkes & Smith, 2014). The
166 second and third named researchers' align primarily with constructionist and pragmatist
167 orientations respectively. We recognize our different philosophies to shed light on how they may
168 have influenced the study design, use of terminology, and the development of this manuscript.

169 **Interviewees**

170 Purposive (Patton, 2002) and snowball sampling (Robinson, 2014) were used to recruit
171 'information rich' interviewees. Coaches had to be coaching at the time of the interviews and
172 were identified through emails to local clubs and the researchers' contacts. To address our aims
173 and limitations of previous literature (e.g., gender bias; see Norris et al., 2017), we deemed it
174 important to work with both male and female coaches from different sports, with those who had
175 varied levels of coaching experience, and those employed on different bases. This provides the
176 platform for future research to be more sport, experience, and employability specific. Purposive
177 and snowball sampling were the most appropriate methods for achieving this sample because
178 they allowed us to target recruitment at coaches who we knew were more or less experienced
179 (purposive sampling), for example, and to ask those individuals to recommend other coaches
180 who may be interested in contributing to the work (snowball sampling). Six male and six female
181 coaches ($M_{age}=34.20$, $SD=13.37$, $M_{experience}=13.20$, $SD=10.41$ years) volunteered to take part in
182 this study (see Table 1). At the time of data collection, each individual was working part-time as
183 either a head ($n=8$) or assistant ($n=4$) coach and, although not purposefully sampled this way,
184 identified as White British. Coaches were either employed ($n=5$) or ~~volunteered-in voluntary~~

Comment [NL7]: Feedback no. 14

Comment [NL8]: Feedback no. 8

185 | positions (n=7) and worked with either youth (n=7) or adult (n=5) athletes. Six of the twelve
186 coaches were working closely with another coach. Each coach represented a team (handball,
187 hockey, rugby, soccer, tchoukball) or individual sport (athletics, disability tennis, tennis, squash)
188 and held a coaching qualification that ranged from level one to five ($M_{level}=2.42$, $SD=1.32$) in
189 their respective sport. These levels of coaching qualifications carry different connotations
190 depending on the sport (for example, a level three athletics coach is different to a level three
191 coach in soccer). The variety of coaches that we recruited, aimed to address voids in the social
192 support literature and extend the coaching literature that predominantly focuses on high-
193 performance coaches.

194 [TABLE 1 HERE]

195 **Interview Guide**

196 In line with previous literature that has focused on stressors and coping with sports
197 coaches (e.g., Didymus, 2017; Knights & Ruddock-Hudson, 2016), a semi-structured interview
198 guide was developed specifically for this study. The interview guide contained three sections.
199 The first section focused on the individual's demographic information and coaching background.
200 This was followed by a section on the situations where coaches use social support (e.g., "What is
201 your experience of social support during coaching?"). This section also contained questions on
202 social support resources (e.g., "What kinds of social support do you use?"). The third section of
203 the interview guide required the coaches to complete an interviewee-aided sociogram that aimed
204 to explore the structure of coaches' social networks (Ryan et al., 2014).

205 The interviewee-aided sociograms (Crossley, 2010) consisted of four concentric circles
206 that had been prepared electronically and printed prior to the interview. The distance of each of
207 the concentric circles from the center where the coach was placed, represented the closeness (or

Comment [NL9]: Feedback no. 15

208 lack thereof) of the network members to the individual (for example, the fourth and outermost
209 circle signified that members were less important to the individual). Coaches were instructed that
210 the closer they put each member of support to themselves in the center, the more influential it
211 was in his or her social network. Interviewees were advised they could write names outside of
212 these circles if they wished. Possible avenues for social support (peers, family, friends, and
213 miscellaneous) were **described** by the researcher during the interviews (Thoits, 1995), and were
214 recorded on the sociograms in different colors. Miscellaneous was included to allow coaches to
215 discuss members that they felt were relevant but not aligned to one of the commonly reported
216 groups (i.e., peers, family, friends). The use of sociograms as a data collection tool fits with the
217 **first named author researcher's** epistemological stance by offering coaches the opportunity to co-
218 create data and to lead the interview (Burr, 2015). After the completion of the sociograms, the
219 interviewees led discussions on the network members that were included in the social network
220 and the rationale for their inclusion. These discussions provided a real-time association between
221 the text (written quotes) and the ego-network diagrams (visual representation).

222 Procedure

223 After obtaining ethical approval from the researchers' local research ethics committee, 18
224 coaches were contacted via email and invited to participate in the study. Each coach was assured
225 that his or her identity would remain confidential and that reproductions of the data would be
226 anonymized. Each coach was also informed of the nature of the study; the compliance of the
227 study with the British Psychological Society's Code of Ethics and Conduct; and the collection,
228 storage, and destruction of data in accordance with the Data Protection Act (1998, see also the
229 General Data Protection Regulation guidelines, 2018). Coaches (n=12) who expressed an interest
230 in volunteering for the study were sent a copy of the interview guide so that they could

Comment [NL10]: Feedback no. 16

Comment [NL11]: Feedback no. 3

231 familiarize themselves with the questions. Twelve coaches were initially deemed appropriate due
232 to availability of the coaches to conduct in-depth interviews and, later in the research, because
233 new insight gathered during the last interview was minimal. A date and an ethically appropriate
234 location for each interview were then organized to meet the coaches' needs and schedules. Each
235 of the 12 interviews were conducted face-to-face by the first named ~~author~~ researcher who had
236 six years of coaching experience in soccer and three years' experience of conducting interviews
237 for research purposes at the time of data collection. This researcher holds the UEFA B and The
238 FA Youth Awards coaching qualifications and his experiences with interviews include being both
239 an interviewer and an interviewee. At the beginning of each interview, coaches were asked to
240 confirm that they understood the purpose and procedure of the study and were happy to proceed.
241 Each interviewee then provided written informed consent and completed a demographic sheet
242 describing his or her age, gender, sport coached, coaching level, and coaching experience. The
243 interviews were recorded using a digital recording device and lasted between 55 and 154 minutes
244 ($M_{\text{length}}=78.72$, $SD=25.53$ minutes).

245 **Data Analysis**

246 We transcribed the audio files verbatim. This process allowed the lead researcher to
247 immerse himself in and reflect on the data (Braun, Clarke, & Weate, 2016). Each interview
248 transcript was analyzed by the first named researcher using an abductive approach to semantic
249 and latent level thematic analyses (Braun et al., 2016). NVivo (QSR International Pty Ltd, 2016)
250 was used to assist with six recursive phases of thematic analyses. To begin with, inductive
251 analysis was completed at the semantic level to create original themes that identified strongly
252 with the interview data. We then analyzed our inductive themes at the latent level to look for
253 similarities to and or differences from existing theories or models of social support. This allowed

Comment [NL12]: Feedback no. 3

254 us to use existing theory to shape the semantic content of the data and, where appropriate, adapt
255 our inductive themes to create a deductive one (Braun et al., 2016). Latent level analysis
256 manifested through double coding of relevant quotes. For example, when analyzing the inductive
257 theme of why coaches use social support, it was clear that these could be grouped according to
258 the four types of social support resources that have been reported in published literature (Rees &
259 Hardy, 2000) without changing their meaning. These approaches align with the constructionist
260 stance that guided this study by providing opportunities to create rich, descriptive themes that
261 strongly link to the data whilst also acknowledging the belief that data is not free of theory.

