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3 **“It’s Avoiding Getting Sued for Concussion for those Kids”: Pedagogical Responses**

4 **of Youth Soccer Coaches to New Guidelines on Heading**

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11 **Abstract**

12 *Purpose:* The purpose of this study was to describe nine youth soccer coaches' pedagogical
13 responses to the implementation of the new guidelines on heading introduced by the United
14 States Soccer Federation (USSF). The specific research questions we attempted to answer were:
15 (a) What were the coaches' perspectives and practices regarding the coaching of heading? and
16 (b) What factors shaped the coaches' perspectives and practices?

17 *Method:* The theoretical framework employed was occupational socialization. Data were
18 collected using four qualitative techniques and reduced to themes using analytic induction and
19 constant comparison.

20 *Findings:* Key findings were that the coaches fell into one of three groups: rejectors, acceptors,
21 and skeptics. Differences in the coaches' acculturation, professional socialization, and
22 organizational socialization were responsible for the coaches differing responses to the new
23 guidelines on heading.

24 *Conclusions:* Should they transfer to other coaches, these findings should help coach educators to
25 develop stronger programs.

26 *Key words:* Injuries, occupational socialization, sport pedagogy

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29 **“It’s Avoiding Getting Sued for Concussion for those Kids”: Pedagogical Responses**
30 **of Youth Soccer Coaches to New Guidelines on Heading**

31 In the last 15 years, there have been growing and considerable concerns about the long-
32 term and serious effects of head injuries in adult (Mizobuchi & Nagahiro, 2016) and youth
33 (Crowe et al., 2010) sport. For example, research indicating that concussions and repeated sub-
34 concussive blows to the head are associated with the onset of chronic traumatic encephalopathy
35 (CTE) and dementia in professional American football (Omalu et al., 2010) and rugby
36 (McMillan et al., 2017) players, as well boxers (McCrorry et al., 2007), has led to some changes
37 in the youth versions of these sports (e.g., flag football, Waltzman et al., 2021) and a decline in
38 the number of youth participating in them (Aspen Institute, 2021). The considerable publicity the
39 research findings have been given through film (e.g., the Hollywood movie “Concussion,”
40 Landesman, 2015), television (e.g., the BBC documentary “Rugby: The Cost of Concussion,”
41 Thomas, 2021) and the print media (e.g., the Nature article “Why Sports Concussions are Worse
42 for Women,” Sanderson, 2021) have made the public, parents, and youth sport governing bodies
43 and coaches more aware of this issue.

44 Little research has been completed on the long-term effects of heading (i.e., repeated sub-
45 concussive blows to the head by performing this skill in practices and games) in soccer on the
46 onset of CTE, dementia, or other debilitating and potentially life-threatening diseases and, to
47 date, a cause and effect link has not been established (Tarnutzer et al. 2017). One recent study,
48 however, provided strong anecdotal evidence of such a link in that four of six deceased
49 professional soccer players examined were found to have CTE, and three of these players had
50 been center forwards or defenders, positions in which heading is more likely to occur (Ling et
51 al., 2017). Furthermore, though not completed in the field, a second recent study indicated that

52 brain activity was disrupted by 20 consecutive headers (i.e., sub-concussive blows), during a 10-
53 minute period, coming from a distance of 6.5 meters, at 25 miles per hour (Di Virgilio et al.,
54 2016). Again, findings such as these have been given a great deal of publicity through television
55 (Doran, 2016) and the print media (Ames, 2022; Clarey, 2016).

56 As a result of the research and subsequent publicity, the United States Soccer Federation
57 (USSF) provided a set of guidelines to aid youth soccer organizations throughout the country.
58 Key guidelines in the organization’s “concussion initiative” for children and youth aged 6 to 11
59 years were that players should not be permitted to head the ball, either purposely or accidentally,
60 during competitive games and that if they did an indirect free-kick be awarded against them
61 (United States Soccer [USS], 2017). During practices, the guidelines for this age group were that
62 heading could be taught as “an isolated skill . . . away from any form of opposition or other
63 aspects of the game” provided “lightweight balls” (e.g., foam balls or balloons) were used (USS,
64 2017, p. 28). The guidelines also suggested that players aged 12 years and older should be
65 allowed to head the ball during competitive games and engage in limited practice of the skill
66 with a normal soccer ball when aged between 11 and 13 years (USS, 2017). All state youth
67 soccer associations decided to follow the guidelines. Some associations went further and
68 eliminated heading altogether for players aged 11 years and younger and many associations
69 provided a more direct definition of “limited practice” for youth aged between 11 and 13 years.
70 For example, in Vermont coaches were notified that players should be permitted to practice
71 heading for up to 30 minutes a week and that this would involve each player heading the ball 15
72 to 20 times (Vermont Soccer Association, 2021, p. 1).

