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**“From a Learning Perspective, It's a Better Way for Them to Learn”: Impact of an
Education Program on Two Youth Soccer Coaches’ Perspectives and Practices**

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Abstract

Purpose: To describe: (a) the impact of a progressive coach education program (CEP) on two grassroots youth soccer coaches' perspectives and practices, and (b) the factors that helped and hindered the CEP's effectiveness.

Method: Occupational socialization theory framed the study. Andros and Christian were observed during the CEP and pre- and post-CEP while coaching practices and games. Data were collected with four qualitative techniques and two systematic observation instruments. Qualitative data were reduced to themes by employing analytic induction and constant comparison. Descriptive statistics were computed for the categories in the systematic observation instruments.

Findings: The CEP had a significant impact on Andros and a negligible one on Christian. The two coaches' occupational socialization helped explain these differential effects.

Conclusions: The study suggests that CEPs should have a greater impact on coaches if they are relatively lengthy, include follow-up support, and coach educators are aware of coaches' acculturation and organizational socialization.

Keywords: Occupational socialization, sport pedagogy, teaching styles, play practice play

47 **“From a Learning Perspective, It's a Better Way for Them to Learn”:** Impact of an
48 **Education Program on Two Youth Soccer Coaches’ Perspectives and Practices**

49 In an effort to improve standards of play, enjoyment, and safety, in the last 40 years
50 governing bodies of youth sport have increasingly required coaches to be certified through
51 coach education programs (CEPs; Chapman et al., 2020; McCullick et al., 2009; Søvik et al.,
52 2017). For example, in the United States the Ladies Professional Golf Association (LPGA)
53 (McCullick et al., 2005) and the United States Soccer Federation (USSF) (Quinn et al., 2012)
54 have implemented CEPs. To date, the effectiveness of these CEPs has not been widely assessed
55 (Cushion et al., 2010; Trudel et al., 2010; Langan et al., 2013), although the evidence we do have
56 suggests that CEPs have, in general, not been a huge success (Stodter & Cushion, 2014).
57 Specifically, the data indicate that some coaches find it difficult to use content taught in CEPs
58 (Gilbert & Trudel, 1999), that others have little interest in or value for that content in the first
59 place (Chesterfield et al., 2010), and that many coaches perceive their own participation in sport
60 as players and coaches to be more useful than CEPs (Cushion et al., 2003; Gilbert & Trudel,
61 2001; Erickson et al., 2009; Maclean & Lorimer, 2016).

62 To counter this state of affairs, governing bodies of youth sport have, in recent years,
63 employed a variety of progressive pedagogical theories and models in an attempt to improve the
64 quality of CEPs. In general, these theories and models have led to CEPs becoming increasingly
65 learner-centered (Araya et al., 2015; Paquette & Trudel, 2018a, 2018b). For example, CEPs have
66 been based on achievement goal theory and self-determination theory (Søvik et al., 2017) and
67 included mentoring (Cushion et al., 2003; Adams et al., 2016), support after CEPs have
68 concluded (Langan et al., 2013), the formation of communities of practice (Lave & Wenger,
69 1991; Culver & Trudel, 2006), problem-based (Jones & Allison, 2014) and competency-based

70 learning (Demers et al., 2006), experiential learning (Gilbert & Trudel, 2001), and reflection
71 (Adams et al., 2016; Callary et al., 2014; Søvik et al., 2017).

72 The small amount of research that has been conducted on this new type of learner-
73 centered CEP has yielded variable results. More positively, data suggest that coach educators can
74 succeed through employing a constructivist approach (i.e., asking coaches to actively construct
75 knowledge as opposed to passively receiving new information) and a variety of direct (i.e.,
76 teaching styles in which coach educators make most of the decisions) and indirect (i.e., teaching
77 styles in which student coaches make more of the decisions) teaching styles, completing regular
78 assessments, and linking their evaluations of coaches tightly with objectives (Blumberg &
79 McCann, 2009; Paquette & Trudel, 2018a, 2018b). On the downside, a case study of one youth
80 soccer coach indicated this kind of CEP to be relatively ineffective (Authors, 2022).

81 The objective of the current study was to partially replicate our previous research
82 (Authors, 2022) (i.e., in the current study we examined a different CEP, taught by a different
83 coach educator, and attended by different coaches) in order to determine whether its negative
84 findings transferred to other coaches and the contexts in which they worked. The purposes of the
85 current study, therefore, were to describe: (a) the impact, if any, of a progressive CEP on
86 grassroots youth soccer coaches' perspectives and practices, and (b) the factors that helped and
87 hindered the CEP's effectiveness.

88 **Theoretical Perspective**

89 The theoretical perspective that guided this study was occupational socialization theory
90 (Lawson, 1983a, 1983b; Richards et al., 2014). This perspective has been employed by sport
91 pedagogy scholars to determine why school physical education teachers and university teacher
92 educators believe and act as they do (e.g., Brunson & Curtner-Smith, in press, Prior & Curtner-

93 Smith, 2020). Some researchers have also adapted occupational socialization theory to, for
94 example, study the impact an out-of-school swimming program for children and youth (Susnara
95 et al., 2022), how principals', parents', and students' beliefs about school physical education are
96 shaped (George & Curtner-Smith, 2016, 2017, 2018), and to examine the influence of a
97 university coach development curriculum on preservice coaches (Kuklick et al., 2021). As in our
98 previous research (Authors, 2022), in the current study we also adapted occupational
99 socialization theory in order to assess the influence of a CEP on grassroots soccer coaches.

