

1 Education under the state of ISIS: A content analysis of the Physical 2 Education Curriculum

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21 Abstract

22 This study focused on lessons learned from the Physical Education Curriculum under the reign of
23 Islamic State of Iraq and Syria (ISIS). We conducted an unprecedented analysis of ISIS primary
24 school physical education curriculum. The research objective focused on describing and analyzing
25 the context and intentions of the document as well as its content (didactic, pedagogy, learning
26 assessment, among others). We also analyzed the general scientific quality of the curriculum of
27 physical education targeting fitness preparation by the instructor in charge of the education of the
28 youth. In addition, our analysis focused on the philosophical and contextual issues of the manual.
29 Findings revealed an incomplete and a rapidly developed textbook where several essential elements
30 related to pedagogy, didactics, learning and assessment were missing or inconsistent. The logic of
31 military preparation under the guise of preparing the student's physical condition was an important
32 finding without being explicitly mentioned. Integration of religious content was present without
33 being affirmed in the content of the lessons. We argue that the ISIS physical education curriculum
34 appears to be committed to an absolutist/theocratic ideological or propaganda program that, among

Physical Education Curriculum Content Under ISIS

35 other things, promotes the preparation of the future soldiers of the ISIS army. Recommendations
36 about secularization and the reconstruction of post-ISIS education systems are formulated.

37 **1. Introduction**

38 Between 2014 and 2017, the Islamic State of Iraq and Syria (ISIS) has taken possession of
39 several territories and regions in Iraq and Syria. It has implemented its ideas and ways of functioning.
40 Furthermore, it has even proposed an educational corpus for the use of school teachers. In
41 collaboration with humanitarian actors on the ground, we had access to several educational materials
42 that have been put in place by the Islamic group. We conducted a series of analysis about the
43 documents to better understand the group's intentions through education (Arvisais & Guidère,
44 2020a), but also, to propose alternatives and recommendations to humanitarian workers and actors
45 who are currently working in the field since the withdrawal of the armed group.

46 This specific study focused on the lessons learned from the Physical Education Curriculum
47 under ISIS? We conducted an unprecedented analysis of ISIS primary school physical education
48 curriculum focusing on the content analysis of the curriculum. Based on a, so called, teacher's
49 manual, the research objectives focus on describing and analyzing the general quality of the
50 document, in particular: 1. Intentions of the manual and 2. Content analysis on didactic, pedagogy,
51 and learning, in order to understand ISIS intentions in this war-torn context. A complementary study
52 from the same project looked more specifically at the illustrations and calligraphy inside the manual
53 (Gadais et al., 2021).

54 *1.1 Using Sport and Physical Education to Serve Politics or Military Purposes*

55 Reviewing literature about the subject shows that little research on the topic has been done.
56 Therefore, in the contemporary context of fight against terrorism, it seems relevant to consider two
57 fields of scientific literature related to sport or physical education: a) sport and physical education
58 under totalitarian regimes and b) recruiting child soldiers.

59 *1.1.1 Sport and Physical Education Under Totalitarian Regimes*

60 Previous studies on history of sport or physical education have presented hypotheses and
61 arguments about how and why ISIS could decide to use the education of the bodies. Indeed
62 throughout history, several regimes or even totalitarian regimes have sometimes tried to use sports
63 (in various forms such as competitions, training, Olympic games), and physical education (the
64 academic discipline) as an instrument for nation-building (Ljunggren, 1996), to control and dominate
65 but also to train and discipline subjects according to their ambitions of power (Guttman, 2003;
66 Ljunggren, 1996). For example, in Germany, Italy and Spain, the political leaders namely Hitler,
67 Mussolini and Franco, first had to be convinced of the power of sport to boost their international
68 prestige (Guttman, 2003). As noted by Boltz (2017), fascist movements were obsessed with
69 changing the habits of the population and with training of athletes who would be loyal to the fascist
70 cause. In their totalitarian system, education was the key to the implementation of the Revolution and
71 the New Man was the result of fascist education, which laid as much emphasis on physical as on
72 intellectual development. Changing minds and bodies for building a New Man were the main
73 strategy used by the regimes (Bolz, 2008). Then, sport or physical education was used to share a
74 theological vision of history, insofar as they conceived the history of mankind as a succession of
75 phases, the aim of which was the holiest organization of society according to fascist principles
76 (Gentile, 2013).

77 Gentile (2013) also noted that the conception of history and the use of the past were central to
78 fascist ideologies, as in the end all the efforts served to establish these new "ideal" societies with
79 unlimited ambitions regarding nations, race and international domination (Bolz, 2017; Krüger &

80 Murray, 2010). The alliance between totalitarianism and sport was not immediate and came
81 gradually, as best illustrated by the 1934 football World Cup in Italy and the 1936 Berlin Olympics
82 (Grix, 2013). The relationship between totalitarianism and sport emphasizing mass participation and
83 preparing top-level athletes had a twofold aim. The propaganda and mega-events gave the people a
84 sense of belonging to the community and convinced them of the validity of the fascist ideology. Also,
85 impressive displays and successful sports results were presented to foreign observers as achievements
86 of the fascist regimes and helped them to strengthen their diplomatic ideas. It is undeniable that
87 fascism promoted sport and used it for its own political and ideological purposes. Sport was of
88 interest to fascist movements because it gave their ideologies a forum where they could visibly
89 concretize their social and possibly racial plans. In return, the sports movement benefited from it to
90 some extent and some sports leaders saw the new regimes as opportunities for sport (Houlihan &
91 White, 2002).

92 Complementary, authors also demonstrated how physical education was instrumented to serve
93 military ideas and soldiers training in France (Arnaud, 1991; Sarremejane, 2006) or in Sweden
94 (Ljunggren, 1996). In a pre-World War I context and in between the two World Wars, physical
95 education was placed under the control of the Ministry of the Army with the vocation of future
96 soldiers' recruitment, preparation, and training. This was possible because of a special context where
97 conflict between nations in Europe was imminent (Saint-Martin, 2006). Now, it seems interesting to
98 see how ISIS decided to organize its physical education curriculum, given the context in which it was
99 implemented in Iraq and Syria. It also seems relevant to understand whether their intentions and
100 operating structures were similar or different from previous totalitarian regimes in history. Finally,
101 another hypothesis to explore is the possible use of a physical education curriculum for recruiting and
102 training child soldiers.