73 As sport pedagogists, we were interested in the impact these guidelines regarding heading
74 would have on youth soccer coaches. Gaining an understanding of what youth soccer coaches

75 thought about the new guidelines and how they reacted to them, we believed, would enable
76 improvements to be made to youth soccer coach education courses and governing body policy
77 statements. The purpose of this study, therefore, was to describe youth soccer coaches'
78 pedagogical responses to the implementation of the new USSF guidelines (USS, 2017) on
79 heading. The specific research questions we attempted to answer were: (a) What were the
80 coaches' perspectives and practices regarding the coaching of heading? and (b) What factors
81 shaped the coaches' perspectives and practices?

82 **Theoretical Framework**

83 Sport pedagogy researchers have employed occupational socialization theory (Lawson,
84 1983a, 1983b; Richards et al., 2014) as a lens through which to examine why physical education
85 teachers and university teacher education faculty think and act as they do (e.g., Park & Curtner-
86 Smith, 2018; Prior & Curtner-Smith, 2020). Their primary goal has been to pinpoint socializing
87 agents that shape the perspectives and behaviors of teachers and teacher educators while
88 recognizing that socialization is a dialectical process (Richards et al., 2014). Some scholars,
89 however, have adapted socialization theory so that it can be employed in other sport and activity
90 contexts. For example, George and Curtner-Smith (2016, 2017, 2018) used the theory to examine
91 how children's, parents', and principals' views about physical education were developed and
92 Susnara and her colleagues employed this perspective to describe the influence of an out-of-
93 school swimming program on children and youth and their instructors (Susnara & Curtner-
94 Smith, 2022; Susnara et al., 2022). Moreover, two recent studies (Authors, 2022a, 2022b)
95 explored the impact of coach education programs on grassroots youth sport coaches through the
96 lens of occupational socialization.

97 In the current study, we examined how coaches' differing patterns of socialization
98 influenced their reading of and responses to the new USSF guidelines (USS, 2017) on heading.
99 Specifically, we were interested in discovering the degree to which, and how, the coaches'
100 perspectives and practices were influenced by their *acculturation* (i.e., cultural and personal
101 influences on the coaches), *professional socialization* (i.e., impact of formal coach education),
102 and *organizational socialization* (i.e., impact of the coaches' soccer club cultures). Prior research
103 suggested that acculturation would be the most potent part of the coaches' socialization (Cushion
104 et al., 2003) and that the key cultural socialization agent would be the portrayal of the "heading
105 issue" in the media. Key personal influences on the coaches' responses to the new heading rules,
106 we thought, might include their experiences of playing soccer, particularly as a child and youth,
107 the level at which they had played, the position in which they had played, past head injuries or
108 concussions the coaches had suffered, their perceptions of their own ability to head a soccer ball,
109 and the degree to which the coaches believed heading was integral to the game of soccer.

110 Mirroring the findings with physical education teachers, Cushion et al. (2003) suggested
111 that professional socialization would have least impact on coaches in general. In the current
112 study, we theorized that key influences might include the views of coach educators and course
113 content, particularly on heading. Finally, regarding organizational socialization, we hypothesized
114 that the coaches' perspectives and practices would be influenced other coaches with whom they
115 worked, parents, and players.

116 Prior to the study, and in line with the research on other sport instructors (Jowers et al.,
117 2022; Richards et al., 2014), we also theorized that during their professional and organizational
118 socialization the coaches would employ one of two coping strategies when they disagreed with
119 the perspectives and practices about heading in youth soccer that were being promoted.

120 Specifically, we thought that some coaches would strategically comply (Lacey, 1977) with these
121 perspectives and practices. That is feign going along with them while secretly disagreeing. Other
122 coaches, we thought, might attempt to strategically redefine (Lacey, 1977), fight back against,
123 and change the perspectives and practices with which they disagreed.

124 **Method**

125 **Participants**

126 Nine youth sport coaches who identified as male and White participated in the study. The
127 coaches were purposefully selected because they worked with different age groups of boys and
128 girls affected by the new heading guidelines; worked in two southeastern American states and for
129 five soccer clubs ranging in size and focus; and varied in terms of age, playing level, position
130 played, perceptions of their own heading ability, history of concussion/head injury, coaching
131 experience, employment status, and coaching qualifications (see Table 1). In congruence with
132 our university's institutional review board's requirements, the coaches signed consent forms
133 prior to the study commencing. They were also assigned pseudonyms in order to protect their
134 anonymity.

135 **Data Collection**

136 The first author collected data with four qualitative techniques. *Non-participant*
137 *observation* involved the first author observing each coach during two practices and two
138 competitive games played against other teams. All practices and games took place outside at club
139 facilities or at local youth tournaments. Practice length ranged from 65.50 to 93.25 minutes and
140 competitive games ranged from 50.00 to 61.25 minutes. During these observations, the first
141 author took copious notes or made voice recordings on the coaches' adherence to the new
142 guidelines on heading; any specific teaching of heading that occurred within skill practices and

143 drills in isolation; the coaches' reactions and responses when a potential heading situation
144 occurred during small-sided, conditioned, and full game play; the coaches' reactions to player
145 head injuries; and the responses of players, parents, other coaches, and referees, to the coaches'
146 pedagogy regarding heading. Voice recordings were transcribed verbatim.