100 Specifically, we were interested in discovering the extent to which the coaches'
101 *professional socialization* (i.e., their formal training during the CEP) influenced their
102 perspectives and practices, and how the coaches' *acculturation* (i.e., personal and cultural
103 influences on a coach prior to engaging in a CEP) and *organizational socialization* (i.e.,
104 influence of soccer club culture) mediated this influence. As in our original research (Authors,
105 2022), our goal was to identify components of the CEP that socialized the coaches towards
106 valuing and using more effective pedagogies or made this objective more difficult to realize. Our
107 original research (Authors, 2022) indicated that components of the CEP that helped coach
108 educators were their expertise, the indirect and experiential nature of the CEP, and the new
109 content and organizational methods coach educators espoused. Conversely, components of the
110 CEP that hindered the coach's positive socialization were its short duration and the fact that there
111 was no follow-up support provided post-CEP.

112 Socialization research has often indicated that the acculturation phase has a greater
113 influence on teachers' practices and perspectives than professional socialization (i.e., Lawson,
114 1983a, 1983b; Prior & Curtner-Smith, 2020). In the current study, we were interested in
115 determining the extent to which the coaches' acculturation was congruent with their professional

116 socialization and so supported it. In our previous study (Authors, 2022), we found that the coach's
117 acculturation was indeed more powerful than and served to negate the impact of a CEP. Key
118 elements in the coach's acculturation responsible for this finding were his childhood and youth
119 coaches and physical education teachers, and the media which portrayed coaches as "being in
120 control."

121 Research has also indicated that the organizational socialization phase is often more
122 powerful than a teacher's professional socialization and can "wash out" any positive effects of
123 physical education teacher education (Prior & Curtner-Smith, 2020; Richards et al., 2014). In our
124 previous study (Authors, 2022), we also found the soccer coach's organizational socialization to be
125 more powerful than his professional socialization. Since the coach's organizational socialization
126 was conservative, it negated the effectiveness of the CEP. Key socializing agents that facilitated
127 this negative impact were the beliefs and expectations of the head coach, players, and parents that
128 contradicted the perspectives and practices espoused in the CEP.

129 **Method**

130 **Design, Participants, and Setting**

131 Following Rink (1989), and working within the interpretive paradigm as we had in our
132 original study (Authors, 2022), we conducted a case study of two grassroots soccer coaches who
133 participated in the CEP. In congruence with many qualitative researchers, we chose to study two
134 coaches, rather than a larger sample, so we could provide an in-depth description and analysis of
135 the influences of the CEP and occupational socialization. Approval from our institutional review
136 board, the USSF, and the state soccer association was gained prior to commencing the study.
137 Both participants and their primary coach educator were given pseudonyms in order to protect
138 their identities.

139 We purposefully selected Andros and Christian for the study because they were
140 grassroots soccer coaches enrolled in the CEP. Since the CEP was aimed at beginning coaches,
141 we wanted to study participants who were “real beginners” in that they had received no prior
142 training and possessed limited content and pedagogical knowledge. The primary coach educator,
143 who knew the participants, identified them as fitting these criteria. The first author confirmed the
144 two coaches’ status as authentic beginning coaches during a short informal interview prior to the
145 study commencing.

146 Andros identified as male, was White, and 43 years of age. He had played recreational
147 soccer and basketball in his youth and had coached recreational soccer to boys and girls aged 6
148 to 18 years for the past 10 years. At the time the study was conducted, Andros was coaching a
149 team of 15 under 13 boys for a club situated in a suburban middle class neighborhood within a
150 large city in the midwestern United States. The team practiced twice a week for a total of three
151 hours, and played one 11-a-side match per week against other teams in a regional recreational
152 league. The youth soccer club, of which Andros was also the unpaid director, was well-
153 supported, though not well funded. It was staffed by 26 unpaid volunteer coaches and catered to
154 600 players ranging in ability and from 4 to 19 years. Club facilities included 10 full-size
155 outdoor pitches and one full-size indoor pitch.

156 Christian identified as male and Latino, was 41 years of age, and coached at the same
157 club as Andros. He had played high school (American) football but no soccer in his youth. At the
158 time the study began, Christian had coached youth soccer for six years and was working with a
159 team of 16 under 15 boys that practiced two times per week for a total of 180 minutes, and
160 participated in weekly 11-a-side matches against teams in a local recreational league.

161 A key informant for the study was Wilfred, the primary instructor of the CEP. Wilfred
162 was 35 years old and identified as Black and male. His qualifications included the prestigious
163 USSF A coaching license and USSF Grassroots Instructor License. He worked full-time for his
164 state association training coaches and working with youth teams ranging in experience and
165 ability.