262 The interviewee-aided sociograms were analyzed separately using NodeXL to create an
263 ego-network diagram for each coach (Borgatti, Everett, & Johnson, 2018). Ego-networks focus
264 on one individual and the social ties associated to that individual (see Figure 1 for an example).
265 SNA using sociograms provides visual representations of social support networks that cannot be
266 achieved through interview data and thematic analysis alone (Marin & Wellman, 2009). The
267 completed sociograms were manually inputted into a network edge list and the data were
268 transformed into an ego-network diagram that illustrated the structure of the social networks
269 (Borgatti et al., 2018). The chosen methods of data analysis complement social constructionism
270 because they provide an insider perspective of each coach's individual social network alongside
271 an outsider view of the network structure (Marin & Wellman, 2009). After completing thematic
272 and social network ~~analysis-analyses~~ separately, the data were then combined to provide a visual
273 representation alongside written explanations of the interviewees' social networks. The second
274 and third named researchers' were involved in data analysis by reviewing a sample of the data,
275 helping to create and refine themes and acting as critical friends during research team meetings.

276 [FIGURE 1 HERE]

Comment [NL13]: Feedback no. 2

277 **Research Quality**

278 To enhance trustworthiness of the data, criteria relating to thick quotes, close
279 collaborations, and reflexivity were deemed most appropriate for this study (e.g., Creswell &
280 Miller, 2000; Sparkes & Smith, 2014). Thick quotes (Ponterotto, 2006) are presented in the
281 results section of this manuscript and consist of dense, descriptive data from the interviewees.
282 This allows readers to make their own judgements of our interpretations of the data. Further,
283 close collaborations that the first named author researcher built with the interviewees enhanced
284 the quality of the data by involving the coaches as co-creators of knowledge and by allowing
285 their experiences to come to the fore (Creswell & Miller, 2000). Close collaborations with the
286 interviewees were developed in two main ways: 1) the first named author researcher's previous
287 involvement in coaching allowed for similar experiences to be shared with interviewees during
288 initial e-mail contact and during pre-interview orientation discussions, 2) the use of interviewee-
289 aided sociograms allowed the coaches to collaborate with the researcher and be increasingly
290 involved in the data collection process. A reflexive journal (Berger, 2015) was kept throughout
291 this study by the first named author researcher. Reflections consisted of critical reflections on the
292 research process and recording of thoughts and feelings relating to the interviews (e.g.,
293 opportunities to probe) and the data analysis. Reflecting can provide a more comprehensive
294 analysis of the data by alerting the researchers to unconscious biases that may influence how the
295 data is constructed (Berger, 2015). In line with social constructionism, this journal also helped to
296 highlight how researcher experiences, assumptions, and knowledge may have influenced the
297 work.

Comment [NL14]: Feedback no. 3 & 17

Comment [NL15]: Feedback no. 3 & 17

Comment [NL16]: Feedback no. 3 & 17

Comment [NL17]: Feedback no. 4

298 **Results**

299 The results are presented in three sections that align with the three-fold aim of the study.

300 First, coaches' social network structures are illustrated using ego-network diagrams to show what
301 coaches use as social support and the locality of that support. These were constructed using the
302 sociograms that were completed during the interviews. The ego-network diagrams are
303 supplemented by quotes from the interviewees. Next, coaches' social support resources are
304 presented in four segments to represent each type of support (informational, emotional,
305 instrumental, and appraisal). The final section of the results highlights the situations in which
306 coaches use social support (i.e., for player issues, training, competition, and organizational
307 issues). Quotes are provided from the coaches across all three sections of the results. In the first
308 section, quotes are supplemented by the interviewees' ego-network diagrams.

309 **Coaches' Social Network Structure**

310 In total, we constructed 429 raw data codes that represent the structure of the coaches'
311 social networks (see Table 2). We collapsed the raw data codes into 41 raw data themes and four
312 lower-order themes: peers (e.g., other coaches), friends (e.g., best friend), family (e.g., parents),
313 and miscellaneous (e.g., media).

314 [TABLE 2 HERE]

315 **Ego-Network Diagrams.** Below is one ego-network diagram for each coach who took
316 part in this study. Each coach is represented by the brown sphere in the center of his or her
317 diagram. The network is organized by shape (female=circle, male=square,
318 miscellaneous=triangle), color (black=family, blue=friends, red=peers, green= miscellaneous),
319 and length of tie (short tie=close relationship, long tie=less close relationship). This approach to
320 shapes and colors has been applied to figures 2-13. The number of network members included in
321 the coaches' networks ranged from 7-28 with most of the networks (n=7) consisting of between
322 11-16 people. The populations of peers and family were included in every network diagram with

323 peers being cited most frequently by coaches. Friends were perceived by the coaches as the most
324 significant population in their networks. Additional results from the ego-network diagrams are
325 presented throughout the results section.

326 [FIGURE 2 HERE] [FIGURE 3 HERE]

327 [FIGURE 4 HERE] [FIGURE 5 HERE]

328 [FIGURE 6 HERE] [FIGURE 7 HERE]

329 [FIGURE 8 HERE] [FIGURE 9 HERE]

330 [FIGURE 10 HERE] [FIGURE 11 HERE]

331 [FIGURE 12 HERE] [FIGURE 13 HERE]

332 **Peers.** Each of the 12 coaches reported that they turn to other coaches for social support.
333 More experienced coaches than themselves were discussed most often, as described by Phil: “I
334 talk to other coaches, you know, professional coaches.” The following quote from Jade,
335 illustrates how mentors can provide informational support by offering advice:

336 ...for example, last year I got an FA mentor which was quite . . . a really good
337 source because I had just started off, well I hadn’t just started off coaching but
338 was newly qualified and was like what else do I do now? What do I do in terms of
339 tailoring the session? . . . So, it were nice to have someone there to comfort me
340 and say you are doing the right thing, but I will offer you more advice...

341 Work colleagues were cited by eight coaches as people who they turned to for support.
342 Physiotherapists, strength and conditioning coaches, and technical directors were discussed by
343 the coaches as sources of social support from colleagues. Phil gave an example of receiving
344 informational support from work colleagues if he has a work problem: “I have got a great line
345 manager here and umm, the coaches here have all got different experiences and different values

346 so I wouldn't hesitate to ask if I had a problem."

347 Peers was the most common population (n=53) in the coaches' social support networks
348 (e.g., see Figure 2) and mentioned by every coach. The following quote from Steph supports this:

349 Because I think in terms of support, I feel like she [the coach] has given me the most or
350 has been the most effective . . . and [coach] is a couple of years older than me. She's kind
351 of done various other things like I've done in terms of the coaching pathway.

352 **Friends.** Whilst peers were staple in coaches' social support networks, these individuals
353 were generally not the *most* significant people within the coaches' networks (e.g., Figure 3). The
354 ego-network diagrams revealed that friends played an important, possibly the most important,
355 part in the structure of coaches' social networks. Friends were often used to help coaches achieve
356 distance from their profession. Katie, for example, spoke about going out with her friends to
357 distance herself from coaching:

358 I like that I have friends that are away from it all and out of it all, err, so I can go there
359 and not think about [coaching]. So, I suppose it is a network or a support because it is a
360 chance to get away and forget...