103 Let's recall that despite the potential benefits of sport, these positive impacts do not accrue
104 automatically. Indeed, studies also revealed negative impacts related to the practice of sport
105 (Newman et al., 2021). Studies have shown that participation in sport can reinforce feelings of
106 incompetence (Erickson & Côté, 2016; Leblanc, 2016), create dependence on the coach (Lévêque,
107 2015), or induce depression in the event of overtraining (Flore & Juvin, 2005). In addition, previous
108 research has documented external pressure from parents, coaches, and teammates that can be
109 detrimental to psychological development and self-esteem (Gerbelli-Gauthier, 2019; Tofler &
110 Butterbaugh, 2005). Those elements can lead to the cessation of sports practice, described as sport
111 drop-out by Leblanc (2016), or some forms of violence against the athlete (Ohlert et al., 2021; Parent
112 & Fortier, 2018). Additionally, other research reported increased rates of delinquency and aggression
113 (Faulkner et al., 2007; Gardner et al., 2009), as well as behavioural and functional problems
114 (Endresen & Olweus, 2005). Socially inappropriate attitudes reinforced by an authoritarian context
115 (Wright, 2006) or even using sport as a recruitment tool by extremist groups have also been observed
116 (Jordan et al., 2007; Zane et al., 2016).

117 *1.1.2 Recruiting Child Soldiers*

118 Around the world, UNICEF (2018) estimates that nearly 250 million children are growing up
119 in torn regions and countries affected by conflict. Nearly 125 million of them are directly affected by
120 violence (Charland et al., 2017). Sadly, Iraq (since 2003) and Syria (since 2011) have ranked high on
121 torn and violent regions. In Iraq as well as in Syria, children have been bearing witness to the horrors
122 of civil war mass terrorism, the death of loved ones, injury and amputation for many years. They also
123 experience all sorts of violence: displacement, kidnapping, human trafficking, and sexual mutilation.
124 Given their surroundings, children in such places often find their education interrupted whether by

125 bombings that destroy schools or by unexploded ordnance and mines. Girls' education is also
126 frequently halted by child marriage, while boys are forced to enlist in armed groups (UNHCR, 2018).
127 Those elements make children vulnerable and easy targets for armed groups' recruitment as ISIS.

128 Over the last three decades, studies had well documented the child soldiers' recruitment
129 process (Betancourt et al., 2013; Daxhelet & Brunet, 2013; Jézéquel, 2006). Child soldiers are people
130 under the age of 18 who are associated with military organizations. Children may be trained and used
131 for combat, assigned to support roles such as porters or messengers, or used for tactical advantage as
132 human shields or for political gain in propaganda (Daxhelet & Brunet, 2013; Jeannet & Mermet,
133 1998). Children are easy targets for military recruitment due to their greater susceptibility to
134 influence compared to adults (Daxhelet & Brunet, 2013; Le Quellec Cottier, 2012). Some are
135 recruited by force while others choose to join up, often to escape poverty or because they expect
136 military life to offer a rite of passage to maturity (Arzoumanian & Pizzutelli, 2003). Child recruits
137 who survive armed conflict frequently suffer of mental illness, poor literacy and numeracy, and
138 behavioural problems such as heightened aggression, leading to a high risk of poverty and
139 unemployment in adulthood (Betancourt et al., 2013; Mubiri-Pondard, 2008). Complementary,
140 research has also found that the enlistment of adolescent children, even when they are not sent to war,
141 is accompanied by a higher risk of attempted suicide (Ursano et al., 2016) stress-related mental
142 disorders (Goodwin et al., 2015), alcohol abuse (Head et al., 2016) and violent behaviour (Bouffard,
143 2005; MacManus et al., 2013; Merrill et al., 2005).

144 In 2015, in Iraq and Syria, about 30 000 armed individuals, originating from more than 100
145 countries were fighting under ISIS flag (Xingang et al., 2017b), including children. In those regions
146 of the Middle East, the use of younger children in armed conflict has increased in recent years as
147 militant Islamist movements and the groups fighting them recruited children aged 16 and 17 in large
148 numbers (United Nations Secretary-General, 2017). More especially, in Iraq, Human Rights Watch
149 has documented the recruitment or use of children by Sunni and Shia Arab armed groups fighting in
150 Iraq, including militias in the battle to retake Mosul. Armed groups in Iraq affiliated to the Kurdistan
151 Workers' Party have recruited boys and girls in December 2015. About 29 cases have been
152 documented in northern Iraq in which Kurdish and Yezidi children were recruited by two armed
153 groups, the People's Defense Forces (Hêzên Parastina Gel, or HPG) and the Shingal Resistance Units
154 (Yekîneyên Berxwedana Şingal, or YBŞ). The same tendency is happening in Syria since 2014, in
155 which army groups have been recruited children as young as seven years old. More than half of the
156 children recruited in cases verified by UNICEF in 2015 were under 15. Children have been filmed
157 executing prisoners in grisly propaganda videos by the Islamic State group. In 2015 the UN said: "A
158 total of 362 cases of recruitment and use of children were verified and attributed to ISIL (274), the
159 Free Syrian Army and affiliated groups (62), Liwa' al-Tawhid (11), popular committees (5), Kurdish
160 People's Protection Units (4), Ahrar al-Sham (3), the Nusra Front (2) and the Army of Islam (1). Of
161 the verified cases, 56% involved children under 15 years of age, a significant increase compared to
162 2014." Knowing the objective of ISIS to restore the Islamic territory of the Caliphate Empire, as it
163 existed in the medieval period, by using military forces to tear apart the Middle East and retrieve
164 lands in Europe, Asia and Africa (Xingang et al., 2017b), one may argue that all those elements put
165 together let us think that ISIS potentially used its Physical Education under its education system to
166 recruit and train future soldiers.

167 *1.2 ISIS Education System*

168 ISIS took hold in Syria and Iraq between 2014 and 2017 and its domination was followed by
169 an elaborate educational system. The terrorist organization's "state program" is a unique case in

170 recent history. Indeed, not only did it overturn the existing formal education system in Syria and Iraq,
171 resulting in a hiatus in the schooling of children and teens, the organization went a step further by
172 creating its own alternative educational system in its stronghold regions. More than 30 textbooks are
173 forming a singular corpus of study never seen before and became the central element in the “jihadist
174 resistance” against American occupation and the new Shia government installed by the Americans in
175 Iraq (Guidère, 2017).

176 Several studies were conducted on this series of educational materials to better understand
177 how ISIS had implemented its education system. More specifically, a first study focused on the
178 integration of religious elements in the corpus of texts (Arvisais & Guidère, 2020b). Another study
179 presented the educational intentions targeted by ISIS through its textbooks (Arvisais et al., 2021),
180 while another one focused on how ISIS established its curriculum in the context (Arvisais & Guidère,
181 2020a), and finally, the analysis of science textbooks also revealed an absolutist/theocratic
182 ideological program that promotes a very inadequate concept of scientific activity and content
183 (Potvin et al., 2019). However, the physical education curriculum recovered was not yet analyzed.
184 Considering the context and objectives of the ISIS’s armed domination in the region, it seems
185 relevant to analyze the physical education curriculum to better understand how the group attempted
186 to use the discipline of the bodies to serve its interests.