166 **The CEP**

167 Andros and Christian were enrolled in a CEP that led to participants being awarded the
168 USSF Grassroots Coaching License (United States Soccer [USS], 2018). This was the USSF's
169 entry level coaching license for neophyte coaches who worked with inexperienced recreational
170 players. For many youth soccer coaches, this might be the only formal training they received. To
171 improve their effectiveness, the USSF had recently updated their series of coaching
172 qualifications so that they emphasized coach educators' and coaches' use of learner-centered
173 pedagogy and indirect teaching styles. Moreover, the USSF also highlighted the need for CEPs
174 to include "experiential learning" for student coaches working towards their various
175 qualifications (USS, 2018).

176 The key goals of the CEP were the acquisition of pedagogies and content knowledge that
177 could be used with recreational players learning to play in a 11 vs. 11 game (United States
178 Soccer [USS], 2017). Pedagogically, the objective was to train coaches to use an instructional
179 model termed "play-practice-play" or "P-P-P" that was very similar to and borrowed elements
180 from Teaching Games for Understanding (TGfU; Bunker & Thorpe, 1982; Metzler & Colquitt,
181 2021; Thorpe et al., 1984). In congruence with those who have advocated for an understanding
182 approach to be used for the teaching of games in schools (Metzler & Colquitt, 2021), the
183 implication was that coaches who employed play-practice-play would be superior to those who

184 used more direct traditional methods. The first phase of this instructional model involves players
185 engaging in small-sided and conditioned games (e.g., a 4 vs. 4 game with no goalkeepers and in
186 which the goals are small so as to promote fast counterattacking) and being asked to solve
187 tactical and skill-related problems prompted by a series of questions asked by their coaches.
188 During the second phase, players engage in practices designed to improve their use and
189 comprehension of the tactics and skills targeted. Finally, the third phase of the model involves
190 returning to small-sided game play and a focus on demonstrating improvement in tactical and
191 skill execution. Content included in the CEP included the skills of passing, dribbling, and
192 shooting and the tactics of building possession in the opponent's half, creating space in attack,
193 and outnumbering opponents.

194 The CEP was delivered by Wilfred to Andros, Christian, and 10 other beginning coaches.
195 It began with a 20-minute online "introductory module" that outlined the play-practice-play
196 model and described four phases of soccer: attacking, defending, transition from defense to
197 attack, and transition from attack to defense. The main component of the CEP was a two-hour
198 on-field session in which the student coaches took turns in working with a group of 16 under 15
199 boys using the play-practice-play model and were provided feedback by Wilfred and each other.
200 This on-field session was sandwiched between two hour-long classroom meetings. In the first of
201 these, Wilfred led discussions on and provided further explanation of the play-practice-play
202 model and the phases of soccer matches. In the second, he asked the coaches to reflect on their
203 use of the play-practice-play model and answered any further questions they had about it.

204 **Data Collection**

205 *Fidelity Data*

206 The first author completed a task analysis of what occurred during the CEP. Specifically,
207 he recorded the activities in which Wilfred and the student coaches engaged during the CEP's
208 on-field and classroom sessions on a minute-by-minute basis.

209 ***Qualitative Data***

210 The first author employed four qualitative data collection techniques. *Formal interviews*
211 were conducted with Andros and Christian prior to and directly following the CEP. During the
212 first interview, the coaches supplied demographic information (example question: What is your
213 race?), described relevant aspects of their acculturation (example question: Did you participate in
214 youth sports?), and explained their perspectives and practices regarding coaching soccer
215 (example question: How would you describe your coaching style?) In the second interview, the
216 coaches described the impact, if any, the CEP had on their perspectives and practices (example
217 question: How has your coaching changed?), and the components of the CEP they found most
218 useful (example question: Which components of the CEP had the most impact on you?). Wilfred
219 also completed formal interviews before and after the CEP. In his first interview, Wilfred
220 supplied demographic information, provided his formal coaching qualifications, relayed his
221 playing and coaching experiences (example prompt: Describe your soccer playing experiences.),
222 and explained the goals he had for the CEP and the methods by which he hoped to realize them
223 (example question: What are the objectives of the CEP?). In his second interview, he commented
224 on the degree to which he perceived the CEP had been effective in terms of influencing Andros'
225 and Christians' perspectives and practices (example question: To what extent, do you think
226 Andros and Christian have changed their perspectives and practices as a result of the CEP?).
227 Formal interviews were conducted by video conference, phone, or in person and were audiotaped
228 and transcribed verbatim. They ranged in duration from 20 to 46 minutes.

229 During *non-participant observations* of the classroom meeting and on-field components
230 of the CEP, the first author made detailed field notes describing the tasks Andros and Christian
231 completed (e.g., coaching the group of under 15 boys), their reactions to these tasks, and their
232 interactions with Wilfred, the other student coaches, the boys they coached, and each other. The
233 first author also completed non-participant observations of Andros and Christian coaching their
234 teams prior to the CEP (Andros: 3 practices and 3 games; Christian: 2 practices and 2 games)
235 and following the CEP (Andros: 3 practices and 3 games; Christian: 3 practices and 3 games).
236 Specifically, the first author made field notes describing the coaches' pedagogies and their
237 players' reactions to them.