361 In particular, coaches frequently turned to their best friend or their housemates for
362 emotional support as the following quote from Jade suggests:

363 ...my boyfriend and my best friend [support me], so like . . . they understand what I am
364 trying to achieve and what I want in my career and this is sort of one of the stepping
365 stones on that ladder. So, they are there to sort of offer me advice. Even though they are
366 not qualified in that area.

367 However, despite friends being cited as an important source of support, soccer coach
368 Steph highlighted how she was wary not to draw on her friends too often because she did not

369 want them to begrudge her:

370 I think in the back of your mind you don't want to become that person. Say if I go to a
371 housemate after every session and say this happened, this happened. I don't want her to
372 be like bloody hell . . . I don't want her to think that when she comes home from football
373 she just chats about how bad it was. That's why I am also careful about when I use it.

374 The ego-network diagrams show that friends were consistently (n=41) a significant
375 source of support for the coaches. The majority of friends were placed towards the middle of the
376 diagram as demonstrated by Phil (Figure 4). These tended to be the most significant people
377 within coaches' networks. Terry advised that the people who he trusts the most tend to be the
378 most significant individuals: "Because probably they are the people I trust to give me the advice.
379 They are the people I trust more than any of the other people."

380 Some ego-network diagrams do, however, show that friends can be both close and distant
381 within the structure of the social network (see e.g., Figure 5). It was mentioned by Ruby that the
382 closeness of friends to the center of her sociogram depends on the regularity in which she sees
383 them: "...yeah, it's just like they are all [people closer to the center] just people that I see
384 regularly, interact with regularly and that I feel comfortable going to if I wanted some advice."

385 **Family.** The most commonly cited family member was the coach's romantic partner.
386 Liam mentioned that, without his partner offering all four types of social support resources, he
387 would not have been coaching at that level at the time of data collection: "Umm, the better half.
388 That's got to be . . . Without them I don't think I'd be able to do half the stuff I've done." Parents
389 were also commonly cited as important sources of social support. For example, Josh stated:

390 And I also kind of talk over stuff with my parents. My mum and my dad. My dad was an
391 athletics coach for umm, he was, he was one of my athletics coaches as I kind of grew up

392 so I kind of talk to him quite a lot about coaching...

393 Family members (n=38) were cited by each of the 12 coaches on their ego-network
394 diagrams. The importance of family members within coaches' networks was, however, varied.
395 For example, Shaun's family members were all important sources of support (see Figure 3) yet,
396 for Jade (Figure 6) and Steph (Figure 7), while they turned to family for support, they did not see
397 them as significant sources of social support. This is illustrated by the following quote from
398 Steph who suggests that, while her family can provide social support resources related to her
399 coaching (e.g., emotional support regarding a difficult situation), their lack of football and
400 coaching knowledge can limit the effectiveness of the coach specific support that they can offer:

401 None of my family really get football. So, I could tell them I've just started coaching with
402 this club I am at or I'm on my UEFA B license and they are like "oh." They don't really
403 understand what it is but like for me that is a huge achievement and I think that, I don't
404 know, I think that would kind of come into your social support.

405 Other coaches, such as Josh, reported that different family members vary in social
406 support influence (see Figure 8). For example, Josh's wife and father were central parts of his
407 social network, whereas other family members were less frequently turned to.

408 **Miscellaneous.** Three coaches described how they used continuous professional
409 development (CPD) events as forms of informational and appraisal support. These CPD events
410 afford coaches opportunities to learn new information and gain feedback from other coaches, as
411 described by Jade: "...the CPD sessions I have gone on with the FA [have been a form of social
412 support]. But obviously one of those is off my own back. You've got to be willing to be criticized
413 and learn as well." Coaches also cited their participation in sport and exercise as a form of
414 instrumental social support. Lucy described how the act of playing sport, in addition to the social

415 aspect, offers her support by being able to distance herself from coaching:

416 I play badminton . . . but I actually enjoy a Monday night and Wednesday matches cause
417 no . . . well, unfortunately, a few people do know me and that I do tennis but to most
418 people I am just the average club player that swears a lot when she misses the
419 shuttlecock. Yeah, on the social side, the sport becomes the . . . that social support really.

420 Miscellaneous sources of support were represented least frequently on the coaches' ego-
421 network diagrams (n=36) and were frequently reported as less significant (e.g., Figure 9).

422 **Coaches' Social Support Resources**

423 We constructed a total of 140 raw data codes that provide insight to the social support
424 resources that the coaches use. We organized the codes into 12 raw data themes and four lower-
425 order themes that each represent a different type of resource (see Table 3): informational (e.g.,
426 advice), emotional (e.g., venting), appraisal (e.g., reassurance), and instrumental (e.g., partner
427 looking after the children).

428 [TABLE 3 HERE]

429 **Informational Support.** This section included data from each of the 12 coaches who
430 described receiving support for the generation of ideas related to coaching practice (e.g., to
431 bounce ideas), advice (e.g., technical), and general coaching matters (e.g., coach behavior). Ten
432 of the coaches discussed that they used social support to bounce ideas and that this support came
433 predominantly from other coaches. One example is from Liam:

434 [Social support is] really important because obviously to have those people there that I
435 can bounce ideas off and just get ideas off them. At times I talk to them about ideas that
436 I've got and they'll just let me potentially trial stuff and then we will sometimes recap
437 and assess why it hasn't worked or maybe what we can do to make it better.

438 Coaches also commented on how they used social support to gain advice about their
439 coaching practice. Terry, for example, discussed how he gains advice from the local tennis
440 community if he has a problem during his coaching role:

441 I would say that the coaching network in tennis is quite a close-knit community. It's quite
442 close, they all like . . . I'm sure if I had a problem, I could go to someone and they would
443 be able to help me or tell me what I'm doing wrong and just give me advice.

444 Coaches also discussed how they would seek informational support to develop
445 themselves as coaches. The following quote from Katie illustrates how being connected with
446 other coaches allows her to observe and improve her coaching style: "...[I am] linked with
447 coaches within the governing body to you know, improve my coaching abilities and, you know,
448 to watch and develop and learn from them..."

449 **Emotional Support.** Ten coaches reported using emotional support as a resource to vent
450 (e.g., about an athlete performance), talk and listen (e.g., about a training session), and seek a
451 calming influence (e.g., helping them to relax). Being able to vent to friends and family about a
452 perceived poor training session or a misbehaving athlete, for example, was important to coaches,
453 particularly for Lucy:

454 ...there are certain people in my life that we have this kind of rule that I can vent and
455 then that's it and it's finished with. I've got a best friend . . . we coach the same sport,
456 tennis, but we are in completely different coaching spheres. So, she is a club coach where
457 I used to be about 20 years ago, and you know, she is a very good coach but we are in
458 completely different fields. But it's quite good because we've got a commonality of
459 tennis and can both vent to each other.

460 Two coaches mentioned seeking support to help calm them down. Steph, for example,

461 discussed that emotional support from her friends stops her from overthinking situations (e.g.,
462 how to improve training):

463 I think if anything, sometimes I just need someone to say you worry about it far too much
464 or you're just completely overthinking and driving yourself crazy with it. But it's just
465 striving for perfection and you just want it to . . . you want it to be good, you want it to
466 improve, you want to improve yourself, and you want it to be the best you can.