147 The first author *informally interviewed* the coaches as often as possible prior to,
148 following, and during breaks within the practices and competitive games. These short
149 conversations were aimed at filling out and confirming observational data. They involved the
150 first author making notes or voice recordings as soon after they had occurred as possible. Again,
151 voice recordings were transcribed verbatim.

152 The first author also *formally interviewed* each coach at a location of his choosing. Six
153 formal interviews were conducted face-to-face and three by phone. Demographic and
154 background data collected during formal interviews included the coach's gender, race, age, state,
155 and the focus and size of his soccer club. In congruence with the research questions we were
156 trying to answer, the lead questions posed during the formal interviews were focused on (a) the
157 coaches' perspectives and practices regarding the coaching of heading following the introduction
158 of the USSF's new guidelines (USSF, 2017) and (b) the factors that shaped these perspectives and
159 practices within their acculturation (i.e., media portrayal of the "heading issue, playing
160 experience, position played, experiences of serious head injuries and concussions, and views on
161 the importance of heading in soccer), professional socialization (i.e., amount and content of
162 formal coach education, coach educators), and organizational socialization (i.e., experience
163 coaching, other coaches, players, and parents). The formal interviews were semi-structured
164 (Patton, 2015) and allowed for multiple follow-up prompts to lead questions. They were also
165 audio-recorded and transcribed verbatim.

166 Finally, *document analysis* involved the first author gathering a number of salient
167 documents and writing notes about their contents related to heading. These included the United
168 States Youth Soccer (USYS) laws of the game (USYS, 2019) and the USSF player development
169 initiative (USS, 2017). In addition, the first author collected curriculum and policy documents
170 from the two state youth soccer associations to which the coaches belonged, as well as the
171 coaches' club policy, philosophy, and curriculum documents, minutes from club meetings, and
172 examples of coaching plans or written materials the coaches had prepared themselves.

173 **Data Analysis**

174 In congruence with the study's research questions, during phase 1 of the analysis the first
175 author separated data into subsets pertaining to (a) the coaches' perspectives and practices
176 regarding the coaching of heading and (b) the factors that shaped the coaches' perspectives and
177 practices. In phase 2, the first author employed analytic induction and constant comparison
178 (Patton, 2015) to reduce the data to themes. Specifically, he separated the data in each subset into
179 data chunks on specific thoughts, views, actions, behaviors, and responses. These data chunks
180 were then given a numerical code and a descriptor. Coded data were grouped to form categories
181 and categories were collapsed to form themes. During this phase, the second author acted as a
182 critical friend (Costa & Kallick, 1993) and critiqued and provided feedback on emerging codes,
183 categories, and themes.

184 Trustworthiness and credibility were established through member checking, the search
185 for negative cases, and triangulation (Patton, 2015). Member checks were performed during
186 informal interviews and by asking the coaches to examine an early draft of this manuscript for
187 factual accuracy. When negative cases were identified in the data, they were used to modify

188 codes, categories, and themes. Triangulation involved checking the congruence of findings
189 across all four data sources.

190 **Researchers Positionality**

191 Readers should be aware that the first author had been heavily involved with both youth
192 and adult soccer coaching and coach education at a variety of levels for a number of years.
193 Moreover, the second author had extensive experience of coaching school soccer teams, working
194 with younger recreational players outside schools, and conducting sessions on teaching soccer
195 for physical educators. Both of us had coached soccer in the United States and the United
196 Kingdom.

197 **Findings**

198 We begin this section by examining the coaches' perspectives and practices regarding the
199 coaching of heading. Next we describe the factors that shaped the coaches' perspectives and
200 practices.

201 **Coaches' Perspectives and Practices Regarding the Coaching of Heading**

202 Three groups of coaches with different sets of perspectives and practices regarding the
203 coaching of heading were identified during the study. These were *rejectors*, *acceptors*, and
204 *skeptics* (see Table 1).

205 ***Rejectors***

206 Although they mostly followed the USSF guidelines (USS, 2017) on heading, three of the
207 nine coaches (Miles, Nathaniel, and Yannick) did so reluctantly and rejected them. This was
208 mainly because they believed that the guidelines had a negative impact on player development:

209 I'm not a fan at all [of the new guidelines]. You know, I firmly believe in teaching them
210 the proper way to head the ball at, you know, 8, 9, 10 years old. And it doesn't have to be

211 40-yard balls serving in, but some soft tosses from 5 to 10 yards away to teach them the
212 technique would be a good thing. (Miles, rejector, formal interview)

213 To reinforce their views, the three rejectors pointed to what occurred in competitive games when
214 their players were observed “ducking” to avoid the ball when it was in the air and attempting to
215 “use their chests” at corner-kicks, rather than heading, as they would have done without
216 restrictions. In addition, the rejectors noted that because their players could not head the ball
217 during games there had been an increase in “unintentional dangerous plays” and players “getting
218 kicked in the face” when “feet [were] flying way up in the air.”

