

1 **Promoting Physical Activity through Youth Sports Programs: It's Social**

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3 Erin K. Howie, PhD^{1,2§}; Bryce Daniels¹, BS & Justin M. Guagliano, PhD^{3§}

4
5 ¹Department of Health, Human Performance and Recreation, University of Arkansas,
6 Fayetteville, USA;

7 ²School of Physiotherapy and Exercise Science, Curtin University, Perth, Australia,

8 ³MRC Epidemiology Unit & UKCRC Centre for Diet and Activity Research (CEDAR), University of
9 Cambridge School of Clinical Medicine, United Kingdom.

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11 **§Corresponding Author:** Erin K Howie, PhD

12 Email: ekhowie@uark.edu.au

13 Phone: (479) 575 2910

14 HPER 308I, University of Arkansas, Fayetteville, AR 72704

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Abstract

Youth sport is a key physical activity opportunity for children and adolescents. Several factors influence youth sport participation, including social factors, but this has not to date been clearly delineated. This study is a scoping review to survey the literature on the influence of family and peers on youth sports participation. The review identified 111 articles of which the majority were cross-sectional, included boys and girls, and were conducted primarily in the US, Canada, Australia, and the UK. The articles were grouped into eight research themes: 1) reasons for participation, 2) social norms, 3) achievement goal theory, 4) family structure, 5) sports participation by family members, 6) parental support and barriers, 7) value of friendship, 8) influence of teammates. Friendships were key to both initiation and maintenance of participation, parents facilitated participation, and children with more active parents were more likely to participate in sport. Less is known on how family structure, sibling participation, extended family, and other theoretical frameworks may influence our understanding of youth sport. The review suggests that social influences are important factors for ensuring participation, maximizing the quality of the experience, and capitalizing on the benefits of youth sport. Future research studies, programs, and policies promoting and developing evidence-based youth sporting experiences should consider and include social influences on youth sport participation

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Keywords

35 children, adolescents, peers, friends, parents, siblings, prevention

Promoting Physical Activity through Youth Sports Programs: It's Social

36 Sport has been identified as one of the seven best investments for promoting physical activity,
37 which is particularly relevant for youth.¹ A study of 38 countries worldwide found that
38 approximately half of children participate in organized youth sport, however, this varies from
39 country to country.² It is estimated that the youth sport industry in the U.S. is worth \$15
40 billion,³ further emphasizing its high profile in society. Importantly for health, youth sport is one
41 of the key physical activity opportunities for youth,^{4,5} and contributes a significant proportion of
42 their total physical activity.⁶ In general, children who participate in youth sport receive many
43 benefits including physical and psychosocial benefits, many related to participation in physical
44 activity during sports. These include reduced risk of obesity, improved metabolic profiles,
45 increased muscular strength,⁷ improved self-esteem, reduced risk of depression,⁸ and overall
46 positive youth development,⁹ which is a prosocial approach to reaching positive outcomes for
47 youths.⁹ However, both the physical and psychological benefits of sport are highly dependent
48 on the quality of the specific sporting experience.^{8,10} Interestingly, some of the benefits may not
49 be solely due to increased physical activity or energy expenditure, and there is some evidence
50 that sport participation may be a greater contributor to mental health than overall physical
51 activity.¹¹ Children who participate in youth sport also report several other positive health
52 behaviors such as improved diet, safer sexual practices, and decreased substance abuse.¹²
53 Since developing positive habits (e.g., physical activity) in childhood can track into
54 adulthood,^{13,14} it can be argued that there should be an emphasis on enjoyable lifelong
55 activities that children can participate in.¹⁵⁻¹⁷ Youth sport participation can be regarded as a
56 lifelong physical activity that can be safe and effective for providing myriad physical and
57

58 psychosocial benefits for children when implemented with qualified instruction and appropriate
59 supervision. Unfortunately, not all children participate in youth sports, and many of those who
60 do participate have negative sporting experiences which can lead to dropout – owing to injury,
61 unsustainable expectations and demands and/or burnout. According to the Sports and Fitness
62 Industry Association, recent data from the US suggest overall participation in youth sports is
63 dropping.¹⁸ Australian research has found that children begin dropping out of youth sport at the
64 age of 8,¹⁹ which is similar to the age of physical activity decline recently reported in British
65 children.²⁰ A better understanding of these sporting experiences (or lack of sporting experience)
66 will help to increase participation, quality, and the benefits that children receive from youth
67 sport.