238 Whenever the opportunity arose, *informal interviews* were completed with Andros,
239 Christian, and Wilfred prior to, following, and during the CEP. Specifically, the first author
240 completed 87 informal interviews with Andros and 56 informal interviews with Christian prior to
241 and following the CEP; and 8 informal interviews with Andros and 15 informal interviews with
242 Christian during the CEP. In addition, the first author completed 6 informal interviews with
243 Wilfred. Informal interviews ranged in duration from a few words to approximately 30 minutes.
244 During informal interviews, Andros and Christian relayed their views about the content of the
245 CEP (example question: What have you learned about the tactics used to create space in attack?)
246 and described the pedagogies they employed in practices and games (example prompt: Describe
247 the methods you just used when working with the group of boys.). Wilfred explained the
248 rationale for the content he taught in the CEP and the methods by which he delivered this
249 content. He also shared his views on the effectiveness of the CEP (example question: Do you
250 think that the student coaches are buying into play-practice-play?). Field notes were made on the
251 contents of informal interviews as soon after they had occurred as possible. Lastly, a *document*

252 *analysis* was conducted on the CEP materials (e.g., PowerPoint presentations, articles on
253 pedagogy, meeting and on-field plans) supplied by Wilfred during which notes were made on the
254 documents' contents and how Wilfred employed them. In addition, a similar analysis was
255 completed on documents supplied by Andros and Christian (e.g., pre- and post-program practice
256 plans).

257 ***Systematic Observation of Practices and Games***

258 The practices and games in which non-participant observations were conducted were also
259 filmed. Specifically, Andros was filmed coaching a total of 548.00 minutes in six practices
260 (275.67 minutes pre-CEP and 272.33 minutes post-CEP) and 491.33 minutes in six games
261 (272.33 minutes pre-CEP and 219.00 minutes post-CEP). Christian was filmed coaching a total
262 of 339.67 minutes in five practices (161.67 minutes pre-CEP and 178.00 minutes post-CEP) and
263 421.67 minutes in five games (185.00 minutes pre-CEP and 236.67 minutes post-CEP).

264 Filmed practices and games were coded with two systematic observation instruments.
265 These were a modified version of the Coach Analysis and Intervention System (CAIS; Cushion
266 et al., 2012) and the Instrument for Identifying Teaching Styles (IFITS; Curtner-Smith et al.,
267 2001). Both instruments recorded data pertinent to the goals of the CEP.

268 The modified version of CAIS is a two-tiered duration and event recording instrument. It
269 includes states, forms of feedback, and types of questioning that are indicative of a more direct
270 coach-centered approach to coaching or a more indirect learner-centered approach to coaching
271 and thus, in the current study, provided data that enabled us to ascertain the degree to which the
272 CEP was effective. The first tier uses time stamping to record the time in which players engage
273 in activities within four states: game state, playing state, practice/training state, and
274 transitional/management state. The second tier records the number of times that a coach employs

275 different forms of feedback and questioning: specific feedback (positive), specific feedback
276 (negative), general feedback (positive), general feedback (negative), corrective feedback,
277 question (convergent), question (divergent). Definitions of states, feedback, and questioning are
278 provided in Table 1. Both CAIS tiers were used to code practices, while tier 2, only, was used to
279 code games.

280 IFITS, used to code practices, is an interval recording instrument that estimates the time
281 in which teachers/coaches use the five reproduction (i.e., direct) teaching styles [style A
282 (command), style B (practice), style C (reciprocal), style D (self-check), and style E (inclusion)]
283 and three production (i.e., indirect) teaching styles [style F (guided discovery), style G
284 (divergent), and style H (going beyond)] as originally identified by Mosston (1981).

285 Furthermore, IFITS estimates the amount of time teachers/coaches spend managing players.
286 Definitions of the teaching styles and management are provided in Table 1. A researcher
287 employing IFITS decides which teaching style is being used, or whether the players are being
288 managed, every 20 seconds. If two or more teaching styles are employed within an interval, the
289 most indirect style is given priority and recorded. When a teaching style is being employed and
290 players are also being managed during an interval, the teaching style is given priority and
291 recorded.

292 Practices and games were coded by the first author. He had been trained to use IFITS in a
293 previous project. Following van der Mars (1989), his CAIS training involved: (a) familiarizing
294 himself with the instrument's coding form, protocol, and the activities and behaviors recorded
295 and (b) 15 hours of practice coding filmed instruction. The process recommended by van der
296 Mars (1989) was used to establish intra-observer reliability for both instruments. Specifically, the
297 first author coded a non-study filmed practice designated as the "reliability practice" and then

298 recoded the practice again seven days later. The length of this reliability practice was 90 minutes.
299 The second coding was compared to the original using time spent in activities (CAIS first tier),
300 event-by-event (CAIS second tier), and interval-by-interval (IFITS) comparisons. These checks
301 revealed agreement percentages of 93.98% (CAIS first tier) and 90.55% (CAIS second tier), and
302 90.41% (IFITS), therefore surpassing the 80% threshold suggested by van der Mars (1989).
303 Further reliability checks for "observer drift" were carried out by the first author following the
304 coding of every three practices or games. Each check involved the first author recoding the
305 reliability practice comparing the new coding with the original. On each occasion, the agreement
306 percentage was greater than 80%.