219 In addition, the three rejectors suggested that the new guidelines were not needed since
220 very little heading actually occurred during competitive or practice games played by the children
221 they coached, the implication being that this amount of heading was not a health concern:

222 To be completely honest, I thought it [i.e., the implementation of the new guidelines] was
223 ridiculous . . . from the standpoint of the amount of headers I've seen in a game. There are
224 maybe four or five or six. And most of them are unintentional. (Nathaniel, rejector formal
225 interview)

226 Moreover, and following Babbs (2001), this group of coaches suggested that not learning
227 to head properly at an early age could actually be detrimental to players' health and lead to injury
228 and concussion when they were allowed to perform this skill in games:

229 Because if they've never headed a ball and all of a sudden they're playing U13 [i.e., under
230 13] 11v11 games, kids are punting the ball all over the place. Then they're more likely to
231 not know how to head it [properly] and won't be effective as a player. And [the players]
232 are also potentially more likely to get themselves injured because they're not familiar
233 with proper heading technique. (Yannick, rejector, formal interview)

234 With these views, not surprisingly and in compliance with the guidelines, the rejectors
235 taught heading in isolation during practices using a series of drills and practices with “softer
236 balls” or, as Miles noted, starting “with a balloon [with] the youngest age group . . . just to teach
237 them . . . the right technique.” In addition, however, they also allowed heading to occur in small-
238 sided games during practices:

239 But in a scrimmage situation, even with the U10 [i.e., under 10] kids that I have, I let
240 them head the ball. . . . I'm not going to stop the scrimmage and say that's a foul because
241 they're going to have to learn how to head the ball. And so once we get into games I think
242 it [i.e., the guidelines on heading] are detrimental to the game itself. (Yannick, rejector,
243 formal interview)

244 Furthermore, the rejectors did not provide corrective feedback when their players headed the ball
245 in competitive games and argued with referees when free-kicks were awarded against their
246 players for “accidental headers.” They also encouraged “big throw-ins” or “big punts” so as to
247 gain an advantage due to the difficulty opposition players had controlling “long balls” without
248 being able to head them.

249 *Acceptors*

250 Three of the coaches (Julián, Luka, and Yohan) were at the other end of the spectrum,
251 fully embraced the new guidelines on heading, and followed them to the letter. As well as
252 protecting players' health, a key part of their rationale for this course of action was that the rules
253 aided outfield player development in terms of learning to play a technically advanced game
254 involving shorter passes that were kept on the ground:

255 So the health side is great. . . . It means we're going to play some proper football [soccer]
256 too. Balls should be kept on the ground a lot more. . . . Hitting it long, feeding the better

257 athletes [is an inferior way to play]. Let's feed the players who can actually play. So, it's
258 kind of a two-headed bonus for me. You get rid of the unhealthy side as well as you get,
259 hopefully, better players out of it. (Julián, acceptor, formal interview)

260
261 With this issue with CTE, I think it's a really good idea. And, generally, as I'm trying to
262 teach players and improve their technical ability on the ball, it hasn't really affected . . .
263 anything I do because we weren't really pumping long balls forward anyway. So I think
264 it's a good idea. (Yohan, acceptor, formal interview)

265 The three acceptors also pointed out that the new guidelines on heading helped
266 goalkeeper development. This was because in order to adapt to the new rules goalkeepers had to
267 be taught that their “first option” was to “maintain possession” with a short throw or pass to a
268 teammate, as opposed to punting the ball a long distance. As Julián noted in his formal interview:
269 “First thing I'm always telling the goalkeeper to do is to take your time, weigh up your options,
270 and find the best outlet that gives you the highest percentage of retaining the ball.” Similarly, in
271 his formal interview Yohan explained that “if there's any way at all my goalkeepers, [when]
272 playing out from the back, they are not going to punt the ball.”

273 In line with these views, the three acceptors believed that it was developmentally
274 appropriate to teach heading at a later stage without any issues:

275 I'm a strong believer in using volleyballs even at 15, 16, 17. It goes farther. It thumps
276 [just like a soccer ball]. They get the confidence. Then on Saturday they hit on the same
277 place [i.e., the forehead]. It feels the same way. (Luka, acceptor, formal interview)

278 For this reason, the acceptors were not observed teaching heading at all in practices and, unlike
279 the rejectors, were not concerned about the occasions when their players had to deal with high
280 balls without heading them during competitive games:

281 Yohan continues to coach his players to play short out of the back to develop their ability
282 to maintain possession despite the other team using long passes and punts from the
283 goalkeeper against them. When this occurs, Yohan coaches techniques used to control the
284 ball, other than head it, or to play first-time away from pressure. (Yohan, acceptor, field
285 notes, game 1)