68 Several factors influence youth sport participation. Using a socioecologic framework, it is
69 proposed that factors from multiple levels influence access, quality, and outcomes.²¹
70 Historically, research on correlates of sports and physical activity in general in both adults and
71 children have focused on intrapersonal factors including demographic and biological,
72 psychosocial and behavioral variables.²² However, youth sport is a social experience and it is
73 likely that interpersonal factors, which we will refer to as social factors throughout the paper,
74 play a large role. These social factors include family, friends, teachers or any other people who
75 may influence an individual. One of the most obvious social agents is the coach. A growing body
76 of research has explored factors related to coaches that influence youth sport experiences.²³⁻²⁵
77 But there are several other social agents that influence the youth sport experience including
78 peers and families. Less is known on how these external social agents influence the youth
79 sporting experience from access, quality of the experience, and the outcomes of participation.

80 These social influences must be understood in order to increase youth sport participation and
81 high quality sporting experience for children to ultimately maximize the number of children
82 receiving the physical and psychosocial benefits from a positive, evidence-based sporting
83 experience.

84 Therefore, the purpose of this scoping review was to explore social influences on youth sport
85 participation. More specifically, it explored how social agents including peers, parents, and
86 siblings influence youth sport participation.

87 **Methods**

88 **Study Design**

89 The current study was guided by the methodological framework for scoping reviews proposed
90 by Arksey and O'Malley²⁶ and further defined by Levac, Colquhoun and O'Brien.²⁷ Scoping
91 reviews allow a rapid and broad survey of existing literature. The authors proposed 6 stages to
92 conduct a scoping review, including: (1) identifying a research question, (2) identifying relevant
93 studies, (3) study selection, (4) charting the data, (5) collating, summarizing and reporting the
94 results, and (6) consultation.^{26,27} The authors' 6 stages guided the current study.

95 **Stage 1: identifying a research question**

96 The research question for the current study was: how do social agents including peers, parents,
97 and siblings influence youth sport participation? These social agents were later grouped into
98 family and peers.

99 **Stage 2: identifying relevant studies**

100 We searched 3 databases, including: PubMed, ERIC, and PsychInfo. Our PubMed search terms
101 and strategy are detailed below. The same key words were used while searching the other 2
102 databases. The review included studies published prior to September, 2017.

103 The following search terms were used to search the abstract and title: ((sport) AND (child* or
104 youth)) AND (sibling* or brother* or sister* or parent or parents or mother or father or mom or
105 dad or friend* or peer* or teammate*).

106 **Stage 3: study selection**

107 Included studies sampled youth from an organized youth sport setting. For the purposes of this
108 study, organized youth sports (herein referred to as youth sport) was defined as an organized
109 activity, formally arranged and governed by the rules of a given sport.²⁸ Youth sport participants
110 attended regular practices and games under supervision of one or more adults, who most often
111 assume the role of team coach.²⁸ For the current study, youth sport did not include sport
112 occurring during school time (e.g., school sport, physical education) or sport occurring outside
113 of the typical formal setting (e.g., summer camps, off-season training). Youth were defined as
114 children and adolescents 18 years of age and younger.

115 Studies must have explored a social agent's influence on youth sport participation, specifically
116 peers and family (i.e., parents and/or siblings). No limitations were set regarding study design,
117 participants' sex, or publication date. Excluded studies included: protocols papers, book
118 reviews, commentaries, majority of participants were >18 years, limited to special populations
119 (e.g., children with disabilities), sport injury studies, studies that only addressed physical activity

120 in general and not sports specifically, those limited to parent demographic variables such as
121 family income or parent education, and those not written in the English language.

122 **Stage 4: charting the data**

123 Articles were then screened by title, abstract, and full text by the first author. Data were
124 extracted from the articles independently by two reviewers, such as details about the
125 population and study design (Supplementary Table A).