187 *1.3 Objectives of the Study*

188 This paper aims to describe and analyze the physical education curriculum implemented by
189 ISIS in primary schools. Pedagogical and didactic perspectives (Lahire, 2007; Lahire & Johsua,
190 1999) were used to help us understand the physical education teaching system in the context of ISIS,
191 attempting to answer fundamental questions such as: what is being taught? In what ways? What are
192 the relationships between school goals and practices and the real goals of ISIS group?

193 Consequently, the research question focused on describing the document, its contents (didactic,
194 pedagogy aspects among others) and analyzing the general scientific quality of the curriculum of
195 physical education that was addressed to the instructor in charge of the education of children. This
196 study aims to:

- 197 1. Describe and analyze context and intentions of the manual;
- 198 2. Describe and analyze content of the manual;
- 199 3. Propose recommendations for the humanitarian workers on the field.

200

201 **2. Methods**

202 *2.1 Research design*

203 We conduct an explorative case study of the physical education curriculum implemented by
204 ISIS for the primary school level. Exploratory research was chosen to determine research priorities,
205 collecting data and focusing in on certain subjects, which may be difficult to take note of without
206 prior exploratory research. Exploratory research allows the researcher to be creative in order to gain
207 the most amount of insight on a subject (Creswell, 2014).

208 Complementarily, a case study methodology was applied for this research (one document
209 analyzed) as case studies are highly suitable for exploring the complex social, cultural, historical,

210 managerial, and procedural phenomena when the situation includes many interesting variables,
211 multiple sources of evidence, and broad theoretical propositions that guide the collection and analysis
212 of data (Yin, 2014). The analysis of this special temporal curriculum is to the best of our knowledge,
213 unique and has never been done before. Yin's three prerequisites, that justify using a case study
214 method, are present in this project, notably that: a) the main research questions are either how or
215 why; b) there is little or no control over behavioural events; and c) the focus of study is a
216 contemporary phenomenon. This study remains descriptive, exploratory research and, as such, will
217 focus on describing, in detail, the data collated from the document analyzed in relation with its
218 context in which the curriculum has been implemented. For all those reasons, various sources of
219 information's and analysis were used.

220 *2.2 Document Analyzed*

221 Our research team got access to various curricula and education documents written, published
222 and distributed by ISIS in northern Iraq between 2014 and 2017 (Arvisais & Guidère, 2020a). All the
223 material was posted online by ISIS itself and printed copies were also found in several schools
224 around Kirkuk after its liberation. The corpus of documents forms a set of teaching materials that can
225 be divided into two categories: subjects of a purely religious nature (textbooks on Doctrine, the
226 Qur'an, Tradition, the Life of the Prophet, and Islamic Education) and traditional subjects (textbooks
227 on science, mathematics, history, geography, physics, etc.). The document analyzed in this study
228 corresponds to the second category (traditional subjects) for the five years of primary school as
229 proposed by the reform of the school pathway by ISIS.

230 This research focuses on the physical education curriculum implemented by ISIS. At this
231 time, attempts to retrieve and analyze the other parts of the physical education program were
232 unsuccessful. The manual was 26 pages long and composed of three sections. On the front page is a
233 large image (Figure 1) with dark colors, mentioning, "teacher's manual," "physical training" for the
234 "first level at the primary school," for the "first semester." In the first section, page 3 of the manual is
235 a general introduction used in every ISIS curriculum documents that pays tribute to the God/Allah
236 and the prophet. It explains the reasons and the context for the implementation of this curriculum by
237 ISIS. Islam religion plays an important part at the beginning of this text. Also, page 4 is an
238 introduction to the importance of a good physical condition for practising the religion and being a
239 good Muslim. In the second section, the manual begins with a warm-up and stretching routines,
240 which is repeated for each lesson, then 17 lessons are followed lasting each for about 45 minutes.
241 The last page of the manual is dedicated once again to a tribute to the prophet. Because only four
242 authors were Arabic speakers in the present study, the manual was translated¹ from Arab into French
243 for conducting data analyses. Then, to make it as accessible as possible, the manuscript was written
244 in English.

245 **Insert Figure 1 here**

246 *2.3 Data Analysis*

247 Due to the special context, we conducted a qualitative data analysis, which was built using a
248 step-by-step descriptive process. More specifically, we used an inductive analysis of the PE manual

¹ Translation process was made by two different Arabic-French speakers, revealed modulations, and rearrangements in-between the two versions. Then, the manuscript was written in English and other arrangements were made (e.g., in French "nombre" and "numéro" became only "number" in English).

249 (form and content) throughout two dimensions. First, we analyzed the manual intentions in order to
250 connect the main objectives with the context of the implementation. Second, we performed a content
251 analysis of the manual's full textbook with pedagogical, didactic, learning and assessment
252 perspectives.

253 *2.3.1 Intentions and Context of the Manual*

254 In order to perform the analysis of the intentions of the PE manual, we conducted a
255 documentary analysis, by trying to connect and understand the document with the context of its
256 implementation. Therefore, we took into consideration a) the scientific literature available in Arabic,
257 French and English on this topic, which included previous studies on this corpus of ISIS educational
258 materials, b) semiology analysis with denoted and connoted principles. We performed a descriptive
259 and inductive qualitative analysis with back and forth between manual, literature, and analysis from
260 semiotics.

261 *2.3.2 Curriculum Content*

262 First, the content analysis was carried out using the text of the manual. We grouped the
263 textbook content by using the SOEA (Subject-Object-Environment-Agent) model (Legendre, 2005)
264 into several fundamental thematic in education such as Subject, Object, Environment, Agent, and
265 their corresponding relations: pedagogy (subject-agent), didactics (object-agent), learning (object-
266 subject) or assessment (Figure 2). We also used Bloom's Taxonomy (Forehand, 2010) to code the
267 intentions and objectives of the lessons. The content was grouped into five categories: general
268 introduction, manual introduction, material, games, content of lessons, and objectives. A word cloud
269 was generated for each category using NVivo12 software. Similar singular-plural terms were
270 grouped, with or without capitalization. We eliminated all three letters, connection words and
271 articles. The format, color, font, and orientation of the words in the cloud were not manipulated by
272 the researchers and were generated automatically by the software. To analyze the word clouds, a
273 semiotic analysis focusing on the denoted and the connoted (Saint-Martin, 2011; Saouter, 2000) was
274 performed by the three coders. This was accompanied by a frequency analysis inspired by
275 lexicometry analysis (Magariños de Morentin, 2008) in order to analyze the occurrences of the words
276 in the texts translated into French from the Arabic version. This allowed to give more meaning to the
277 text, to better understand it and to ease the interpretation of the different keywords highlighted by
278 Nvivo12. The word clouds allowed us to visually represent the preponderance of certain words in the
279 texts on the different pages of the manual.