467 **Appraisal Support.** The raw data themes related to appraisal support encompassed
468 affirmation (e.g., that the coach is heading in the right direction) and gaining perspective (e.g.,
469 seeking a second opinion). In total, seven coaches discussed the use of affirmation or recognition
470 that what they were doing was correct as a form of appraisal support. For example, Phil spoke
471 about seeking confirmation that he was going in the right direction:

472 Yeah, it [social support] helps you because it reassures you or points you in the right
473 direction where you think you might be going at a tangent. As I have said before, you are
474 not right all the time so you need to be told every now and then.

475 With regards to gaining perspective, Steph discussed the worth of getting other points of
476 view from coaches, work colleagues, family, and friends about a situation at a previous club:

477 . . . at a previous club I was at, where it was getting to the point when I was walking away
478 hating coaching, hating being there, hating being part of the club it was like "oh well, I
479 want to be here for this reason." But, actually, that is when I found I can rely on my
480 support to kind of hear both sides . . . so I am not just getting closed minded, tunnel
481 vision.

482 **Instrumental Support.** Eight coaches discussed using instrumental social support
483 resources. This consisted of creating opportunities (e.g., observing other coaches), securing

484 coach cover (e.g., for training), switching off from coaching (e.g., by going to a public house),
485 and support from their partner (e.g., looking after the children). With reference to creating
486 opportunities, six coaches spoke about how instrumental support had created opportunities for
487 them to develop. One example came from Maria who stated that she would not have the same
488 coaching opportunities made available to her if she did not have the social network that she has:
489 “He [coach] made that approach for me to go to [club] and got the introduction so I guess if I
490 didn’t have that relationship with him then that wouldn’t have come about...” Additionally, Josh
491 spoke about the importance of the instrumental support that he received from his partner:

492 I will be away this weekend. We’ve got two sons so that puts a burden on her, so all of
493 that sort of stuff kind of has a toll and the tangible support that [wife] would give, I
494 wouldn’t be able to continue coaching [without it].

495 **Situations in Which Coaches use Social Support**

496 Overall, we constructed 83 raw data codes that focused on the situations in which
497 coaches use social support (see Table 4). We organized the raw data codes into 14 raw data
498 themes and four lower-order themes: player issues (e.g., player behavior), training (e.g.,
499 planning), competition (e.g., team selection), and organizational issues (e.g., coaching
500 qualifications).

501 **Player Issues.** In total, 10 coaches revealed that they turn to their social support
502 resources for player issues, including player behavior, number of available players, and players
503 struggling with a skill or technique. Ruby for example, described how she sought informational
504 support from her housemates when working with disruptive players:

505 I had a situation last year with a team I coached, the under 13’s, 15 kids I think I had.
506 There was four that were a bit rowdy and all stuck together. And we had a situation

507 basically where they were accused of bullying . . . I was really stressed about the situation
508 and I would ask my housemates who are both teachers, especially one of them who also
509 coaches tchoukball. So, she obviously talked about her experiences as a teacher in terms
510 of obviously how she deals with these types of experiences [regularly]...

511 [TABLE 4 HERE]

512 Four coaches highlighted that not having enough players during training and competition
513 was a situation when they sought support. Maria provided an example of seeking informational
514 support when needing to increase number of players for her soccer team:

515 ...so, the support is there and again the same with the county [FA] when we were
516 struggling with numbers or . . . losing numbers [of players] or need a bit of direction or
517 ideas, suggestions. I always know I can just drop [coach] an email or give him a call.

518 **Training.** Eight coaches cited training as a common situation when they would seek
519 support. For example, coaches reported turning to their social networks when planning training
520 sessions. An example from Steph shows how she turned to work colleagues to discuss what she
521 could do during training:

522 I've really enjoyed to be able to just sit with them [work colleagues] and be you know, "I
523 got this topic tonight what did you do?" "Oh, I did this with this age group," and "oh
524 right, well I can take some of that", and it makes a whole world of a difference because
525 just to have someone on your wave length or that thinks similar to you or, you know, got
526 that common ground in a coaching sense...

527 Coaches also turned to their social networks after training if they perceived that the
528 session went badly. Ruby described how they would seek support from friends if "the session
529 didn't go very well" via emotional support to vent frustrations and appraisal support to gain

530 another perspective.

531 **Competition.** One situation when coaches required support with competition was for
532 team selection. Lucy talked about when she was coaching for Great Britain and needed
533 informational support during team selection: “I’ve been on the GB books, GB books as
534 manager/coach, so when I took the teams away and did selection and that sort of stuff, I needed
535 social support.” Tactics was another situation for which coaches sought support. When deciding
536 what formation his hockey team should play, Liam sought advice from the head coach: “If I need
537 to bounce ideas off the head coach then I talk to him about what formation to play, erm, who to
538 play where, what to do in certain situations and that sort of thing.”

539 **Organizational Issues.** This theme relates to various organizational issues that the
540 coaches sought support for, including coaching qualifications, issues with the sports clubs where
541 the coaches were working, issues with the coaches’ National Governing Bodies (NGB), and
542 issues that arose during coaching qualifications. Three coaches mentioned that they had received
543 social support from other coaches and their club when wanting to complete a coaching
544 qualification. Jade discussed how her soccer club provided instrumental support by helping with
545 the process of applying for a coach education course: “...I think if you have a proactive club that
546 puts you on courses, so if I want to go on any course then I can go on it, I think that is probably
547 their way of supporting you.” With reference to issues with a club, Steph described how she
548 sought advice when she began disliking her work at a soccer club:

549 The most recent example is when a fall out with a club, or if I felt like something
550 was making me feel really uncomfortable, umm, just ended up being at a place
551 where I hated being part of it but I wasn’t sure whether I should stay there and see
552 it out or...and when it gets to that point, that’s when I rely on it [social support]...

553

Discussion

554 The purpose of the study was to examine coaches' social network structures, to explore
555 the social support resources that are available to these coaches, and to better understand the
556 situations in which coaches use social support. The findings highlight that the structures of
557 coaches' social networks consisted of peers (e.g., other coaches), friends, family, and, to a lesser
558 extent, miscellaneous avenues of support (e.g., CPD). The most frequently cited support resource
559 was informational support to acquire advice but emotional, appraisal, and instrumental social
560 support resources were also sought. There were a variety of situations that coaches required
561 support for, including informational support for training (e.g., drill ideas) or advice about players
562 (e.g., player behavior) and instrumental support for organizational issues (e.g., completing a
563 coaching qualification).