126 **Stage 5: collating, summarizing and reporting the results**

127 To collate and summarize the data, the three-step process method proposed by Levac et al.
128 (2010) was used and included analysis, reporting, and meaning.²⁷ The analysis phase includes
129 both numerical and qualitative summaries of the findings. The reporting phase includes the
130 organization of these results into an end-product such as themes that may be a conceptual
131 framework or table. In the third phase, the specific findings must be discussed within the
132 broader context and consider implications in order to add validity to the findings.²⁷

133 **Stage 6: consultation**

134 Consultation was not performed at this stage, however the implications for key stakeholders is
135 discussed.

136 **Results**

137 **Study selection**

138 The initial search included 5,291 titles after removing duplicates (4,656 from PubMed, 967 from
139 ERIC, 923 from PsychInfo). After screening by title, 431 articles remained. Abstracts were then

140 screened and 252 full-text articles were reviewed for full text. A final sample of 111 full text
141 articles were included in the final review (See Supplementary Table A).

142 **Study characteristics**

143 The majority of studies were cross-sectional (80 studies) with an additional 15 qualitative, 10
144 longitudinal studies, 4 reviews, one experimental and one quasi-experimental. Most of the
145 included studies were conducted in the US (40 studies), Canada (13 studies), Australia (11
146 studies), and the UK (10 studies; 6 studies specified England). One study had multi-national
147 samples from the US and the UK and one had participants from Australia and Canada.

148 Participant sample size ranged from 8 to 67,124 with a median of 231 participants. Of studies
149 that included youth participants, 62 studies included adolescents (above primary grades), 19
150 included children only, and 18 included both children and adolescents. An additional 13 studies
151 included adult participants (recalling childhood experiences) or were review articles. Most
152 studies included both girls and boys (n = 96, 86%), with 12 studies including girls only and 3
153 studies including boys only. The majority of studies examined youth sport in general (n = 66,
154 59%) or a combination of sports (n = 15). The most common single sport researched was soccer
155 (n = 9).

156 The articles represented 8 broad themes as shown in Table 1. These included reasons
157 for/barriers to participation, social norms, achievement goal theory, family structure, sporting
158 family, parent support, value of friendship, and influence of teammates.

159 **Reasons for and barriers to participation in youth sport**

160 Several studies, using surveys or qualitative interviews, indicated that the most common
161 reasons children gave for participating in youth sports were because of friends or family (See
162 Supplementary Table A). Five qualitative studies²⁹⁻³³ asked participants to describe reasons for
163 sport participation. An Australian study of 9-12 year old children reported family, siblings, and
164 community reasons for joining soccer,²⁹ which was echoed by a study of Canadian
165 adolescents,³¹ but friendships were important for continued youth sport participation.²⁹
166 Another study of adolescent soccer players in England found that family, particularly bringing
167 the family together and connecting with family members was motivation for participating in
168 youth sport.³⁰ Additionally, involvement and engagement with others was a theme that
169 emerged in a qualitative study that interviewed Swedish adolescents about their participant in
170 youth sport.³² However, these results may be biased by interviews with children and
171 adolescents who are participating in sport. Similarly, Coleman et al. (2008) found that UK
172 adolescents who participate in sports report friends as a reason for participating, however,
173 those who do not participate in youth sports reported friends as a barrier because these
174 participants perceived sport to take away from time to be social.³³

175 Quantitative surveys had inconsistent results regarding the role of family and peers for
176 participating in sports. A study of boys aged 6 to 10 years in the US found the top reasons for
177 participating in sport to be feeling part of a team and being with and making new friends.³⁴
178 However, a survey of Australian children and adolescents reported competition, skills, physical
179 fitness, and liking a challenge as top reasons for participating.³⁵ It is possible that there are
180 cultural or racial differences in reasons for participation in youth sport, as found in one study,³⁶
181 or differences in age groups. Basterfield et al. (2016) found that physical barriers (e.g., not

182 having transportation) were more important for 9-year-olds in England, but social
183 environmental factors (e.g., friends and peer acceptance) were more important for 12-year-
184 olds.³⁷ Other evidence suggests gender differences may account for some differences in
185 participation and factors related to it with girls having greater social influences.³⁸ A survey of
186 French adolescents found that boys reported having a friend in sport as a reason for
187 participating, while girls more specifically participated for encouragement and support from
188 parents, siblings and friends.³⁹ An additional parental barrier to participating included a fear of
189 injury.^{40,41}