280 **Insert Figure 2 here**

281 *2.3.3 Trustworthiness in Empirical Data Analysis*

282 In the context of this study, and to ensure methodological rigor, all team members interacted
283 with each other during the different phases of the data analysis (Elo et al., 2014). This co-
284 construction made each researcher a critical partner to the other (Smith & McGannon, 2018). Thus,
285 the three main authors were regularly questioned on the issues relating to the research, data, and
286 results. To reach an intercoder agreement, the interrater reliability technique was used to triangulate
287 data and ensure that results are reliable, reproducible, and consistent (Smith & McGannon, 2018). In
288 concrete terms, the coders, along with other team members, would meet throughout the analysis
289 process to compare and discuss the discrepancies between their analyses to refine the coding so they
290 could proceed with more precise coded data. The goal was not to reach a statistical standard but
291 rather to improve the quality of the coding process.

292 **3. Findings**293 **3.1 Intentions and context of the PE manual**

294 Findings regarding the philosophy of the PE manual can be summarized into four points: a)
 295 form and content of the manual, b) construction of a specific religious doctrine to serve the interests
 296 of the group, c) physical preparation of the future soldier, and d) vision of child development.

297 **3.1.1 Regarding the manual (form and content)**

298 This short document (26p.) is especially designed for the use of the instructor or, so called,
 299 teacher (*Agent*) in charge of education, in contrast to the other curriculum documents made directly
 300 for students (Arvisais & Guidère, 2020a). Thus, following the title of the manual, it focuses more on
 301 physical fitness preparation or training, than a physical education and sports, as announced, or even
 302 health curriculum. In addition, this manual clearly seeks to convey the values and ideas of ISIS, as it
 303 includes illustrations of ISIS in several places (p. 1, 4–7, 14) as well as a Anthem to the glory of the
 304 group's leader the Baghdadi (p. 14). However, it is interesting to note that this book is the least
 305 religious document in the corpus compared to the contents of the other manuals, with less religious
 306 occurrences (Arvisais & Guidère, 2020a). Analysis also reveals the poor quality of the Arabic
 307 writing. Several mistakes were identified in the textbook. Many illustrations used were not relevant
 308 to the content of the activities and were not helping to better understand the content or the intention
 309 of the curriculum (e.g., see lesson 9, p.16 or lesson 16, p.23). Finally, it was announced in the
 310 introduction that the document was created using scientific and pedagogical references, but no
 311 mentions were available.

312 **3.1.2 Construction of a specific religion**

313 The reading and analysis of the manual reveals that the ISIS group relies on the Islamic
 314 religion to serve its interests and by manipulating its contents. The Islamic religion is therefore used
 315 but above all transformed to hide the real purpose of the manual, which seems to be to recruit new
 316 members of the ISIS group. Hidden behind the Islamic religion and numerous references to the God
 317 Allah (e.g., general introduction, p. 2), the emphasis is put on the leader of the group (Baghdadi) as
 318 soon as the opportunity arises (e.g., in lesson 7, p.14, the learning objective is to learn the Baghdadi
 319 Anthem). This seems to be a subtle adaptation of the Islamic religion to serve the interests of their
 320 particular group, considered to be the best.

321 **3.1.3 Physical preparation of the future soldier**

322 The analysis of the manual reveals that the ISIS group does not perceive the discipline of
 323 physical education as envisaged globally by UNESCO (2015). The main objective seems to be the
 324 preparation of a future soldier for combat or war by improving his general physical condition (title of
 325 the manual). There is therefore a strong emphasis on physical fitness to train the soldier to be ready
 326 to go into battle (*Object*). There also seems to be a focus on the rapid integration of civilians
 327 (children) into the army to fight enemies quickly. In many ways, the manual refers to organization,
 328 discipline, order, the non-commissioned soldier, and good behaviour in line with its purposes
 329 (*Didactics*).

330 **3.1.4 Vision of child development**

331 Interestingly, there is no mention of student (*Subject*) characteristics (e.g., gender, age, needs)
332 in the manual. For example, it is not clear whether the manual is equally applicable to girls and boys,
333 what the age of the children in primary school is and what the learning expectations are for them.
334 However, several avenues allow us to identify a certain vision of child development. First, we noted
335 that repetition is essential since each lesson must be repeated three times according to the instructions
336 in the manual. The warm-up and cool-down routines are repeated in each lesson, but with no
337 connection to the rest of the lesson content while it should be the case. As well, six objectives out of
338 17 are formulated as “the student must recall,” meaning first step of Bloom’s Taxonomy associated
339 with an order. Second, we believe that the group hopes to use this brainwashing strategy in the same
340 way it did for child soldiers (Daxhelet & Brunet, 2013). Lesson 7 is particularly interesting since the
341 students must line up to learn and sing a hymn to the Baghdadi leader. In this sense, students are
342 made to believe that things are done in the name of religion, but this is a manipulation as mentioned
343 above. Children are not developing critical thinking but are only repeating orders and rules.

344 **3.2 Curriculum Content**

345 Findings about the curriculum content are presented via six-word clouds, generated by the
346 software Nvivo12 (See figures of Supplementary files). The first two-word clouds correspond to the
347 manual general introduction (Figure 3) and the manual introduction (Figure 4). The next four-word
348 clouds correspond to the four main sections of the 17 lessons and are presented in the same order as
349 they appear in the manual, namely, the equipment (Figure 5), the objective (Figure 6), the general
350 content of the lessons (Figure 7) and the game (Figure 8). Whilst analyzing the curriculum content,
351 one lesson, number 7, appeared to the research team as very different from all the others. A
352 comparison of this specific lesson is made with a more representative lesson found in the manual,
353 namely, lesson 6. Each section presents the denoted part followed by the connoted part of each word
354 cloud.

355 **3.2.1 Manual sections**

356 **3.2.1.1 General introduction**

357 In page 3 of the Arabic manual translated into French, the general introduction occupies the
358 entire page (Figure 3).