564 The use of a novel data collection technique to create ego-network diagrams offered
565 unique data on the structure of coaches' social networks. Despite discussions relating to the
566 structure of social support in previous literature (e.g., Bruening & Dixon, 2007; Olusoga et al.,
567 2010), coaches' networks have not previously been illuminated in the detail that is offered in this
568 study. The ego-network diagrams presented in the current study demonstrate that the main
569 sources of support for coaches were peers. Coaches have previously discussed turning to other
570 coaches for social support when experiencing stressors (Didymus, 2017; Knights & Ruddock-
571 Hudson, 2016). In a study exploring the learning approaches of coaches, Stoszkowski and
572 Collins (2016) found that social interactions with peers during day-to-day coaching were the
573 predominant source of support for guidance, advice, and information. The current study
574 advances knowledge of social support by investigating the importance and influence of the social
575 network for sports coaches, which is missing from previous literature. For instance, whilst social

576 support from peers has a significant influence on coaches, the ego-network diagrams showed that
577 despite friends being cited less than peers, friends were perceived as the most important avenues
578 of support. This was highlighted by the locality of friends in the coaches' networks; they were
579 regularly placed closer to the coach when compared to other populations (e.g., family). An
580 explanation for this may be that friends provide the widest range of support resources
581 (Rosenfeld, Richman, & Hardy, 1989) and may, therefore, have greater influence on coach
582 PWB. Due to high demands and unsociable working hours in the coaching profession, coaches
583 may feel disconnected from their friends and family (Didymus, 2017). Given our findings
584 relating to the importance of friends in coaches' support networks, this could have negative
585 implications for the receipt of appropriate and important types of social support. This can, in
586 turn, have adverse effects on coaches' personal lives, relationships, PWB (Didymus, 2017), and
587 performance because a reduction in PWB can decrease cognitive functioning and impair decision
588 making.

Comment [NL18]: Feedback no. 5

589 Turning to the social support resources provided by members of coaches' social
590 networks, our findings reinforce the notion that coaches often seek four types of resources
591 (informational, emotional, appraisal, and instrumental; Thoits, 1995; Rees & Hardy, 2000).
592 Extending previous social support literature, the support resource cited most frequently by the
593 coaches in this study was informational, particularly to gain knowledge and advice related to
594 coaching behaviors and or training drills. This is perhaps not surprising given that a study
595 focusing on coach development reported that coaches discussed the need to seek advice and
596 knowledge to continually develop their skills (Stoszkowski & Collins, 2016). However, this
597 study develops on Stoszkowski and Collins by exploring all four types social support resources
598 in detail and the association to the individual's network structure. With regards to emotional

599 support, the majority of examples provided during this study were from female coaches. This
600 could be explained by published social support literature, which suggests that women are more
601 likely to seek and receive emotional support (Reevy & Maslach, 2001). Social support resources
602 offered by network members can sustain an individual's self-esteem, sense of mattering to
603 others, and perceived control over minor or impending stressors (Thoits, 2011) and as a result,
604 PWB and performance increases.

605 The results that relate to the situations where coaches require social support resources
606 highlight that coaches use social support when managing issues relating to players (e.g., player
607 numbers), training (e.g., perceived poor session), competition (e.g., tactics), and the coaches'
608 governing organizations (e.g., qualifications). Support during training was commonly cited by
609 coaches for generating ideas relating to training drills and to help recover from and reflect on
610 poor training sessions. These findings supplement research that has consistently shown training
611 to be a significant stressor for coaches (e.g., planning and running training sessions; Chroni et al.,
612 2013). Other research has shown that the stressors experienced can differ according to a coach's
613 employment status (Potts, Didymus, & Kaiseler, 2018). Coaches who are employed and paid, for
614 example, may perceive pressure from the organization (Thelwell et al., 2008) while volunteer
615 coaches may be more likely to experience finance related stressors (e.g., funding for their role;
616 Potts et al., 2018). Therefore, it seems important that coaches are offered additional support (e.g.,
617 instrumental support from the organization) to cope with and buffer the negative effects of
618 stressors. As illustrated by one of the coaches in this study, social support is often sought in
619 peaks and troughs. This supports the notion that social support is multidimensional and time-
620 sensitive (Hassell, Sabiston, & Bloom, 2010), which, alongside the general social support
621 literature (e.g., Holt & Hoar, 2006), highlights the need for longitudinal research to better

Comment [NL19]: Feedback no. 10

622 understand the development and manifestation of social support over time.

623 As with any research project, this study is not without strengths and limitations. A
624 strength relates to the sampling strategy that we employed. The sample included male and female
625 coaches who were purposefully selected from a range of team and individual sports, coaching
626 levels, employment statuses, and levels of coaching experience. In doing so, the work extends
627 the wealth of published sport psychology research that has recruited high-performance, often
628 male, coaches. Research of this type is useful because it helps to build an evidence base for
629 appropriate and effective support that can be tailored by organizations and or NGBs for each
630 performance context (e.g., specific coach education on social support for each coaching level). A
631 further strength relates to the innovative representation of data via ego-network diagrams, which
632 provides aerial views of the coaches' network structures and highlights our novel data on the
633 locality of the network members. The data were, however, collected via a single interview, which
634 means that we captured the coaches' perceptions at one time point and may not have fully
635 represented the multidimensional nature of social support (Hassell et al., 2010). In addition, each
636 of the coaches in this study identified as white British. While not purposefully sampled in this
637 way, we have not worked with coaches' from diverse cultural backgrounds. This is important
638 because individuals from different cultures may place higher values on different network
639 members (e.g., with family). The study focused on coaches with a range of coaching experience
640 (1.5-39 years). This can be considered a strength of the work because it provides insight to the
641 specific ways in which more and less experienced coaches' networks differ. Given the
642 importance of mentors and learning from more experienced peers during coach development
643 (Nash, Sproule, & Horton, 2017), the current work adds value by offering those with less
644 developed networks some strategic foci for maturation of their social support resources. For

645 example, coaches who want to develop their networks might look to build relationships that can
646 offer emotional support when managing frustrations (i.e., support that is more common among
647 experienced coaches) and should work to maintain relationships that offer informational support
648 for tactical knowledge development.

Comment [NL20]: Feedback no. 9

649 Future studies may wish to employ longitudinal methods (e.g., daily diaries or multiple
650 interviews) whereby coaches can recount or record when, why, and for what they use social
651 support resources on a daily basis. Such methods would also afford explorations of whether and
652 how the use of social support resources changes over time. Future research is also recommended
653 with coaches from different cultural and ethnic backgrounds to facilitate tailored social support
654 interventions that are fully inclusive. Explorations of gender differences and or similarities in
655 social support with sports coaches are called for to better understand if there are differences in
656 seeking and receiving social support between genders. The current study used a sample of
657 coaches from varied levels, sports, and employability statuses. Future research could focus on
658 social support structure and resources among coaches from more specific populations or
659 demographic groups to understand more deeply the nature of social support structure and
660 resources among these groups. Coaches highlighted the receipt of social support when applying

Comment [NL21]: Feedback no. 7

661 for coach education courses but provided limited discussions on the support received during
662 coaching courses. Given that coaches' experiences on education courses can influence their
663 intention to stay in the profession, future research should focus attention here to understand
664 support experiences during education course. Finally, research on the effects of social support on
665 PWB with coaches is warranted as this may be beneficial to enhancing coach well-being and
666 performance.

Comment [NL22]: Feedback no. 8 & 10

667 With reference to the applied implications of our findings, not all coaches seem to be

668 aware of the importance of social support. Thus, NGBs should educate coaches on the usefulness
669 of social support and on how to build effective social networks through coaching qualifications
670 and CPD events, for example. Particular focus should be on developing and maintaining
671 relationships with friends because these individuals have been shown in the current study to
672 provide coaches with appropriate social support resources. In addition, the results offer
673 practitioners who are working with coaches a better understanding of the situations when
674 coaches require social support (e.g., during coaching qualifications). This information can assist
675 practitioners to provide more effective support (e.g., information about the coaching
676 qualification) during these specific situations.