307 **Data Analysis**

308 *Fidelity Data*

309 The first author calculated the percentage of time in which the student coaches were
310 engaged in the activities that comprised the CEP. These were active learning; observing each
311 other; interacting with each other; planning, organizing, managing, and setting up equipment;
312 observing videotape of coaches using the play-practice-play model; and engaging in small group,
313 paired, and full group discussions. The first author also computed the percentage of time in
314 which Wilfred lectured student coaches.

315 *Qualitative Data*

316 In Phase 1 of the analysis, the first author sorted data from all sources into sets that
317 pertained to each of the research questions: (a) impact of the CEP on Andros' and Christian's
318 perspectives and practices, and (b) factors that helped and hindered the CEP's effectiveness.
319 Subsets of set 2 were created by further sorting these data into those concerned with professional
320 socialization, acculturation, and organizational socialization. In phase 2, the first author coded

321 the data in the first set and the three subsets of set 2 by employing analytic induction and
322 constant comparison (Patton, 2015). Data chunks were identified, circled, and given a number
323 and descriptor. Coded data were then grouped to form themes that were given a title. The second
324 author acted as a peer debriefer (Lincoln & Guba (1985) throughout this process and provided
325 the first author with feedback on emerging codes and themes. In phase 3, extracts of data were
326 selected to illustrate the themes in the findings section of this manuscript.

327 Trustworthiness and credibility were established by three techniques (Patton, 2015).
328 Member checks were conducted within informal interviews and when Andros, Christian, and
329 Wilfred examined an earlier version of this manuscript for factual accuracy. Interpretations of the
330 data were triangulated across data sources. Discrepant cases found in phase 2 were used to
331 modify codes and themes.

332 *Systematic Observation Data*

333 Raw data generated by CAIS and IFITS were collapsed for each coach for: (a) pre-CEP
334 practices and (b) post-CEP practices. Further, raw data generated by CAIS (second tier only)
335 were collapsed for each coach for (c) pre-CEP games and (d) post-CEP games. Percentages of
336 IFITS intervals for each teaching style and management were calculated for pre- and post-CEP
337 practices. Percentages of time in which players engaged in the activities within the CAIS practice
338 states were computed for pre- and post-CEP practices. The percentages for which Andros and
339 Christian used the various types of questioning and feedback coded by CAIS were also
340 calculated for pre- and post-CEP practices and games.

341 **Findings**

342 We begin this section by describing the fidelity of the CEP. Next, we examine the
343 impact of the CEP on Andros' and Christian's perspectives and practices. Finally, we describe
344 the factors within the coaches' socialization that helped and hindered the CEP's effectiveness.

345 **Fidelity of the CEP**

346 The task analysis completed by the first author confirmed that the CEP delivered by
347 Wilfred was congruent with the guidelines for an indirect focus provided by the USSF (USS,
348 2017, 2018). Specifically, the student coaches spent much of their time in active learning
349 coaching the under 15 boys (13.80%); observing each other in action (12.12%); interacting with
350 each other (15.49%); planning (1.35%); organizing, managing, and setting up equipment
351 (9.09%); observing videotape of coaches using the play-practice-play model (1.01%); and
352 engaging in small group (2.69%), paired (1.68%), and full group (24.24%) discussions. In
353 contrast, Wilfred lectured for only 17.17% of the CEP.

354 **Impact of the CEP on Andros' and Christian's Perspectives and Practices**

355 *Perspectives and Practices Before the CEP*

356 Prior to the CEP commencing, both coaches' primary goals were to produce "skilled"
357 players who "enjoyed" the game. A key difference between them, however, was that Andros was
358 product-focused and concerned about "winning and losing," whereas Christian was process-
359 focused, played down game results, and was concerned about providing a "positive learning
360 environment" in which his players got "lots of touches on the ball" so they would "learn and love
361 to play."

362 Both coaches' pedagogies aligned with their goals and were traditional. Practices included
363 both skill drills and game play and the main mode of teaching was direct in nature. During games,
364 the coaches were also very direct in their interactions with players. Specifically, and as shown in
365 Table 2, during practices players of both coaches spent relatively little time in game state and more
366 time in playing state. Andros' players spent a large proportion of their time in practice/training
367 state, a pattern that would have been matched by Christian's players but for the fact that they spent

368 a good deal of time in management state. Data in Table 2 also indicate that the predominant
369 teaching style employed by both coaches during practices was the practice style, they did not use
370 any of the other reproductive styles, and rarely used the productive styles. Moreover, the table
371 reveals that the main source of feedback provided by the coaches was general in both practices and
372 games. Finally, data in Table 2 show that in both practices and games the coaches spent little time
373 asking questions of either type, the exception being Andros who spent a reasonable amount of time
374 asking convergent questions in practices.