190 **Social norms**

191 Seven cross-sectional and qualitative studies addressed social norms,⁴²⁻⁴⁸ displayed by family
192 and peers, as they are associated with youth sports. These mainly included perceptions of
193 gender and popularity. Several older studies examined what characteristics high school
194 students' value for popularity. While one study found athletes were most popular,⁴³ another
195 found that high schoolers would prefer to be remembered for being smart as opposed to an
196 athlete.⁴⁵ Unsurprisingly, youth perceptions of popularity were highly influenced by gender, not
197 only of the participant, but also the sport in which they participate. One study found male
198 athletes were considered more popular and boys valued sports for popularity.⁴³ Furthermore,
199 females in stereotypical "feminine" sports (e.g., ballet) were given higher status as rated by
200 their peers compared to those in stereotypical "masculine" sports (e.g., karate, basketball).^{42,46}
201 These gendered perspectives existed among family members as well as peers. Two studies
202 examined family gender stereotyping from parents and sibling order, with boys more likely to
203 have sport or "masculine" toys from early ages.^{47,48} While the majority of this research was

204 conducted prior to 2000, a more recent Serbian study using social network methods found that
205 those who participate in sport have higher sociometric status as rated by their peers.⁴⁴

206 **Achievement goal theory**

207 Twenty-four studies were based on achievement goal theory and included studies of
208 motivational climates and goal orientations (See Supplementary Table A). Twenty-one of these
209 studies were cross-sectional, with only 2 longitudinal^{49,50} and one qualitative.⁵¹ Both peer and
210 parent motivational climates, or the psychological environment that is created in a situation,
211 were researched. The majority of these studies examined associations between task or ego
212 climates and youth outcomes such as motivation or maintenance. One study of US soccer
213 players found parent goal orientations were associated with child orientations.⁵² Task-oriented
214 peer and/or parent climates in sports have been associated with flow,⁵³ intrinsic motivation and
215 persistence in sport,⁵⁴⁻⁵⁷ and positive self-worth and enjoyment.⁵⁸ Studies also found that
216 combinations of individual traits, such as perfectionism and stress combined with particular
217 climates and orientations were associated with negative outcomes such as burnout^{59,60} and
218 unsportsmanlike play.⁶¹

219 **Family-specific themes**

220 **Family structure.** Three cross-sectional studies examined family structure only,⁶²⁻⁶⁴ not whether
221 family members participated in sports, but how many parents were in the household and
222 sibling orders. Family structure, particularly parents, was associated with youth sports
223 participation. In one large Canadian study of over 20,000 children and adolescents⁶² and one
224 smaller study of 381 adolescents from the United Kingdom,⁶³ children from single-parent

225 families were less likely to participate in youth sports. Only one study examined the effect of
226 sibling order on sports participation and found no relationship.⁶⁴

227 **Sporting family.** Fifteen studies examined the associations between family members'
228 participation in sport and a child's participation in sports (See Supplementary Table A). Two of
229 these included qualitative information^{65,66} and two were reviews,^{67,68} with the remaining cross-
230 sectional studies. This has been both examinations of associations between family members'
231 sporting behaviors as well as possible genetic contributions. Three studies have discussed a
232 potential genetic basis of shared of sports participation with two being reviews, concluding
233 limited evidence for a genetic influence.^{67,68} The one cross-sectional study was conducted in the
234 Netherlands and found relationships in sports behavior between parents, and between female
235 twins, but not between parents and offspring.⁶⁹ Other studies have consistently found that
236 children with parents who participate in sport, or are active, are more likely to participate in
237 sports.^{65,70-74} With regards to siblings specifically, one study found that both sibling
238 participation in elite or non-elite sports and the interaction with sibling order related to a
239 child's sport participation.⁷⁵ For example, children with an older sibling who participated in the
240 same sport were more likely to be elite athletes.

241 **Parent and family support.** Twenty studies researched how parents provide support for
242 children in youth sport as well as potential barriers that they may face to providing that
243 support. Again, the majority were cross-sectional studies, however seven were qualitative,⁷⁶⁻⁸²
244 one was longitudinal,⁸³ and one was a review article.⁸⁴ Parents play several roles for youth in a
245 sport setting, including being supporters (e.g., cheering from the sideline), coaching, managing
246 (e.g., fundraising). and being providers (e.g., providing transportation).⁸⁰ The majority of studies

247 described parental support as an important facilitator for participation.^{77,82,84,85} While multiple
248 studies describe the importance of financial support,^{78,79} and often financial toll, parents
249 provide other forms of support including tangible, esteem, information, emotion and network
250 support.⁸¹ Parental modeling of sport, while associated with higher rates of child participation,
251 may not be as critical for sports participation as other forms of support.^{86,87} On the other side,
252 children who receive negative parental support, such as pressure to excel^{88,89} or hostility,⁹⁰ may
253 result in a negative experience for children in sport. Some barriers parents experience in
254 providing support include cost, time and work.^{76,91}