677 **Conclusion**

678 This study provides novel insight to male and female coaches' social network structure,
679 social support resources, and the situations when coaches use social support. The innovative
680 methods employed allowed data to be collected on the resources for and the structure of coaches'
681 networks, as well as showing the importance of social support as described by the coaches
682 themselves. Peers were frequently turned to by coaches yet the ego-network diagrams illustrated
683 that friends tended to be more important sources of support. Based on the findings of this study,
684 we recommend that practitioners, researchers, and NGBs work together to provide various
685 options for social support to coaches, particularly given the influence of relationships in
686 enhancing development and PWB. The findings of this study highlight that an effective social
687 support network is likely to be influential in enhancing performance and PWB as a coach.

688

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791

Tables

792 Table 1

793 *Interviewee Characteristics*

Interviewee Pseudonym	Age (years)	Sport	Context	Experience (years)	Level	Employed / volunteer
Jade	24	Soccer	Youth	1.5	1	Volunteer
Joe	20	Handball	Adult	4	1	Volunteer
Josh	38	Athletics	Adults	22	3	Volunteer
Katie	31	Squash	Adolescence	14	3	Employed
Liam	22	Hockey	Youth	6	2	Volunteer
Lucy	42	Tennis	Adult	22	4	Employed
Maria	44	Soccer	Youth	10	1	Volunteer
Phil	61	Rugby	Adolescence	20	4	Employed
Ruby	25	Tchoukball	Adult	9	1	Volunteer
Shaun	56	Tennis	Adolescence	39	5	Employed
Steph	24	Soccer	Youth	3	2	Employed
Terry	23	Tennis	Youth	8	2	Volunteer

794

795 Table 2

796 *Coaches' Social Network Structure*

Raw Data Themes	Lower-Order Themes	Higher-Order Theme
Committee (3)		
Experienced coaches (12)		
Less experienced coaches (4)		
Mentor(s) (6)	Peers (12)	
Previous coach (5)		
Support staff (4)		
Work colleagues (8)		
Brother (2)		
Children (4)		
Cousin		
Dad (8)		
General family (7)	Family (12)	
Grandmother		
Mum (9)		
Niece and nephew		
Romantic partner (9)		
Sister (4)		Coaches' Social Network Structure (12)
Best friend (7)		
Friends (9)		
Housemates (2)	Friends (11)	
Players (6)		
School friends (2)		
Animals (2)		
Business people (2)		
Continuous professional development		
Internet (8)		
National governing body (2)	Miscellaneous (12)	
Players parents		
Previous experiences (2)		
Sport and exercise (2)		
Sport psychologist		
Teachers (3)		
Writing in a journal		

798 Table 3

799 *Coaches' Social Support Resources*

Raw Data Themes	Lower-Order Themes	Higher-Order Theme
Advice (7) Coaching practice (7) Ideas (10)	Informational Support (12)	Coaches' Social Support Resources (12)
Calming influence (2) To talk to and listen (6) Venting (7)	Emotional Support (10)	
Affirmation (7) Perspective (4)	Appraisal Support (8)	
Ability to switch off (4) Covering coaching sessions (4) Opportunities (6) Partner (2)	Instrumental Support (8)	

800

801 Table 4

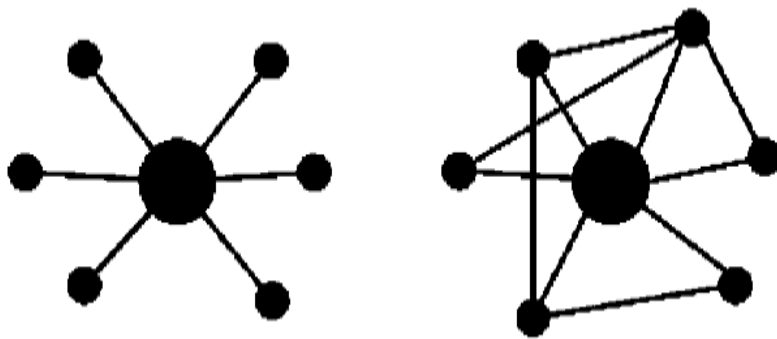
802 *Situations Where Coaches' use Social Support*

Raw Data Themes	Lower-Order Themes	Higher-Order Theme
Lack of players (4) Personal problems (2) Player behaviour (8) Struggling with something (4)	Player Issues (10)	Situations Where Coaches' use Social Support (12)
Coaching practice (4) Feedback (2) Planning sessions (8) Poor training session (2)	Training (10)	
Preparation (2) Tactics (2) Team selection (3)	Competition (6)	
Issues with club Issues with NGB Qualifications (3)	Organizational Issues (5)	

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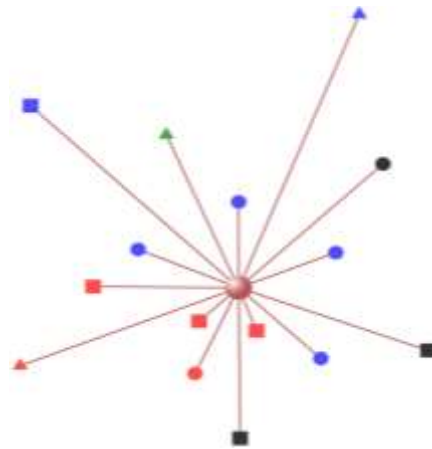
Figures



805 Figure 1. *Two illustrative examples of ego-networks. Adapted from “Network Analysis in*
806 *the Social Sciences” by S. P. Borgatti, A. Mehra, D. J. Brass, and G. Labianca, 2009, Science,*
807 *323, p. 894.*

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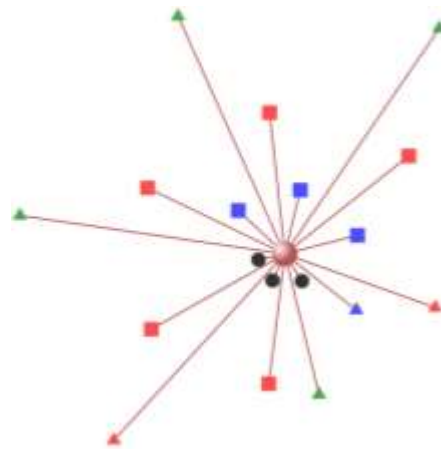


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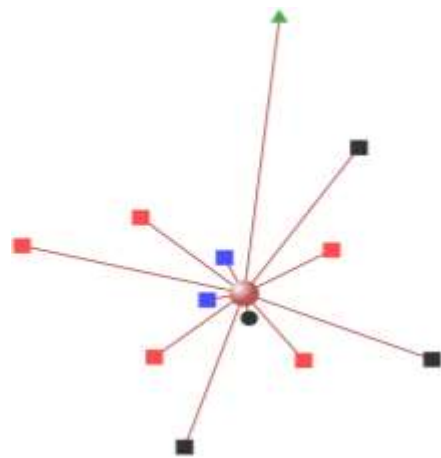
812 Figure 2. *Ego-network diagram for coach Joe*