286 *Skeptics*

287 Three of the coaches (Glenn, Joel, and Gábor) took a position somewhere between the
288 rejectors and acceptors. While they followed the new guidelines on heading without fail, like the
289 acceptors they were skeptical of the “real” reasons that they were being asked to take this course
290 of action. Specifically, all three skeptics were not convinced that the “scientific evidence”
291 linking heading and brain injuries was accurate:

292 I’m kind of 50-50 on the fence. I get why they [i.e., the USSF] are doing it. I appreciate
293 the idea, but I’m also of the mindset that it’s a pretty influential part of the game. And if
294 it’s taught correct—the correct form, and correct technique to head—I don’t necessarily
295 see a whole lot of danger with it. (Joel, skeptic, formal interview)

296 In addition, the skeptics were not sure that the USSF had introduced the new guidelines
297 on heading in order to improve player safety. Rather, they believed that their governing body had
298 taken this course of action to protect themselves from lawsuits:

299 I honestly thought more than anything, somebody was trying to cover themselves in case
300 they're being sued. . . . And my first thoughts were somebody's setting themselves up so
301 that there's not a lawsuit. And were they really fearful of the trauma of heading for youth
302 soccer? I don't know that I believe that that's what the motive was. But again, with you

303 know, new [scientific] evidence, and some of the stuff going on with the brain injuries . .
304 . (Glenn, skeptic, formal interview)

305
306 Part of it is player safety and, certainly, I can handle that. But I also think, heavily, it's
307 avoiding getting sued for concussion for those kids. And that becomes the coaches'
308 problem, not USSF, not the local club, not anybody else. That's the coaches' fault for not
309 following protocol. (Gábor, skeptic, formal interview)

310 Harboring these beliefs, the skeptics mostly eschewed teaching heading in practices,
311 "other than a little intro heading," incorrectly believing that doing so was against the USSF
312 guidelines. In addition, the skeptics were not overly concerned about the influence, good or bad,
313 the new guidelines had on the competitive games in which their players engaged or their players'
314 overall development:

315 I do not think . . . [the guidelines have changed how games are played]. I mean most kids
316 aren't at the point where they are going to hit long balls in the air anyway. So the ball
317 stays on the ground a lot. And if they do, it's a clearance. (Gábor, skeptic, formal
318 interview)

319 Instead, the key concern of the skeptics was to avoid "getting sued" themselves. As Glenn
320 explained: "We don't want to leave ourselves open [to a lawsuit]. We don't want to be
321 responsible for a kid being injured when we're clearly told if it's an injury you err on the side of
322 caution." Consequently, when their players were in a position where they could head the ball in
323 games the skeptics directed them not to. For example, Joel, was observed telling his players to
324 "get in line with the flight of the ball to take it down [with their feet]." In addition, the skeptics
325 were quick to check on a players' wellbeing "after a bumping together."

326

327 **Factors that Shaped the Coaches' Perspectives and Practices Regarding Heading**

328 **Acculturation**

329 The acculturation part of their socialization was a powerful influence on the views of the
330 three groups of coaches regarding heading. The key socializing agent that led to their differing
331 perspectives and practices was their exposure to and interpretation of the media coverage of
332 heading and injury in soccer. As illustrated in the three data extracts below, rejectors were
333 persuaded by arguments that they heard on television or read in the print media or online that
334 suggested the evidence for heading being related to injuries was weak, acceptors were convinced
335 by arguments they read and watched that suggested the link between heading and injury was
336 strong, and skeptics agreed with those in the media who were unsure of the arguments for or
337 against heading leading to serious injury:

338 There's been times with him [referring to a television soccer commentator] where a
339 player may have headed the ball and he's just going on this massive rant about that person
340 should not be allowed back in the game. . . . He would be . . . the main voice of, you
341 know, almost taking it to the extreme. There's doctors and medical professionals that are
342 on top of these players that are evaluating them. And he's making these decisions based
343 on what he's seeing from the press box . . . and saying that these kids can't play. (Miles,
344 rejector, formal interview)

345 Within the last six months they [referring to two radio soccer pundits] were talking about
346 there's trials out there . . . for soccer without heading or soccer with modified heading
347 rules where you can only head the ball inside the 18 yard box. . . . Or they're running
348 trials where games are being played without heading at all. . . . I really liked that idea. I
349

350 think that's a fantastic way to go for all age groups, not necessarily just children. (Julián,
351 acceptor, formal interview)

352 I wouldn't be shocked either way if [some] studies said it's [i.e., heading a soccer ball]
353 really harmful to the developing brain, [and] some studies said no, with good technique
354 the amount of force hitting a human skull is not damaging.” (Glenn, skeptic, formal
355 interview)
356

357 There were no obvious patterns in the data that indicated that the coaches' level of soccer
358 playing, the positions they played, their perceptions of their own heading ability, and the number
359 of concussions they had suffered dictated, in a uniform manner, to which of the three groups the
360 coaches belonged (see Table 1). Specifically, coaches in all three groups had played soccer at
361 different levels and in a variety of positions, had differing perceptions of their ability to head the
362 ball, and had suffered multiple concussions.