375 *Perspectives and Practices Following the CEP*

376 Both qualitative and systematic observation data indicated that the CEP influenced Andros'
377 perspectives and practices significantly and positively. Following the CEP, Andros suggested that
378 the “much more tactically based” “P-P-P” indirect method that Wilfred espoused was an
379 improvement on his previously direct pedagogy and explained that “from a learning perspective,
380 it's a better way for them [i.e., his players] to learn.” Andros also noted that “looking at [coaching]
381 from a developmental standpoint, it does make a lot more sense to . . . let them [i.e., players] lead
382 themselves through it. We can . . . guide them along the way.” Finally, he relayed that he intended
383 play-practice-play to become his main “method” going forward:

384 Quite honestly, that's the way I had been doing all my practices . . . in that old format [i.e.,
385 skill drills and direct teaching styles]. And this was a lot different. I mean, play-practice-
386 play is a completely different way of approaching the training sessions. (Andros, formal
387 interview 2)

388 In contrast, while Christian was intrigued and positive about play-practice-play, particularly
389 for “younger children,” he indicated that he was not ready to jettison his traditional direct

390 pedagogy. He also explained that he had tried to incorporate elements of play-practice-play into his
391 coaching and that some of these efforts at doing this had been unsuccessful:

392 Games started with three versus three. We tried that, but then we would notice that because
393 of the gaps [i.e., in skill level between players], some of the kids were just really strong and
394 running over everybody. Some of the kids were not getting the right touches [i.e., enough
395 practice], and we . . . added . . .10 minutes of more technical [drills]. (Christian, formal
396 interview 2)

397 Data in Table 2 indicate that the CEP had more influence on both coaches' pedagogies
398 during practices. Conversely, pedagogical shifts were negligible during games. Specifically, in
399 congruence with play-practice-play, during practices Andros increased the amount of time his
400 players spent in game state and reduced the proportion of time they spent in practice/training state
401 dramatically. Moreover, while Christian's players did not participate in game state at all following
402 the CEP, they spent considerably more time in playing state and the amount of time they spent in
403 practice/training state increased as well, mainly because Christian improved his managerial skills.
404 Table 2 also reveals the degree to which Andros became much more indirect in his teaching
405 following the CEP. Specifically, the amount of time he spent in practice style declined
406 significantly and the time in which he used productive teaching styles, particularly guided
407 discovery, increased substantially. In contrast, Christian's post-CEP pattern of teaching style use
408 was largely unchanged. Finally, data in Table 2 reveal that during practices both coaches increased
409 the number of questions they asked players following the CEP, the most dramatic changes being in
410 Andros' use of convergent questions and Christian's use of divergent questions.

411 **Factors that Helped and Hindered the CEP's Effectiveness**

412 *Professional Socialization*

413 Three of the elements that helped the CEP’s effectiveness were similar to those we had
414 discovered in our previous study (Authors, 2022). Most importantly, both Andros and Christian
415 enjoyed the indirect and participatory nature of the CEP:

416 I just felt like this was more involved, more in-depth. . . . Let's sit in the classroom. Let's
417 talk about this stuff. What’s our focus? What's this about? And then going out on the field,
418 and . . . breaking things down and working on it that way. And then kind of coming back
419 for another hour. I think that format is cool. (Andros, formal interview 2)

420 In addition, the two coaches explained that the feedback they got from Wilfred, the CEP instructor,
421 was key:

422 And I remember the feedback I've gotten. A “Hey, but right now you're focusing on
423 defense.” Or if we were focusing on creating opportunities, I'm like, “Ah, okay, that's
424 right.” That was very helpful for the tactical perspective. . . . I don't have to think of highly
425 tactical concepts. Make sure they get the basic concepts. (Christian, formal interview 2)

426 Moreover, the fact that the CEP included content and concepts that were “new” to Andros
427 and Christian meant that they found it interesting and it held their attention. For Andros, learning a
428 new pedagogy that gave his players “an opportunity to kind of figure some of this stuff out on their
429 own” was the main attraction. Conversely, Christian was particularly pleased to learn methods
430 through which he could decrease his management time such as “better preparation” and thinking
431 about the “kind of resources” he had at his disposal.

432 One element that helped make the CEP more effective that we had not encountered in our
433 previous study (Authors, 2022) was the community of practice (Lave & Wenger, 1991) Christian,
434 in particular, noted had been formed by the coaches enrolled in the CEP. Specifically, he espoused
435 the value of “talking with other coaches [who] go through what they're going through” and

436 explained that the group was going to “try to get together again . . . and just have more of a support
437 system and idea sharing.”

438 The two elements that hindered the CEP’s effectiveness were congruent with those
439 unearthed in previous research (Authors, 2022; Langan et al., 2013; Søvik et al., 2017). These were
440 the brevity of the CEP and lack of “follow-up” support for coaches after the CEP which Wilfred
441 believed led to “superficial” learning at best: “I think we accomplish that [i.e., teaching new
442 pedagogies] in terms of informing them, and making them aware. Maybe not necessarily a deep
443 understanding of what we're doing.”

444 *Acculturation*

445 In congruence with past research (Authors, 2022; Brunson & Curtner-Smith, in press;
446 Prior & Curtner-Smith, 2020), both coaches’ acculturation was shown to be key in determining the
447 degree to which they were influenced by the CEP. Christian’s acculturation was more powerful
448 than and contradicted the main message espoused by Wilfred in the CEP regarding the use of
449 indirect pedagogies. Specifically, Christian’s key influences in this phase of his socialization were
450 his high school (American) football coaches who “were tough,” evidently controlled most aspects
451 of practices and games, and employed direct teaching styles. His admiration of one coach, in
452 particular, who “was very calm, analytical [and] very organized” meant that he aspired to coach in
453 the same way. Of secondary importance in Christian’s acculturation were two media influences.
454 First, he admired Tony Dungy, a national (American) football coach, who appeared to be “in
455 control” of his team and promoted traditional values. Second, he was a big fan of “The Karate
456 Kid” martial arts movie (Avildsen, 1984) in which a successful coach is portrayed as “focusing on
457 basic things” including “repetitions” while practicing skills. Collectively, these influences made it
458 difficult for Christian to comprehend how the play-practice-play pedagogy could yield results that

459 were similar or superior to those produced by traditional direct pedagogy when it came to teaching
460 technical skills. Specifically, he did not realize that within constructivist “understanding
461 approaches” to teaching games like P-P-P, it is perfectly acceptable to teach skills in isolation in
462 situations when instructors think it necessary.