359 **Insert Figure 3 here**

360 (D) The text is written with an Arabic typography different from the style used in the rest of
361 the textbook and takes the classical form of a speech that can be delivered orally. It begins with the
362 *Basmala*: “In the name of Allah, Most Gracious, Most Merciful.” The most used word is Allah (8).
363 Many references are made to Allah: His grace (3), His help (2) and His blessing (1). The highlighted
364 words are: first (5), prophet (5), Islamic (4), we (4), powerful (4). A second group of words, quoted
365 three times, stand out: caliphate, Coran, faults, grace, heresy, Islam, the state, pious. In a third group
366 of words, there are references to the enemy: cited twice: ignorance, western, eastern. Cited once:
367 blasphemous, capitalism, devil, defect, demons, slip-ups, falsification, hatred, humiliating, imposture,
368 irreproachable, justice, unbelievers, polytheism, cunning, socialism, trickery, vicious, victory,
369 swords.

370 (C) The general introduction of the manual is written as a forward/preamble and is quite
371 unusual for a teaching manual. Indeed, we find the typical ISIS group discourse tinged with hatred,
372 on a salient background of religion, as defined by the ISIS group: “Islamic education; a new

373 curriculum.” Religion is omnipresent to guide the education. Everything is done in the name of
374 Allah, but with a “clear vision” (p. 3) that defines the identity and purpose of ISIS: “neither eastern
375 nor western, but prophetic Koranic which distances itself from the passions, heresies and impostures
376 emanating from the missionaries of Eastern socialism, Western capitalism or agents of vicious parties
377 and movements around the world” (p. 3). This introduction presents as well a lexical field defining
378 the ISIS group: State of the Caliphate or Caliphate Edifice. At the end of the general introduction, the
379 efforts made to write this manual are acknowledged and an openness or predisposition to criticism,
380 advice and modification from “any supporter (ally/friend)” is suggested. This last clarification
381 therefore indicates that not all criticism is welcome despite a so-called openness.

382 3.2.1.2 Objectives and intentions

383 On each page, from page 8 to page 24 of the manual, there is a boxed text presenting the
384 objective of each lesson (Figure 4).

385 **Insert Figure 4 here**

386 (D) The group of words that comes up most often is “the student must” (16 out of 17
387 objectives). This group of words is followed by an action verb: recall (6), execute (3), do (3), practice
388 (2), run (1), squat/crouch (1). The next most used word is “exercise” (10). The word “Swedish” (6) is
389 always associated with it, to form “The Swedish Exercise,” listed in 6 objectives out of 17. A second
390 group of words stands out: correct (4), manner (4), execute (3), do (3), part (3). The group of words
391 “in a correct manner” is used 4 times out of 17 objectives. In a third group, particular words are
392 mentioned once: deployment, Anthem gathering.

393 (C) In the manual, no mention or distinction is made between general and specific objectives.
394 The objectives are formulated as “the student should” + action verb. These verbs have been
395 organized according to Bloom’s taxonomy (Forehand, 2010). According to Bloom, objectives should
396 cover different cognitive levels. These levels are ranked in ascending order of cognitive difficulty:
397 knowledge, understanding, application, analysis, synthesis and evaluation. The verb “to recall”
398 relates to the level of knowledge and is the most used of all. The verb “to do” relates to the level of
399 understanding, and the verbs “to execute” and “to practice” relate to the level of application. Two
400 objectives concern only the psychomotor domain (to run and to squat). The objectives are aimed at
401 cognitive operations of low difficulty that do not require much autonomy from students.

402 Also, the objectives are not SMART. As a matter of fact, the objectives are not clear as to the
403 what, where, when and how (Specificity, e.g.: lesson 3’s objective: “The student must perform the
404 main part of the lesson *as required*”). The use of the word “correct” is unclear (Measurability) as
405 there are no success or achievement criteria to define what is “correct” or not (e.g.: lesson 1’s
406 objective: “The student should stand in a crouched position in a *correct* manner”; lesson 10’s
407 objective: “The student should practice the Swedish exercises *correctly*”). The assessment seems to be
408 left to the teacher without any other form of measurement. The objectives are not motivating, do not
409 represent an ambitious and attainable challenge (Acceptability and Realism). Finally, the objectives
410 are not defined temporally (Temporality). No distinction is made based on the age and the objectives
411 are not evolutionary. There is no gradation in learning.

412 On the other hand, several words are taken from the military terminology as in lesson 2’s
413 objective “The student should practice the *deployment* and *gathering* according to *precise*
414 *modalities*”. In lesson 2, it reads: “... so that the students learn the discipline.” Discipline is
415 omnipresent in the manual as the last sentence of each lesson exemplifies: “back in line regularly.”

416 Also, the objectives of lessons 5, 7 and 11 are not related to the main part but to the “game” part of
417 the lesson. However, the games are presented as modular unlike the main parts. Logic would dictate
418 that the objective should be directly related to the main lesson and not to the game. This structure is
419 incoherent. In addition, the objective of Lesson 7 has nothing to do with physical preparation (see
420 analysis L6 versus L7). Finally, the continued reference to Swedish, and therefore Western, exercises
421 contradicts the desire, expressed in the introduction of the manual, to move away from the Eastern
422 and Western world to be inspired only by Allah and Islam.

423 3.2.1.7 Lesson 6 Versus Lesson 7

424 Finally, we did compare two lessons in terms of content. The following figure 5 presents a
425 comparison of word clouds from two lessons from the textbook, lesson 6 and lesson 7. Lesson 6 is
426 typical and representative of the lessons proposed in the manual and has the following objective:
427 “The student should remember the importance of Swedish exercises for the lower body.” This
428 objective is clearly aimed at physical preparation. Lesson 7 has a unique and very different objective
429 from the other lessons: “The pupil shall learn the Anthem mentioned below.” Indeed, this objective is
430 not aimed at physical fitness but rather a recitation of an allegiance Anthem.

431

Insert Figure 5 here

432 (D) In the lesson 6, three groups of words are identified. A first group consists of the most
433 used words: baskets (4), balls (3), two (3), exercises (3), knees (3) and student (3). A second group of
434 words, cited twice, stands out: body, second, must, duration, legs, first, seconds, Swedish, teams. A
435 third group is composed of words that are used only once. The verb “must” is used twice. A group of
436 verbs, used once, consists of recall, spread, hold, do, lower, bend, touch, change, repeat, divide, put,
437 move, finish, win. The required equipment comprises balls (3), baskets (4) and a courtyard (1).