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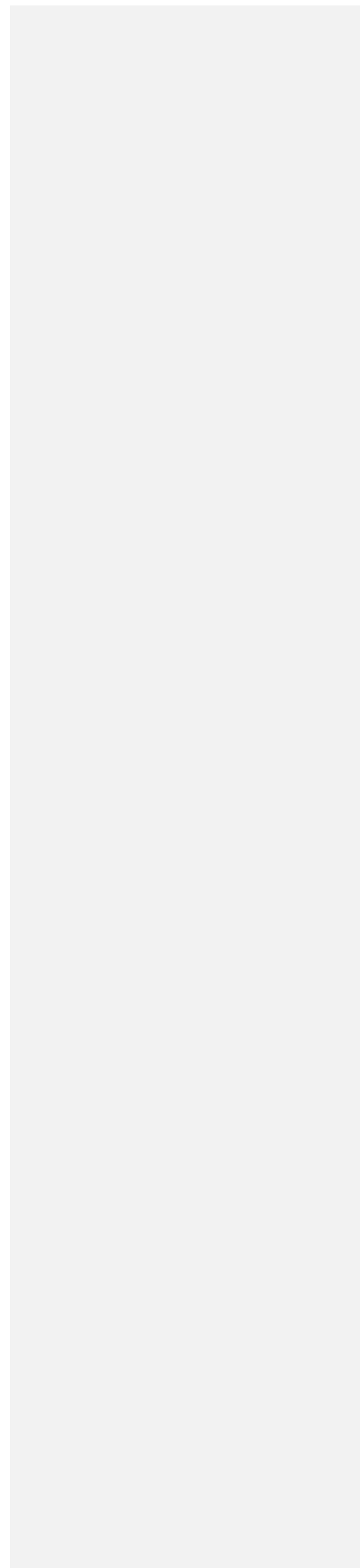
814 Figure 3. *Ego-network diagram for coach Shaun.*

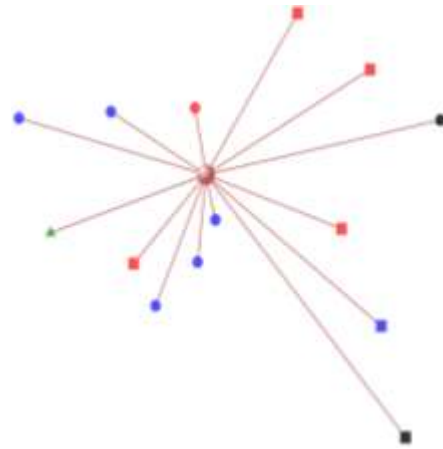
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816 Figure 4. *Ego-network diagram for coach Phil.*

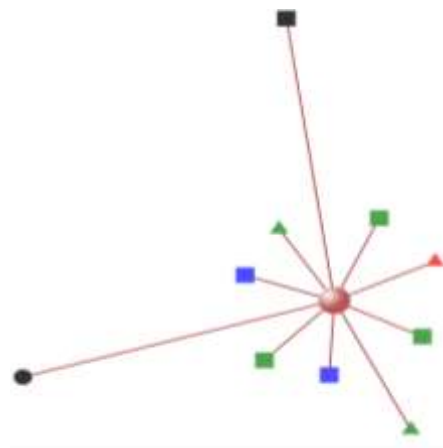
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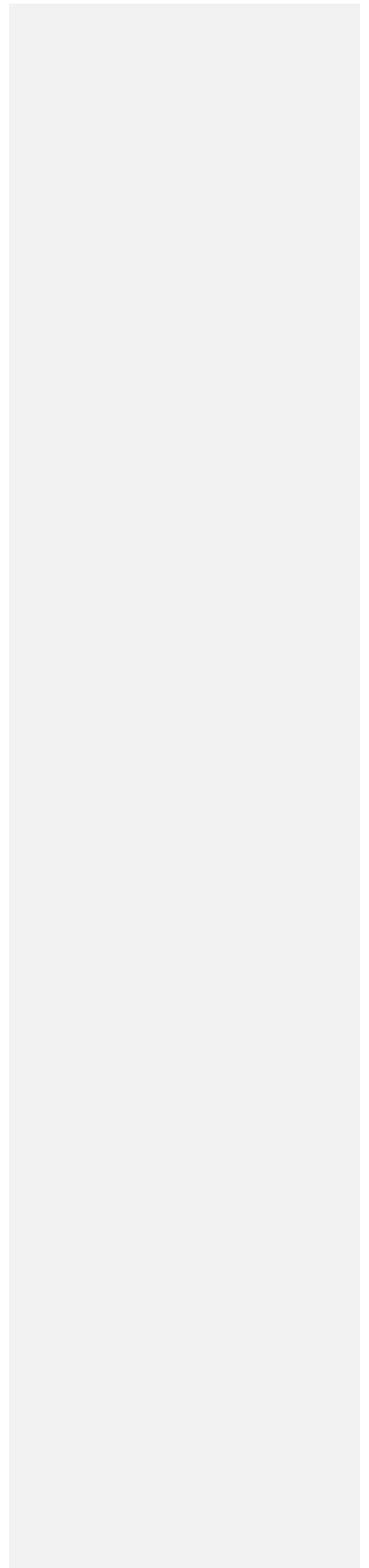
818 Figure 5. *Ego-network diagram for coach Ruby.*

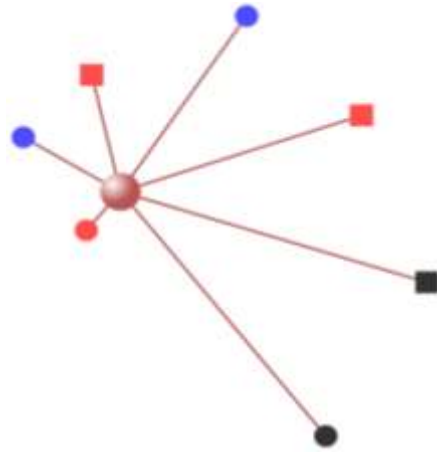
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820 Figure 6. *Ego-network diagram for coach Jade.*