363 Julián, Luka, and Yohan, however, noted that their acceptance of the new guidelines was
364 partly based on their own experience of head injury:

365 But I can remember two or three times going to win a ball knowing I was going to win it.
366 And then a couple of seconds later . . . I'm lying on the floor [concussed]. . . . It wasn't
367 uncommon I don't think. I can name 10 other people that happened to during games.
368 (Julián, acceptor, formal interview)

369 Conversely, Yannick, Miles, Joel, and Gábor indicated that their rejection of or
370 skepticism about the new guidelines on heading were partly based on their not having suffered
371 any serious head injury themselves and their coaches not being concerned about any “minor”
372 head injuries they did receive:

373 I think I've probably had a minor concussion once. But you know it wasn't diagnosed. It
374 was in a high school game and I think someone elbowed me in the jaw. . . . And so I
375 subbed out of the game. . . . And I said to coach, "Man, I've got this ringing in my ears."
376 And he said, "Well make it stop because you got to go back in." . . . But I don't know if it
377 was [a concussion]. It could have been a minor concussion, but we never did anything
378 about it. (Yannick, rejector, formal interview)

379 Finally, a key personal influence on the coaches' beliefs about the new guidelines on
380 heading was the style of soccer they had grown up playing in their youth. Specifically, while all
381 the coaches now espoused a short passing ground game in which heading was relatively
382 unimportant, the acceptors generally had more experience of this kind of play or came to it
383 earlier in their youth:

384 I mean my preference is as a player and as a coach—I'd rather not have the ball in the air.
385 I'd rather keep it on the ground as much as we possibly can and to play it into feet.
386 (Yohan, acceptor, formal interview)

387 In contrast, the rejectors and skeptics generally had less experience of this short passing game
388 during their youth and more experience of a style of play in which "long balls" were played and
389 a premium was put on "getting the ball forward quickly," tactics which necessitated a good deal
390 of heading to execute effectively or negate:

391 Field conditions had a lot to do with [playing a long ball game]. . . . In the Midwest area
392 where I was from [the soccer pitches consisted of] long grass. . . . You know, where your
393 entire shoe disappears in the grass. And so . . . running with the ball was not necessarily
394 possible. (Nathaniel, rejector, formal interview)

395

396 **Professional Socialization**

397 Inspection of the coaching qualification data in Table 1 indicates that, although there was
398 some overlap, there were differences between the amount and levels of education and training
399 the coaches in the different groups had received. Specifically, as a group, the acceptors had
400 received more and higher level training than the rejectors and skeptics. Not surprisingly, the
401 acceptors, particularly Luka and Yohan, appeared to be influenced by their training to a greater
402 degree than the rejectors and skeptics when it came to coaching the aforementioned short passing
403 game with its relatively low reliance on heading, and on the teaching of heading itself. Yohan,
404 for example, explained that the training he had received when obtaining various USSF
405 qualifications was “really good . . . particularly if you are coaching youth soccer players.”
406 Furthermore, the acceptors spoke about the influence of specific coach educators on their beliefs
407 and pedagogies who they had “admired and respected” and who had run the courses through
408 which they had been certified:

409 My college coach . . . was my instructor for my B license and my A license. So he's been
410 a big mentor. But [he] was definitely into trying to build through the lines [i.e., play a
411 short passing game] and play a lot of pattern play, a lot of shadow play, stuff like that.
412 (Luka, acceptor, formal interview)

413 In contrast, the rejectors and skeptics, who had received less coach education, were more
414 likely to have disagreed with material relevant to the new heading guidelines that had been
415 presented to them during formal courses. In addition, three of the coaches in these two groups
416 (Miles, Nathaniel, and Joel) did not realize that as well as attempting to eradicate concussions
417 caused by collisions, elbows, and head clashes during the heading act, the new guidelines were
418 also intended to halt any issues caused by the accumulation of sub-concussive headers.

419 Consequently, three of the coaches categorized as rejectors and skeptics (Nathaniel, Glenn, and
420 Gábor) strategically complied with these new guidelines (see Table 1):

421 There was really never any intentional heading [in practices and games]. So I thought the
422 intentions [of the guidelines] were good but maybe misguided. . . . Why are we even
423 banning something that's not used? So I thought it was a little ridiculous. (Nathaniel,
424 rejector, formal interview)

425 Conversely, the remaining three rejectors and skeptics (Miles, Yannick, and Joel) attempted to
426 strategically redefine the new guidelines by fighting back against or ignoring them (see Table 1):

427 And I think what's really . . . personally affected us is . . . if you go to the trainer and give
428 them any one of those [concussion] triggers: “Oh, I’m a little dizzy,” or anything like
429 that, it’s [a minimum of] two weeks [not playing]. . . . I had a player [with a concussion
430 trigger] and she was fine, but it took a while to get her cleared. I had to go [convince the
431 officials]. (Miles, rejector, formal interview)