255 **Peer-specific themes**

256 **Value of friendship.** Four cross-sectional⁹²⁻⁹⁵ and one cross-sectional and longitudinal study⁹⁶
257 examined friendship in sports. Generally, youth have friends who participate in sport with
258 them⁹⁵ and friendships in sport may predict sporting commitment.⁹⁴ However, the reverse may
259 not be true. Participating in sport together was not critical for friendship. Socializing and school
260 were more important for maintaining friendship compared to participating in sports together as
261 ranked by 4th & 8th graders in the US.⁹³ Bigelow et al. (1989) found that friendships were also
262 resilient to sporting context, meaning that if a child has a friend on another team, they can still
263 maintain that friendship. In the National Longitudinal Study of Adolescent Health in the US, a
264 social network analysis of over 67,000 adolescents found that children are more likely to be
265 friends if they participate in sport together and in a longitudinal follow-up of a subsample of
266 2,550 participants, those who participate in sport together are more likely to be friends 8
267 months later.⁹⁶

268 **Influence of teammates.** More specifically than peers and friends, 11 studies described factors
269 related to teammates that influenced behaviors, both prosocial and anti-social behaviors. These
270 included five cross-sectional studies,⁹⁷⁻¹⁰¹ two qualitative studies,^{102,103} two longitudinal
271 studies,^{104,105} one quasi-experimental study¹⁰⁶ and one experimental study.¹⁰⁷ Being involved in
272 youth sport itself may lead to improved prosocial behaviors.^{102,105-107} The anti-social behaviors
273 studied included bullying, aggression and unsportsmanlike conduct. Sporting context,⁹⁷ team
274 norms,¹⁰¹ and self-efficacy⁹⁸ have been associated with antisocial behaviors. Baar and Wubbels
275 (2011) conducted a survey of over 1,400 10 to 12 year olds in the Netherlands and found that
276 sports clubs had higher levels of aggression than school sports and that this may result from
277 different prosocial and Machiavellian resource control strategies in different sporting
278 contexts.⁹⁷ A study of ice hockey players in Canada, found that teammates who perpetrated
279 antisocial behaviors saw their behavior as justified and acceptable, while positive teammate
280 behaviors influenced social identity of the team.¹⁰² Group cohesion¹⁰⁴ and positive group
281 membership¹⁰⁵ may be beneficial for team outcomes and weaker social connections have been
282 associated with bullying.⁹⁹ The one experimental study found in this review, compared a coach-
283 led soccer environment to a peer-led soccer environment, and found that those in the peer-led
284 group had higher prosocial behaviors and communication.¹⁰⁷

285 **Cross-themes**

286 Six studies included multiple themes of those described above.¹⁰⁸⁻¹¹³ Two qualitative studies
287 conducted with Australian adolescents examined reasons for participating including participate
288 to advance education, barriers to participation including lack of parent provided transportation,
289 how having active family members promoted sport, enjoyment of participating with friends,

290 and influences from peer social norms.^{108,109} The other studies were cross-sectional surveys and
291 examined how both parents and peers interest were higher in athletes compared to
292 nonathletes,¹¹¹ how strong parent support may counteract peer negative support,¹¹² how
293 parent and peer support is associated with self-esteem¹¹⁰ and important for fun in sport.¹¹³

294 **Discussion**

295 This scoping review identified eight main themes of existing research related to social
296 influences on youth sport, not including coaches. These themes are not exclusive or
297 comprehensive to all the potential themes of social influences on youth sport, but a summary
298 of the major research themes in existing literature. The social agents include parents, siblings,
299 extended family, friends, teammates, other peers, as shown in Figure 1. While this represents
300 an oversimplified view of the complex and nuanced relationships influencing youth sport, it is a
301 current summary of the broad themes existing in the literature. These social agents have been
302 shown to influence motivational climates which interact with goal orientations. All of these
303 social influences exist within a system of social norms.