438 (D) In lesson 7, three groups of words are identified. A first group consists of the most used
439 words: exercise (5), arm (4), elbow (3), all (3). A second group of words, cited twice, stands out: act,
440 go, amir, must, right, allegiance, do, keep, left, groups, Anthem, hand, walk, small, posture, prince,
441 repeat, seconds, hold, pull. A third group is composed of words that are used only once. In this group
442 of 40 words, eight particular words stand out: Baghdadi, country, flags, fatimide, hachimiste, ISIS,
443 master, villages. Several verbs are used twice: must, pull, hold, keep, repeat, walk, go, do. Other
444 verbs are used once: learn, chose, change, stretch, bend, designate, move forward. The required
445 equipment comprises flags (1) and a courtyard.

446 (C) The key words stemmed from the analysis of lesson 6 are consistent with words that
447 would be found in a physical education lesson. The main part of the lesson consists, as in 15 out of
448 17 lessons, of making body movements, called “Swedish exercises.” The exercises are individual,
449 there is no interaction or cooperation between students, and the game part is a competition. The
450 required equipment is rudimentary. On the other hand, the objective of Lesson 7 has nothing to do
451 with physical preparation. The key words stemmed from the analysis of lesson 7 are indicative of its
452 unspoken goal of indoctrinating and training the future ISIS soldiers. In this lesson, students do “a
453 regular walk with the same organized rhythm,” they stop and resume following the teacher’s
454 instructions whilst singing an Anthem. This exercise strongly resembles a military walk or even, a
455 parade in a dictatorial regime. As a matter of fact, the anthem pays tribute to the Baghdadi, head of
456 the Islamic State. It sounds like a propaganda urging young people to swear allegiance to him.
457 Contrary to the introduction which put Allah and the Prophet in the central position, there’s a shift
458 towards the head of state in this lesson. There is also a reference to the word “Amir” used to refer to

459 the leader or commander. The group chooses its own “Amir.” Once again, the military organization
460 is suggested and supported by an illustration on the same page of the manual.

461 3.2.2 SOEA Model

462 Table 1 presents findings on the SOEA model applied to the ISIS manuscript. Regarding the
463 *subject*, few information is available about students’ characteristics. Indeed, no precision is made
464 about gender, age, size, weight, morphology, etc., but also needs and autonomy, freedom, critical
465 thinking or creativity. But it is assumed that they are boys according to the clothing they are wearing,
466 haircuts (no veil or burka) and the proposed illustrations.

467 **Insert Table 1 here**

468 For the *object*, the presence of the ISIS flag underscores the presence of the state in education.
469 The presence of the *Basmala* emphasizes the presence of religion in education. In other states, one
470 would have to deal with both public (state) education and private education (borrowing of religion).
471 There is no choice: religion is imposed in the education offered by the state. Interestingly, those
472 elements are mostly present inside the general introduction and manual introduction, not later.

473 The *Environment* is where the teaching is taking place and only few references are mentioned.
474 The “suitable court” is the only place, mentioned in each lesson (n=17) (pp. 8–24), which offers few
475 information about the context and the area for implementing the physical education lessons.

476 Regarding the *Agent*, this manual seems to be a seemingly guide for the teacher to interpret it
477 as he or she wishes. However, no information is given as to who will implement this manual. We do
478 not know anything about this teacher, instructor or other. We know nothing about his or her training,
479 skills or profile. Some passages suggest that the teacher would just be there to read the instructions.
480 He is told what to do and, in this sense, he has little room for manoeuvre in terms of autonomy in his
481 pedagogy and in the autonomy left to the students. But sometimes it is also indicated that he or she
482 can add activities related to what is proposed. He must sometimes be master of discipline, sometimes
483 give rules, sometimes divide the students.

484 *Pedagogy* is the relation in between the teacher (*Agent*) and the student (*Subject*). In this
485 manual, three elements bring information about pedagogy: material used, games-activities and
486 illustrations. It is interesting to note that the proposed illustrations do not always correspond to the
487 exercises indicated in the manual. Thus, they do not support the teaching in any way. The general
488 aim of the manual is clear, although it is not explicitly stated, that young children must be physically
489 prepared to be ready to fight in the ISIS army. For example, “the student must practice the
490 deployment and assembly exercise in the precise manner” (p. 8) or “the student must learn the
491 Anthem quoted below” (p. 13). They must be in good general physical condition to be ready for war.
492 We therefore speak of physical fitness even though no scientific references or standards are named in
493 connection with the development of physical fitness in young people.

494 *Didactics* is the relation between the teacher (*Agent*) and knowledge (*Object*). The general
495 content of lessons and the compared contents of lessons 6 and 7 are two very interesting parts
496 regarding didactics. What is clear is the logic of preparation and method to prepare student fitness.
497 Swedish gymnastic is mentioned several times as a model to follow. However, the manual does not
498 make any reference in this sense, and only proposes a rejection of any Western culture (p. 3), which
499 is contradictory. Moreover, no criteria for achievement (how to make the movement) or success (how
500 to make sure I have succeeded in the movement) is mentioned.

501 Finally, *learning and assessment*, the intentions are very unclear and poorly formulated. For
502 example: “The pupil must recall the objective of the game of tug-of-war” (p. 11) or “The pupil must
503 recall the main objective of Swedish sports exercises” (p. 10). There is no expectation of the end of
504 the educational cycle for students. It is not known what targets are to be achieved, either in terms of
505 learning, or in terms of fitness or skill development. Nothing is mentioned about assessment. To
506 achieve the overall goal, it is proposed to simply repeat the 17 lessons 3 times, but no progress is
507 targeted in development. There is therefore no planning over several levels of mastery or between
508 lessons. Moreover, the games proposed seem to us inadequate for the age group of primary school
509 children, 1st cycle. Nothing about children’s participation, enjoyment, and learning. While attention
510 should be focused on the development of basic motor skills, the manual proposes, push-up (p. 18),
511 abdominals (p. 18), and stretching exercises (p. 6).

512 4. Discussion

513 The exercise of analyzing the ISIS physical education curriculum is, to our knowledge, a first
514 in research. It is therefore important and relevant to draw lessons and insights from this particular and
515 challenging investigative work.

516 4.1 Key findings

517 In the present study, we observed two main findings: the logic of military use of physical
518 education by ISIS and a teaching manual in which the content lacks reflection, criticism but above all
519 refinement.