432 Finally, prior to data collection all the coaches, along with other coaches not in the study,
433 had to attend annual short mandatory refresher courses specifically on how to deal with
434 concussions to their players should they occur, in which the coach educators training them
435 followed the curricula and used the materials from the “HEADS UP” (Centers for Disease
436 Control and Prevention [CDC], 2021) or SafeSport” (United States Center for Safesport, 2022)
437 programs. While the acceptors viewed these courses as “valuable” and “helpful,” the rejectors
438 and skeptics viewed them as “comical” and a “waste of time” and strategically complied with
439 their content:

440 I look at the CDC videos and I mean anyone who doesn't know that stuff prior to
441 [watching the videos]. . . . They are meant to address the coaches who might be overly

442 competitive. But, right, at some level they're a bit comical because the kids [in the
443 videos] clash heads. You check to see if they're alright. If they are showing signs of not
444 being alright, even though they say they are alright, you go sit them down. (Gábor,
445 skeptic, formal interview)

446 **Organizational Socialization**

447 There were no obvious patterns in the data suggesting that the coaches' experience or
448 employment status influenced their reading of the USSF's new guidelines on heading (USS,
449 2017) (see Table 1). Moreover, the ages and views of the coaches' players and the size and type
450 of the soccer clubs at which they coached appeared to have no influence on the coaches' beliefs
451 and coaching behaviors at all. As we theorized, however, the cultures of the coaches' soccer
452 clubs varied in the degree to which and how they influenced the coaches' perspectives and
453 practices. Key in these cultures were the views of other coaches, club officials, and parents.

454 The acceptors' views and actions were supported by the cultures of their clubs (see Table
455 1):

456 [Our club] has a 12-week curriculum training program with sessions outlined on
457 Mondays and Tuesday nights. And Thursday night is coach's choice. . . . And when we
458 do work on heading we used those [i.e., guidelines] and that's with the 12s and 13s and
459 14s. (Luka, acceptor, formal interview)

460 Four of the rejectors and skeptics (Nathaniel, Yannick, Glenn, and Joel) also indicated
461 that the cultures of their soccer clubs supported their views and actions regarding heading (see
462 Table 1). For example, Glenn explained that parents were not saying that they did not "want
463 Johnny to head the ball in training because we're afraid he's going to get . . . some damage to his
464 head later." Glenn also relayed that he had actually seen a decrease in players wearing

465 “protective head gear” at practices and games following the introduction of the new guidelines.
466 In addition, Joel noted that other coaches at his club disagreed with the guidelines and planned to
467 introduce heading to their players despite not knowing if they were “technically allowed” to. The
468 remaining two rejectors and skeptics (Miles and Gábor) acknowledged that the majority of club
469 officials, fellow coaches, and parents did not agree with their views (see Table 1) and so they
470 strategically complied with them:

471 I did have one of my [players] whose mom would not let her head the ball. . . . She would
472 move out of the way and everything. And so obviously, the mom had been influenced in
473 a way she would not allow her daughter to do it. . . . It was very frustrating. (Miles,
474 rejector, formal interview)

475 Finally, it was apparent that the filtering of the new USSF guidelines (USS, 2017) on
476 heading through several layers of bureaucracy, each of which had slightly different
477 interpretations of the guidelines, and the confusion this caused, provided the coaches in all three
478 groups with support or cover for their own perspectives and practices and allowed them to
479 choose the interpretations they aligned with. For example, USYS, an organization that existed a
480 layer below the USSF, mandated that players under 10 years of age would not be allowed to head
481 the ball during practices or games (USYS, 2019). By contrast, the two state associations to which
482 the coaches’ clubs belonged banned heading in games for players on under 11 teams, whereas
483 other nearby state organizations did not. Furthermore, the tournaments to which the coaches took
484 their teams, and that were organized by different clubs, had their own and differing
485 interpretations of the new USSF heading guidelines as well. Often these clubs ignored the new
486 guidelines altogether, thus serving to legitimize and reinforce the perspectives and practices of
487 the rejectors and skeptics. At Gábor’s club, for instance, an under 10 team attended a tournament

488 where heading was “allowed.” Similarly, Yannick explained that when a coach took a team to a
489 tournament, the best policy was to “ask the referee [what the rules regarding heading were]
490 before the game and go, ‘Hey, can we head the ball?’ And usually they would let us do it.”
491 During the study, it also became apparent that most referees did not enforce the USSF guidelines
492 either. Specifically, on the few occasions that heading was observed referees did not give indirect
493 free-kicks against the perpetrator because the header was “not intentional.” This form of
494 officiating by referees also served to support the perspectives and practices of the rejectors and
495 skeptics in the study:

496 I’ve seen plenty of these [unintentional headers] this weekend not called [as indirect free
497 kicks]. The last coach we played against was a referee assignor and he said accidental
498 headers should not be called as a foul. Calling them only disrupts the flow of the game.
499 (Miles, rejector, field notes, game 2)