304 Friends were consistently reported as a predominant reason given by children and adolescents
305 for participating in sports. Thus, to increase and sustain participation, it is important to involve
306 the friendship network. It is likely that friendship importance and quality differ by gender and
307 ages and may be differentially associated with sport motivation.¹¹⁴ Future interventions may
308 target friend groups to all participate in a sport as opposed to including individual children or
309 adolescents. Family, including siblings and parents were also given as reasons for participating.
310 Similarly, families should be included in the sporting experience. While sports is not suggested

311 to be important for maintaining existing friendships, continuing sport may be highly dependent
312 on whether youth have a friend participating with them. This may have implications for how
313 teams are created, for example, keeping friends together on the same team instead of
314 randomly selecting teams. This may also help in minimizing parent barriers. However,
315 friendships may also result from being on teams, and coaches should facilitate these friendships
316 to maintain sports participation and positive benefits of sport.

317 In addition to coaches, teammates have a large influence on the sporting experience, which can
318 be both positive and negative. More effort is needed to ensure that this is a positive experience
319 that encourages prosocial behaviors using systematic evaluation and valid interventions.¹¹⁵ For
320 example, in addition to teaching skills and sport-specific team strategies, a good youth sport
321 experience will also implicitly and potentially explicitly teach good social skills similar to other
322 quality after school programs.¹¹⁶

323 Few studies examined family structure in specific relation to sports' participation. A single-
324 parent home may be associated with fewer time and financial resources which are cited as key
325 barriers for parental support.^{76,91} While there was limited research on siblings and sport, there
326 has been more research on sibling concordance of broader health behaviors including physical
327 activity,¹¹⁷ and associated health outcomes such as obesity.¹¹⁸ It is possible that total number of
328 siblings, and not birth order may be more important, which may be indicative of family
329 socioeconomics or differences in parenting strategies,¹¹⁸ however, birth order has shown to be
330 associated with other types of achievement such as educational attainment¹¹⁹ and related skills
331 such as cooperation.¹²⁰ While family structure is not an easily modifiable factor, it may help to

332 target resources towards youth in particular family situations who are less likely to gain the
333 benefits from sports.

334 Not only may family structure influence sporting participation, but the sport behaviors of those
335 family members have shown to be associated with youth sport participation. While several
336 studies examined cross-sectional associations between sporting or activity habits of parents
337 being positively associated with sport participation in children, this scoping review identified
338 few articles on the effects of siblings' sports participation on sports participation. A study of
339 elite athletes found interesting and complex relationships between birth order and level of
340 sport.⁷⁵ Their study of Australian and Canadian elite athletes found that elite athletes were less
341 likely to be first-born and more likely to have older siblings who participated in recreational
342 sports. This suggests that there may be unique parenting or a transfer of skills or motivation
343 that may encourage younger siblings who have older siblings involved in sports, though not at
344 an elite level, to become elite athletes. For example, research has shown that eldest children
345 receive more psychological support than youngest children.¹²¹ Similar to friends, if siblings play
346 a large role in promoting youth sports participation, sports programs and interventions may
347 aim to involve siblings in the sport experience. It is likely that the effect of siblings on sports
348 participation is complex and an understanding of sibling order, gender, personality types,
349 relationships, and sporting context are likely to influence sporting participation.

350 It is consistent that parents are an important supporter of youth sports participation, which is
351 consistent with broader physical activity.¹²² Parents need to be included when targeting
352 participation and barriers to parent support, particularly time and money should be addressed.
353 However, it is interesting to note that financial support, while a major form of parent support

354 for youth sport participation, is not the only type of support that may be beneficial for
355 participation.⁸¹ Parents should be made aware of the multiple forms of support, beyond
356 financial support, that they can provide for their children. Less is known on the influence of
357 extended family. One study addressed how the influence of nuclear vs extended family on
358 sporting behavior may differ by socioeconomic status.⁶⁶ When parental barriers are high due to
359 limited resources, extended family may be a key social agent. Different cultures may have
360 differing functional¹²³ involvements levels of extended family members that may also need to
361 be included in the sporting experience.