520 First, this study revealed a highly militarized logic of the curriculum proposed by ISIS. Since
521 most of the training focuses on physical preparation and fitness, it is likely that the logic of
522 militarization and preparation of future soldiers is behind the implementation of this curriculum. This
523 logic included the appointment of physical preparation as a major focus of the textbook, the lack of
524 freedom or creativity of the pupil, the directive role of the teacher, the use of Swedish gymnastics and
525 highly aligned, etc. In addition, controlled and disciplined forms of teaching and grouping bears no
526 resemblance to current international recommendations on textbook writing in physical education.
527 According to our analysis, this textbook seems to coincide very strongly with the aims of totalitarian
528 regimes as discussed in the introduction (Bolz, 2017; Guttmann, 2003). The soldier preparation
529 suggested in the manual matches the ISIS needs of massive military forces to attain its objectives
530 (Xingang et al., 2017b). State control is also marked by the imposition of religion and political
531 ideologies within the textbook itself. Finally, the teachers in this textbook look like military soldiers
532 instead of pedagogues, which was supported by several passages in the document (Figure 2).

533 Second, our analysis also revealed irregularities and gaps in the content of the PE manual
534 proposed by ISIS. Several elements related to pedagogy, didactics, learning and assessment is
535 missing. For example, no information was given on student characteristics (e.g., age, gender, needs,
536 enjoyment, and participation), no expectations are set in terms of learning targets to be achieved, and
537 no form of assessment is proposed at all. Similarly, the learning objectives and content do not, in
538 their current form of writing, provide a clear idea of the targets to be achieved or the content to be
539 provided to students. Our analysis also shows a marked willingness to repeat the lessons with little
540 room left for the teacher to adapt the material to the needs of his students or to the reality of his
541 environment. All of these elements lead us to believe that the content of the textbook was hastily
542 constructed without a rigorous revision process, despite the fact that a writing group has been
543 vaguely identified in previous studies (Arvisais & Guidère, 2020a, 2020b). However, and unlike the

544 textbooks analyzed in science (Potvin et al., 2019), we did not identify any content that would have
545 been copied from other documents and pasted quickly into this manual.

546 *4.2 Meanings of findings - What can be understood and learned?*

547 This study has provided us with lessons learned about the use that ISIS has made of its
548 physical education curriculum. The results of this study seem to point to two main perspectives: the
549 creation by ISIS of its own education system and the use of religion for its own purposes.

550 On one side, ISIS has set up its own education system. This manual reflects different aspects
551 of ISIS realities and objectives, to have the complete power on all the region in a reign of terror. In
552 detail, the analysis of the manual revealed many inaccuracies in its content, several spelling mistakes
553 and inappropriate use or misplacement of several illustrations. This overall lack of coherence leads us
554 to believe the wish to rapidly establish a state by setting up, among other things, an education system
555 to enforce its ideas and actions. This idea lines up with the conclusions of a previous study on the
556 implementation and use of the education system by ISIS (Arvisais & Guidère, 2020a). There is also a
557 willingness to use physical education as a means of rapidly imposing and enforcing ideas, which
558 align with several distinctive features of totalitarian regimes (Guttmann, 2003; Sugden & Tomlinson,
559 1998). As noted by Sugden and Tomlinson (1998), sport or physical education have been used to
560 train and represent a model or the identity that the political group wants to achieve. Guttmann (2003)
561 also mentioned several totalitarian regimes that tried, throughout history, to use sometimes sports and
562 physical education as an instrument to control, dominate but also to train and discipline subjects
563 according to their ambitions of power. It also seems relevant to mention that their intentions were
564 similar but operating structures were different from previous totalitarian regimes in history. As such,
565 the terrorist organization's "education state program," is a unique case in recent history.

566 On the other side, Islamic religion revisited by ISIS is, by far, one of the most prominent
567 aspects of this manual. The terrorist group has gone so far as to create its own educational system by
568 mixing religion and politics to serve its own interests. For example, there are misleading statements
569 about the Prophet and inappropriate uses of passages from the Qur'an to convey their ideas of the
570 world. The general introduction, where everything is made in the name of Allah and the Prophet, or
571 in lesson 7, in which the pupils are to line up and sing the Anthem of allegiance to the Baghdadi, are
572 perfect examples of contradiction and misuse of religion to reach political goals. Another element
573 that coincides perfectly with the logic of totalitarian regimes is the suppression of part of the
574 population, in this case women. Indeed, any attempt to denunciate violence against women would be
575 perceived as a support for the occidental imperialism (Boudjak, 2007). Boltz (2017) observed that
576 fascist movements were obsessed with changing the habits of the population and with the training of
577 athletes who would be loyal to the fascist cause. In their totalitarian system, education was the key to
578 the implementation of the Revolution and the New Man was the result of fascist education, which
579 laid as much emphasis on physical as on intellectual development. Changing minds and bodies for
580 building a New Man were the main strategy used by the regimes (Bolz, 2008).

581 Some studies showed that about 30,000 armed individuals, originating from more than 100
582 countries were fighting under the ISIS flag in Iraq and Syria in 2015 (Xingang et al., 2017a),
583 including children. In those regions of the Middle East, the use of younger children in armed conflict
584 has increased in recent years as militant Islamist movements and the groups fighting them recruited
585 children aged 16 and 17 in large numbers (United Nations Secretary-General, 2017). These
586 contextual elements lead us to believe that ISIS potentially used its physical education program to
587 recruit and train future military soldiers. All those elements together let us think that ISIS potentially

588 used its physical education under its education system to recruit and train future military soldiers.
589 Children are easy targets for military recruitment due to their greater susceptibility to influence
590 compared to adults (Daxhelet & Brunet, 2013; Le Quellec Cottier, 2012). Child recruits who survive
591 armed conflict frequently suffer from psychiatric mental illness, poor literacy and numeracy, and
592 behavioural problems such as heightened aggression, leading to a high risk of poverty and
593 unemployment in adulthood (Betancourt et al., 2013; Mubiri-Pondard, 2008). Psychosocial
594 intervention by local or humanitarian workers with the youth on the field is, therefore, crucial.

595 While international organisations such as UNESCO intentionally give priority to effective
596 personal development, aim to ensure peace and are designed to be inclusive, the ISIS physical
597 education curriculum exploits this to recruit students, youths and men to join them. Behind the good
598 intentions of sports presented in the manual's introduction, the group insidiously distorts physical
599 education to attain less noble goals of military preparation, as represented through action-oriented
600 scenes of military exercises, fighting and celebrating fight victories, repeating exercises over and
601 over and repeating the Anthem of Baghdadi their leader. Extremist ideologies are founded on
602 misunderstandings of Islamic manuscripts and the Qur'an (al-Qaeda's manipulation and imprecise
603 interpretation) and reverberate among young people and new recruits (children) who have a lack of
604 knowledge, and limited understanding, critical thinking and comprehension of their religion. In this
605 case, sport is only used to build a novel Islamic state and military troops of new recruits.