500 **Summary and Conclusions**

501 To our knowledge, this was the first study that described youth soccer coaches’
502 perspectives and practices regarding the teaching and coaching of heading following the USSF’s
503 (USS, 2017) introduction of new guidelines regarding this soccer skill. In addition, it was the
504 first study to examine how coaches’ perspectives and practices were shaped by their
505 occupational socialization. Key findings were that the coaches fell into one of three groups.
506 Rejectors mostly followed the guidelines, but were reluctant to do so because they did not think
507 they were necessary to protect their players’ health and thought they had a negative impact on
508 player development. Acceptors fully embraced the new guidelines because they believed they
509 kept players safe and had a positive impact on player development. Skeptics questioned the
510 scientific evidence linking heading to brain injury and believed the new guidelines had been

511 introduced by the USSF to avoid lawsuits. Consequently, their main motivation for following the
512 new guidelines carefully was to avoid the legal consequences of not doing so.

513 The study also revealed that the coaches' acculturation had a powerful impact on their
514 reading and interpretation of the new guidelines on heading. The primary socialization agent was
515 the media coverage of heading and its links to brain injury. There was also some indication that
516 the degree to which the coaches had suffered from concussions and the style of soccer they had
517 grown up playing influenced their views and actions. The acceptors' coach education served to
518 reinforce their views about coaching heading, whereas the rejectors and skeptics disagreed with
519 their formal training and strategically complied with or attempted to strategically redefine it.
520 Similarly, the cultures of their soccer clubs reinforced the acceptors' and some rejectors' and
521 skeptics' beliefs about coaching heading. Other rejectors and skeptics, however, encountered
522 soccer club cultures that clashed with their own views on heading and so strategically complied
523 with them. The confusion caused by differing interpretations of the new guidelines regarding
524 heading by different governing bodies, organizations, clubs, and referees allowed each group of
525 coaches to justify its own perspectives and practices.

526 If the findings of the current study transfer to other coaches, they suggest four main
527 practical implications for youth soccer in the United States. First, coach educators need to be
528 aware of the different ways in which coaches perceive and react to the new guidelines on
529 heading so that they can counter faulty perspectives more effectively. Second, those in more
530 powerful positions within the different organizations through which youth soccer is delivered at
531 the various levels in the United States should strive to provide a more uniform interpretation of
532 the new guidelines on heading so as to avoid confusion among coaches (and referees) and allow
533 multiple readings of new guidelines to flourish in the first place. Finally, and more generally,

534 knowledge of how the different forms of socialization interact to shape the views and pedagogies
535 of coaches, and the ways in which coaches sometimes fight back against this socialization,
536 should enable coach educators to develop more effective programs.

537 Future research in this area obviously needs to be carried out to determine to what extent
538 the findings of the current study transfer to other male coaches in other parts of the country.
539 There is also a need to conduct similar research with female soccer coaches and coaches of color.
540 Perhaps the patterns of socialization differ for female coaches or coaches of color and new
541 perspectives and practices on the teaching and coaching heading will be unearthed. More
542 research of this nature also needs to be completed if and when the science linking heading with
543 injury changes or becomes more nuanced and facilitates changes in the guidelines covering
544 heading in youth soccer.

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Table 1*Coaches' Socialization Profiles*

Biographic Detail	Participants								
	Rejectors				Acceptors			Skeptics	
	Yannick	Nathaniel	Miles	Luka	Yohan	Julián	Glenn	Gábor	Joel
Age (years)	34	43	39	59	53	40	51	42	26
Age/gender last coached	U9/girls ¹	U11/boys	U10/girls	U11/girls	U11/boys	U10/boys	U11/girls	U9/boys	U11/boys
Size/focus of soccer club	Large/ Performance	Large/ Performance	Small/ Performance	Large/ Performance	Large/ Performance	Small/ Recreational	Large/ Performance	Small/ Recreational	Large/ Performance
Highest playing level	Adult Recreation	High School	College	College	Professional	College	Professional	College	High School
Positions played	Center Forward	Central Defender	Wing	Full-back	Goalkeeper	Full-back	Midfield	Central Defender	Midfield
Perceptions of heading ability	Low	Low	Low	Average	Average	High	Average	High	High
Estimated number of concussions	0	2	0	3	2	3	2	0	0
Coaching experience	14 years	16 years	7 years	35 years	30	5	30 years	15	2 years
Employment status	Full-Time	Full-Time	Part-Time	Full-Time	Part-Time	Volunteer	Full-Time	Volunteer	Part-time
Coaching qualifications	D ²	B	D	A	A	D	A	D	E
Coping strategy during coach education	Strategic Redefinition	Strategic Compliance	Strategic Redefinition	Full Compliance	Full Compliance	Full Compliance	Strategic Compliance	Strategic Compliance	Strategic Redefinition
Club culture	Supportive	Supportive	Unsupportive	Supportive	Supportive	Supportive	Supportive	Unsupportive	Supportive

Note. ¹Denotes under 9 years of age, under 10 years of age, and under 11 years of age. ²The A license is the highest USSF qualification for youth coaches and the E license is the lowest qualification