362 Multiple social agents, parents, teammates and peers, have been researched in the context of
363 achievement goal theory. Achievement goal theory has been the dominant theoretical
364 framework for understanding the influence of family and peers on youth sport experiences, and
365 examining motivation in educational research in general.¹²⁴ While much of the research has
366 taken a simplistic approach to achievement motivation goals and orientations, a more complex
367 understanding is need to better understand youth sport behavior and outcomes.¹²⁴ Most
368 research seems to suggest that for the majority of participants, a task parent and peer climate
369 are most conducive to positive sporting experiences. Therefore, youth sport experiences that
370 encourage task-oriented climates should be promoted. Other theoretical frameworks should
371 also be explored. In taking a broader social network approach, theories and methods from
372 social network analysis such as social capital theory or rational choice theory may be
373 considered.¹²⁵ For example, instead of limiting analyses to a single social agent (i.e. parents),
374 social network analysis may examine multiple social agents and then connections between

375 these agents. When examining a peer network, some peers may hold more influential status or
376 complex connections between peers may be critical to influencing participation.

377 Lastly, broader social norms have shown to influence these social relationships in the context of
378 youth sport participation. Athletic or sport status was not as highly valued among high
379 schoolers as expected.^{43,45} However, these studies were conducted in 1976 and 1994. The role
380 of sports in society continues to evolve with a seemingly greater impact at all levels. Since the
381 publications of those studies, sport has been increasingly specialized, commodified, and an
382 increased presence in media.¹²⁶ Even the way that individuals interact with the media has
383 dramatically changed, with digital communication and social networking making sports easily
384 accessible and “telepresent”.¹²⁷ Sports media has shown to influence social norm perceptions.
385 Current studies may find that the current form of sports, both professionally and recreationally,
386 and how that is communicated and perceived in society has changed.

387 The role of gender stereotypes may have also changed in recent times, however, some
388 evidence suggests that gender stereotypes are still present and may be strengthened.¹²⁸ These
389 gender norms may be reinforced as children get older with girls less likely to join sport at older
390 ages and some boys joining during adolescence.¹⁹ Recently, adolescents have tended to rate
391 masculine activities as more masculine, feminine activities as more feminine, and neutral
392 activities as more masculine than did adults; though the role of gender stereotypes can
393 change.¹²⁹ There are still different social pressures and inequalities for girls participating in
394 sports compared to boys. The way we consider gender in sport has changed and there is a
395 growing appreciation of the intersectionality of race, cultures and gender.¹³⁰ More qualitative
396 and longitudinal studies on how these social norms influence participation over time are

397 needed. Especially during the transition from childhood to adolescence, as it is likely that these
398 peer and family influences change during these different life stages. Research on physical
399 activity in general suggests that the influence of family changes to a greater influence from
400 peers.¹³¹

401 Overall, existing literature suggests an important role of family and peers on youth sport
402 participation. However, the bulk of literature is limited by single cross-sectional survey study
403 designs. This is an appropriate study design for many of the research questions such as how the
404 structure of the family is associated with child sport participation. However, more longitudinal
405 studies are needed to track participation over time and factors that may influence maintenance
406 of dropping out of youth sports. Furthermore, experimental studies, intervening within social
407 networks, such as with siblings or friends, may be a key method of increasing youth sport
408 participation. However, change at the population level will not be effected without widespread
409 implementation and dissemination of the findings from these longitudinal and experimental
410 studies. Currently, there is a lack of implementation and dissemination research related to
411 sports participation. This current scoping review was limited in depth in order to include a
412 breadth of studies, while also including some indicators of study quality. Future systematic
413 reviews may include more depth of studies as they relate to a single social agent such as
414 parents or teammates. However, this is a first preliminary step in assessing the evidence for a
415 role of social influences on youth sport participation and how these multiple influences may
416 interrelate (Figure 1).

417 **Conclusion**

418 Social influences are important factors for ensuring participation, maximizing the quality of the
419 experience, and capitalizing on the benefits of youth sport. Social factors appear to critically
420 influence youth sport participation. Thus, future research, programs and policies hoping to
421 increase participation and ensure high quality sport experiences, need to better understand the
422 nuanced social relationships and address the many social agents influencing youth sport.

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- 774

775 Table 1.

776 Summary of article themes.

Social Agent	Theme	Number of studies
Family & Peers	Reasons for/barriers to participation	13
	Social Norms	8
	Achievement Motivation	24
Family	Structure	3
	Sporting family	15
	Parent support	20
Peers	Friendships	5
	Teammates	11
Variable	Multiple	6

777

778 **Figure legend.**

779 Figure 1. Sporting Social, a description of themes resulting from a scoping review of the social
780 influences on youth sport.

781

782 **Supplementary Material**

783 Table A: Summary of included articles