463 By contrast, Andros’ acculturation had not had a significant impact in terms of shaping his
464 beliefs about teaching and coaching. He recalled his own youth sport coaches as being
465 “entertainers” who “made sure [he and other children] were enjoying ourselves” and noted that he
466 did not aspire to be like them. Moreover, he was aware that the media generally “portrays coaches
467 as hard-line and very, very regimented,” but rejected this portrayal. Consequently, Andros was
468 much more open to the perspectives and practices on which Wilfred focused during the CEP.

469 *Organizational Socialization*

470 Again, in line with previous research (Authors, 2022; Prior & Curtner-Smith, 2020;
471 Richards et al., 2014), Christian’s organizational socialization proved to be more powerful than
472 and contradicted the perspectives and practices espoused by Wilfred in the CEP. Specifically, other
473 coaches with whom he interacted at his club rejected the play-practice-play indirect pedagogy
474 Wilfred had championed, instead embracing and reinforcing the traditional direct approach with
475 which Christian was familiar and more comfortable. Moreover, Christian indicated that parents
476 would expect him to employ direct pedagogies when coaching their children, particularly as he had
477 “got some feedback [from] and talked to parents, and a lot of parents’ main concern right now is
478 on high school try-outs.”

479 Andros’ organizational socialization was similarly conservative, the main socializing
480 agents also being other coaches and parents. The fact that he was the director of his soccer club,
481 however, meant that he was in a more powerful position than Christian and able to reject and fight

504 In congruence with previous research (Authors, 2022), elements of the CEP that helped
505 to make it effective were its indirect and participatory nature, the instructor’s expertise, and the
506 inclusion of new content. Also in line with previous research (Authors, 2022; Gilbert & Trudel,
507 1999; Stodter & Cushion, 2014) were the two elements of the CEP that hindered its
508 effectiveness—its brevity and the lack of follow-up support provided for coaches. We also
509 suspect that the pedagogical improvements made in practices, particularly by Andros, did not
510 transfer to games because the main focus of the CEP was on coaching in practices. One new
511 finding in this study was that the CEP’s effectiveness was increased because the coaches enrolled
512 formed a community of practice (Lave & Wenger, 1991). The main socializing agents within the
513 two coaches’ acculturation were their own youth sport coaches and portrayals of coaches in the
514 media. Those in their organizational socialization were other coaches and parents.

515 As our earlier study (Authors, 2022) had also indicated, the main practical implications of
516 this study are that CEPs need to be relatively long and include follow-up support for coaches
517 after they have concluded. We suggest that this support is best provided by the instructor of the
518 CEP. Further, and as we have argued previously (Authors, 2022), the study indicates that coach
519 educators’ and their CEPs’ effectiveness might be improved were they to have an understanding
520 of the extent to which their charges’ occupational socialization helps or hinders them in teaching
521 new perspectives and practices such as play-practice-play. Moreover, CEPs’ potency might be
522 strengthened if student coaches were made aware of how their prior socialization can facilitate or
523 constrain their pedagogical development. Finally, the quality of CEPs might be improved if those
524 who organize them deliberately facilitate the formation of communities of practice among the
525 coaches being trained.

526 Future research in this line should include the examination of different types of CEP. It
527 should also be aimed at improving the pedagogy of youth sport coaches who possess a range of
528 experience and expertise and work with players of differing abilities. As well as studying
529 coaches with socialization profiles that indicate they are “ready” to change their perspectives and
530 practices (Kern et al., 2019), we think it particularly important that researchers investigate the
531 degree to which lengthy and powerful CEPs can change the perspectives and practices of
532 coaches who have experienced strong, contradictory, and antagonistic acculturation and
533 organizational socialization. Longitudinal research, in which the cumulative impact of
534 successive and increasingly more sophisticated CEPs on coaches is assessed, would also be
535 helpful. For example, and in this case, it might be that American youth soccer coaches’
536 professional socialization would be much stronger if they were encouraged or required to enroll
537 in more of the hierarchical series of CEPs designed by the USSF that follow the grassroots CEP
538 described in this study. Finally, we should stress that we think research on youth sport CEPs
539 would be more effective if it were conducted in both the interpretive paradigm, as we have done
540 in this study, and in the positivistic paradigm, within which different questions could be asked
541 and answered. Studies carried out in the critical paradigm that examined CEPs for both positive
542 and negative hidden and unintended effects on coaches would also be helpful.