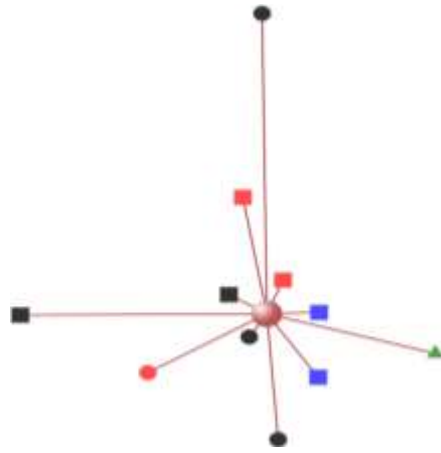
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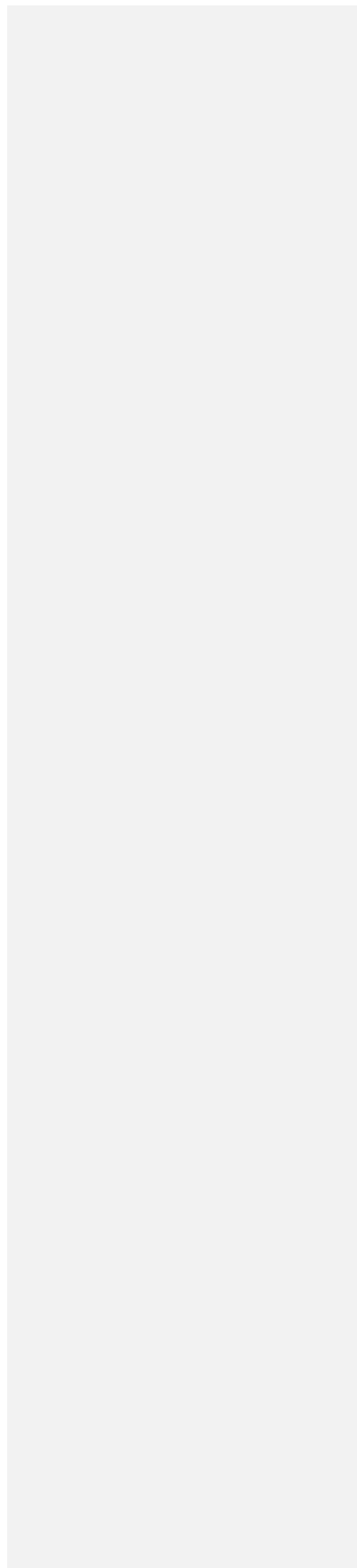
822 Figure 7. *Ego-network diagram for coach Steph.*

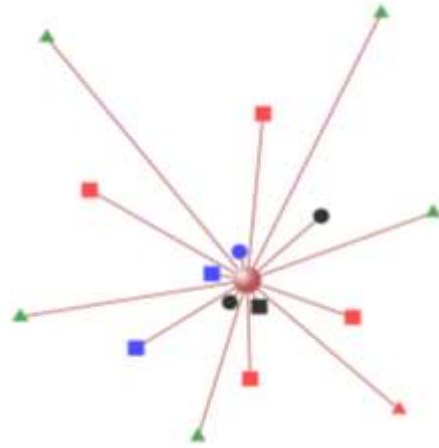
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824 Figure 8. *Ego-network diagram for coach Josh.*

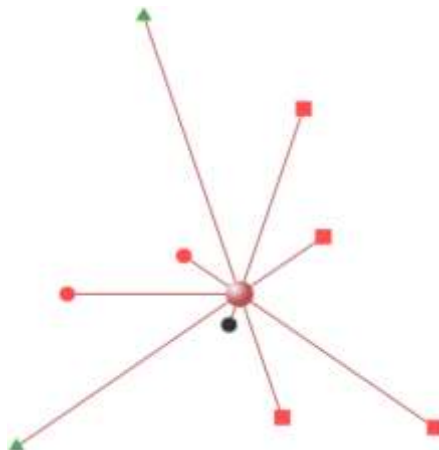
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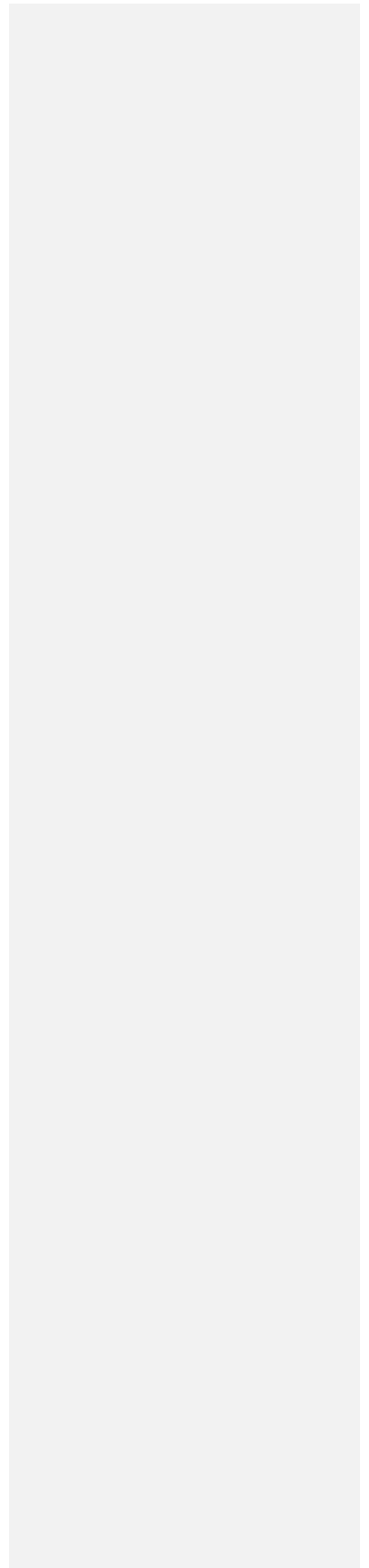
826 Figure 9. *Ego-network diagram for coach Maria.*

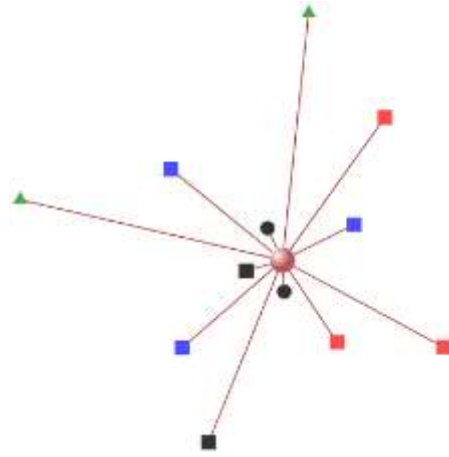
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828 Figure 10. *Ego-network diagram for coach Liam.*

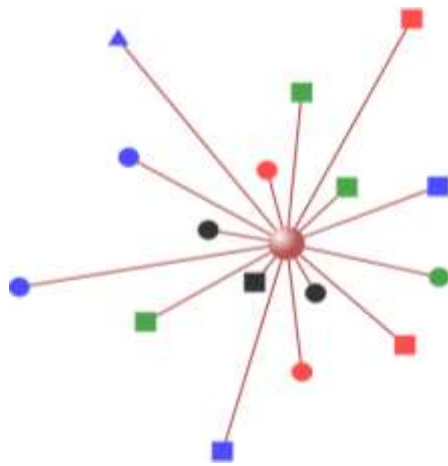
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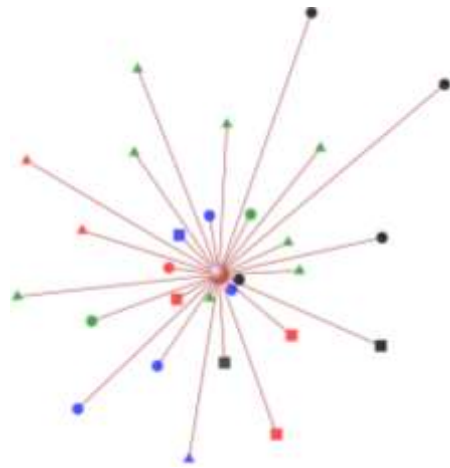


830 Figure 11. *Ego-network diagram for coach Terry.*

831



832 Figure 12. *Ego-network diagram for coach Katie.*



833 Figure 13. *Ego-network diagram for coach Lucy.*