606 These elements lead us to question how and to what extent the curriculum in place potentially
607 erased children's identities. These young people thus became unwilling child soldiers who were
608 recruited and indoctrinated to serve the ISIS cause. In this sense, it is important to understand that
609 they are not criminals but children. And therefore, they have rights that must be respected in line with
610 the 1989 UNICEF International Convention on the Rights of the Child. The question arises of
611 respecting this convention and possibly restoring justice for them in the future. Also, this research
612 leads us to explore the impact that this traumatic experience has potentially had on the youths. That
613 is, how the training carried out within the curriculum framework has influenced the children and
614 what the potential consequences are in the medium or long term.

615 *4.3 Recommendations*

616 Based on our analyses, our experiences as researchers but also as humanitarian workers, we
617 would now like to propose several recommendations to help the work in the field. These elements
618 can constitute tracks of reflections and solutions to help local workers to better adapt their work with
619 the affected population:

620 - Ensure respect for the international law of all children and adolescents, including the right to equal
621 education and to have an inclusive education that respects the developmental needs of the child;

622 - Ensure that the overall development of children, including physical and mental health (i.e.,
623 enjoyment), is promoted and not only certain aspects (e.g., physical fitness);

624 - Verify the learning environment to promote quality education;

625 - Carry out psychological and social follow-up in relation to potential trauma, brainwashing and
626 forms of indoctrination of children and adolescents and promote their harmonious reintegration into
627 society, potential gaps with families and communities;

- 628 - Be attentive to the lack of autonomy, creativity, participation and critical thinking skills of children
629 who have been affected by armed conflict;
- 630 - Address the lack of fulfillment of basic physical as well as basic psychological needs of the youth;
- 631 - Verify the teaching conditions and accompany the teachers in training and pedagogical monitoring
632 in order to provide quality education for all.

633 Today, in addition to remaining an educational tool, sport or physical education can be used
634 as an instrument of psychosocial intervention with vulnerable youth. Researchers investigating SDP
635 programs have described various benefits of sports participation, including individual development,
636 health promotion and disease prevention, gender equality, social integration, peace-building or
637 conflict prevention/resolution, and post-disaster/trauma assistance (Chawansky & Holmes, 2015;
638 Kidd, 2008). According to Lyras and Peachey (2011), sport-based projects use sport as a medium “to
639 exert a positive influence on public health, the socialization of children, youths and adults, the social
640 inclusion of disadvantaged, the economic development of regions and states, and fostering
641 intercultural exchange and conflict resolution”. More specifically, from a psychological standpoint,
642 participation in sport is a protective or even preventive factor (Pascoe & Parker, 2019). Some sports
643 programs help develop self-confidence and self-esteem, as well as combat depressive disorders and
644 suicidal ideation (Babiss & Gangwisch, 2009; Jerstad et al., 2010). On a social level, the practice of
645 sport can provide safe spaces and reduce antisocial behaviour among children belonging to minority
646 groups (Stodolska et al., 2014). It can also develop citizenship, cooperation, leadership skills,
647 mobility, social cohesion, community integration, and positive peer relationships (Edwards, 2015). In
648 addition, it may encourage pro-social behaviour (Carreres Ponsoda et al., 2012) and broaden social
649 horizons by linking participants with various institutional actors (Spaaij, 2012).

650 *4.4 Limitations*

651 Conducting this study was very challenging for our research team. Two limitations could be
652 clearly identified. A first limitation comes back to the question of the translation and interpretation of
653 this manual. First, the original manual was translated from Arabic into French by two people using a
654 round-trip process. In fact, many words and expressions were not clear or easy to translate from
655 Arabic into French and therefore subject to interpretation (e.g., group vs. team, competition vs.
656 competitor, teacher vs. instructor vs monitor). Despite the precautions taken by our research team to
657 ensure quality translation (Four Arabic-speaking authors, three authors from the Middle East), it is
658 therefore possible that some words or expressions were misinterpreted depending on the context in
659 which this manual was implemented. Moreover, by switching from Arabic (original document) to
660 French (data analysis) to English (writing), and despite the research team efforts, some interpretations
661 or explanations may have been lost or impoverished in terms of meaning (see footnote #1).

662 A second limitation of this study refers to the lack of access to the field and the possibility of
663 validating some information with quality sources. Working on a theme that includes a war context as
664 well as an extremist group necessarily implies shortcomings in the possibility of verifying the sources
665 of information for our analyses. In this sense, many questions remain unanswered after this analysis
666 and several of the hypotheses we have put forward could not be verified. For example, the secondary
667 school physical education manual was found by sources in the field but has not yet reached us for
668 logistical reasons. Similarly, several interviewees from an ongoing study to collect testimonies on
669 this lived reality became very silent when discussing some of the reflections on physical education

670 and its organization by ISIS. Nevertheless, we hope that this ongoing study will help validate some of
671 the hypotheses put forward by our analyses.

672 **5. Conclusion**

673 The present study conducted an unprecedented analysis of the ISIS primary school physical
674 education curriculum describing and analyzing the context and philosophy of the document as well as
675 its contents (didactic, pedagogy, learning assessment, among others). Our work reveals an incomplete
676 and a rapidly developed textbook where several essential elements related to pedagogy, didactics,
677 learning and assessment are missing or inconsistent. The logic of military preparation under the guise
678 of preparing the student's physical condition is a major finding, which was developed based on
679 religious pretexts, hijacked for political purposes. The ISIS physical education curriculum appears to
680 be committed to an absolutist/theocratic ideological or propaganda program that, among other things,
681 promotes the preparation of future soldiers, used in the accomplishment of the ISIS goals of
682 dominance.

683 Yet, and as mentioned in the limitation section, several aspects need to be completed in future
684 studies. Hypotheses and conclusions need to be validated with original sources using a more
685 comprehensive investigation in the field. Finally, recommendations about secularization and the
686 reconstruction of post-ISIS education systems are formulated but should be discussed with local
687 partners to go further and meet their needs and those of the affected population.

688 **Conflict of Interest**

689 *The authors declare that the research was conducted in the absence of any commercial or financial*
690 *relationships that could be construed as a potential conflict of interest.*

691 **Author Contributions**

692 All authors have made a substantial, direct and intellectual contribution to the work, and approved it
693 for publication. TG, GT, LD, AD, CC and OA were involved in the design of the study and
694 contributed to the review of literature. TG, GT, LD, MK conducted analyses and wrote results
695 section. TG wrote the first draft of the manuscript, after which GT, LD, MK, AD, CC and AO read
696 and contributed to the revision of the manuscript.

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