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704 **Table 1**705 *Definitions of Behaviors and States Coded by the IFITS and CAIS*

Instrument	Definitions
IFITS	
Style A (Command):	The coach makes all the decisions. The coach demonstrates or explains a task for the players to emulate, then directs the players' practice by giving commands. The players react only when told to do so by the coach. The coach evaluates players' performances in terms of congruence with the prescribed task.
Style B (Practice):	The coach demonstrates or describes a task and the players practice the task at their own pace. The coach provides players with performance feedback.
Style C (Reciprocal):	The coach demonstrates or describes a task. The players then practice in pairs. One player (the doer) practices while the other player (the observer) evaluates his/her partner's performance and provides feedback based on criteria supplied by the coach. During the practice phase, the coach assists the observer while taking care not to take over the observer's role.
Style D (Self-Check):	The coach presents a task. Players practice at their own pace but are now responsible for analysing their own performances. During practice the coach does not provide performance feedback. Instead, his/her role is to help players hone their self-evaluation skills.
Style E (Inclusion):	The coach models a task with several levels of difficulty. At the beginning of the practice phase the players choose the level of difficulty at which they feel most comfortable. During practice they are encouraged by the coach to evaluate their own performances and decide when to change to a new level of difficulty.
Style F (Guided Discovery):	The coach asks a series of questions or sets a series of physical problems that when answered or solved lead the players to discover a desired skill or concept.
Style G (Divergent):	The coach asks a question or sets a physical problem to which there are many possible answers or solutions. The players then set about finding and evaluating alternative answers and solutions.
Style H (Going Beyond):	The players identify problems and set about finding and evaluating alternative solutions. The coach assumes the role of facilitator. This involves providing help when it is asked for and asking questions for clarification.
Management (M):	The time the coach is engaged in activity not related directly to instruction. This includes time spent beginning and ending the session, managing equipment, organizing, dealing with player behavior, and any other tasks other than instruction or class management.
CAIS	
Game state	Players participate in small-sided games or full-sided games in which they follow regulation rules and scoring.
Playing state	Players participate in conditioned games in which rules are changed to emphasize skills or tactics, games focused on phases of play (e.g., attack vs. defense), and games focused on maintaining possession.
Practice/Training state	Players participate in warm-up and cool-down activities, and individual or group skill drills and practices that can be unopposed or opposed.
Transition/Management state	Players are organized for or transition to new instructional games, practices or drills; move equipment; or engage in other activities not related to instruction
Specific Feedback (positive):	Coach makes positive statements about the quality of players' execution of skills and strategies.
Specific Feedback (negative):	Coach makes negative statements about the quality of players' execution of skills and strategies.
General Feedback (positive):	Coach makes general positive verbal statements or non-verbal gestures about players' performance (e.g., "well done" and thumbs-up gesture)
General Feedback (negative):	Coach makes general positive verbal statements or non-verbal gestures about players' performance (e.g., "poor effort" and thumbs-down gesture)
Corrective Feedback:	Coach makes statements aimed to improve player's performance of skills and strategies.
Question (convergent):	Coach asks a question of players to which there is a limited number of correct answers.
Question (divergent):	Coach asks a question of players to which there are multiple correct answers.

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709 **Table 2**710 *IFITS and CAIS Data Pre- and Post-CEP*

Instrument	Andros				Christian			
	During Practice		During Games		During Practice		During Games	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post
IFITS								
<i>Reproductive Styles</i>								
Style A (Command)	0.00%	0.00%			0.00%	0.00%		
Style B (Practice)	75.00%	45.29%			57.11%	69.46%		
Style C (Reciprocal)	0.00%	0.00%			0.00%	0.00%		
Style D (Self-Check)	0.00%	0.00%			0.00%	0.00%		
Style E (Inclusion)	0.00%	0.00%			0.00%	0.00%		
Style F (Guided Discovery)	3.39%	32.93%			0.62%	3.54%		
Style G (Divergent)	0.24%	2.94%			0.21%	1.49%		
Style H (Going Beyond)	0.00%	0.00%			0.00%	0.00%		
<i>Management</i>	22.37%	18.85%			42.06%	25.51%		
CAIS								
<i>States</i>								
Game State	7.05%	44.06%			10.31%	0.00%		
Playing State	22.85%	24.24%			28.04%	45.25%		
Practice/Training State	42.56%	4.28%			19.59%	28.49%		
Transition/Management	27.09%	27.42%			42.06%	26.26%		
<i>Feedback and Questioning</i>								
Specific Feedback (positive)	3.17%	8.12%	11.95%	9.97%	12.74%	7.65%	11.46%	7.22%
Specific Feedback (negative)	14.29%	9.69%	11.78%	11.11%	14.65%	4.89%	2.48%	1.03%
General Feedback (positive)	45.44%	34.03%	34.37%	39.74%	61.46%	61.16%	67.49%	73.40%
General Feedback (negative)	14.09%	6.02%	13.09%	8.83%	6.37%	11.01%	3.72%	8.87%
Corrective Feedback	15.48%	15.45%	23.57%	22.36%	3.18%	3.98%	10.22%	5.36%
Question (convergent)	7.14%	19.63%	4.75%	6.98%	1.27%	7.65%	3.10%	2.47%
Question (divergent)	0.40%	7.07%	0.49%	1.00%	1.59%	11.31%	4.64%	4.12%

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