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ORIGINAL RESEARCH

Raising awareness of the Sports Club for Health (SCforH) guidelines in the sports, higher education, and health promotion sectors: Evaluation of an educational online intervention in 34 European countries

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Abstract

Background: Sports Club for Health (SCforH) is among the largest European initiatives that promotes health through sports clubs. The recently developed SCforH online course has never been empirically evaluated. **Objective:** The aims of this study were to: (i) assess participant engagement in the course and course quality; and (ii) explore differences in the engagement levels and subjective assessments of course quality by stakeholder type, EU residency status, region of Europe, and prior awareness of SCforH guidelines. **Methods:** The study sample included 840 participants from 34 European countries, who attended the SCforH online course. Using web trigger events, we gathered information on the number of course parts completed and time in course. Course quality was assessed using the 12-item EDUcational Course Assessment TOOLkit (EDUCATOOL) post-course questionnaire, asking about participant's *reaction*, *learning*, *behavioural intent*, and *expected outcomes*, where scores on the evaluation components were expressed on a scale from 0 to 25 points. The overall evaluation score (0–100 points) was calculated as the sum of evaluation components. **Results:** The vast majority of participants (92%) completed all 28 parts of the course, and the median time in course was 27.60 min (95% confidence interval [26.93, 28.27]). The medians of all evaluation components were ≥ 20.00, while the median overall evaluation score was 82.50 (95% confidence interval [81.11, 83.89]). Some aspects of course quality were rated slightly lower by residents of EU countries (compared with residents of non-EU countries), participants from Western Europe (compared with Central and Eastern Europe), and students (compared with representatives of sports clubs and associations; $p < .05$ for all). **Conclusions:** The level of participant engagement in the SCforH course and quality of the course are high, which demonstrates that this course is an adequate tool for dissemination of SCforH guidelines among various stakeholders in the European sports sector.

Keywords: online course, educational course, sport setting, physical activity, exercise, EDUCATOOL

Introduction

Physical activity is associated with a range of benefits for individuals and society (Warburton & Bredin, 2017). Globally, numerous initiatives have been implemented to raise awareness of the importance of physical activity for health and to promote different types of physical activity. Such initiatives cover different settings, such as workplace, schools, universities, healthcare, community, environment, and sports.

Sports setting has a great potential for physical activity promotion (Koski et al., 2017), because specialised equipment, facilities, skilled staff, structured training programs, and financial support that can be used for this purpose are already available in sports clubs (Downward et al., 2021). Several initiatives have been launched in Europe with the aim to promote physical activity through sports clubs (Lane et al., 2020; Madsen et al., 2020; Ooms et al., 2017), and Sports Club for Health (SCforH) is one of the largest such initiatives (Pedišić, Matolić, et al., 2022).

By increasing the quality and availability of "sport for all" programs in sports clubs, the SCforH initiative may contribute to improving population health in Europe (Koski et al., 2017). The initiative targets the stakeholders in the sports sector, such as sports club managers, sport coaches, sports promoters, policymakers, physical educators, and sports club members. It relies on the existing resources in sports clubs and associations, including their infrastructure, personnel, and 'know-how', to maximise the potential of the European sports sector to promote health-enhancing sports activities among all age groups. Since 2008, when the SCforH idea was publicly presented for the first time, the European Union (EU) co-funded three large international SCforH projects that involved a total of 38 partner institutions from 18 countries (Pedišić, Oja, et al., 2022). In 2009, the first version of SCforH guidelines

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were published to provide guidance to stakeholders in the sports sector on promoting health-enhancing sports activities through sports clubs. The guidelines were updated in 2011 and 2017 (Pedišić, Oja, et al., 2022), and the latest book of guidelines has been made publicly available in five languages. In 2013, the EU Council has listed the implementation of SCforH guidelines as one of the 23 key indicators for evaluation of the promotion of health-enhancing physical activity (HEPA) in the EU member countries (Pedišić, Oja, et al., 2022).

Since 2009, the SCforH guidelines have been extensively disseminated among European sports clubs and organisations. However, data collected in 36 European countries, including all EU member states, EU candidate countries, Iceland, Norway, and Switzerland, revealed that less than 10% of European sports clubs (Pedišić, Matolić, et al., 2022) and 17% of national sports organisations (Pedišić, et al., 2021) have integrated the SCforH guidelines into their programs. Such implementation rates could be explained by a lack of awareness and knowledge about SCforH guidelines.

Awareness of SCforH guidelines among representatives of sports associations has increased from 22% in 2016/17 to 53% in 2021/22 (Pedišić, Matolić, et al., 2022), which is expected to lead to their increased implementation in the future. However, these findings also indicate that additional efforts are needed to further increase the awareness of SCforH guidelines. A recent study conducted among 536 sports organisations in Europe found that awareness of SCforH guidelines is associated with a higher commitment to HEPA promotion (Matolić, Jurakić, Podnar, et al., 2023). It is, therefore, important to continue raising awareness of SCforH guidelines in the European sports sector.

As part of the ongoing shift towards a greater utilisation of online platforms, various internet-based physical activity interventions have been developed (Jahangiry et al., 2017; Marcus et al., 2000). Following this trend, to continue increasing awareness of SCforH guidelines, in 2020/21 the SCforH online course was developed (Sports Club for Health Consortium, 2020). It leverages the wide reach, accessibility, interactivity, and cost-effectiveness of the highly popular and fast evolving digital landscape (International Telecommunication Union, 2023; Marcus et al., 2000). As part of the latest international EU funded SCforH project, the course was disseminated among stakeholders in the European sports sector.

Knowledge about the course quality is essential for making improvements in the course. However, no previous study has evaluated the SCforH online course. Therefore, the first aim of this study was to evaluate the SCforH online course by analysing participant engagement in the course and course quality as perceived by participants. It is also important to gain insight into suitability of the course for different audiences. Thus, our second aim was to explore differences in the engagement levels and subjective assessments of course quality between: (i) different types of stakeholders in the sports sector; (ii) residents of EU and non-EU countries; (iii) participants from different regions of Europe; and (iv) those with and without prior awareness of the SCforH guidelines.

Methods

SCforH online course

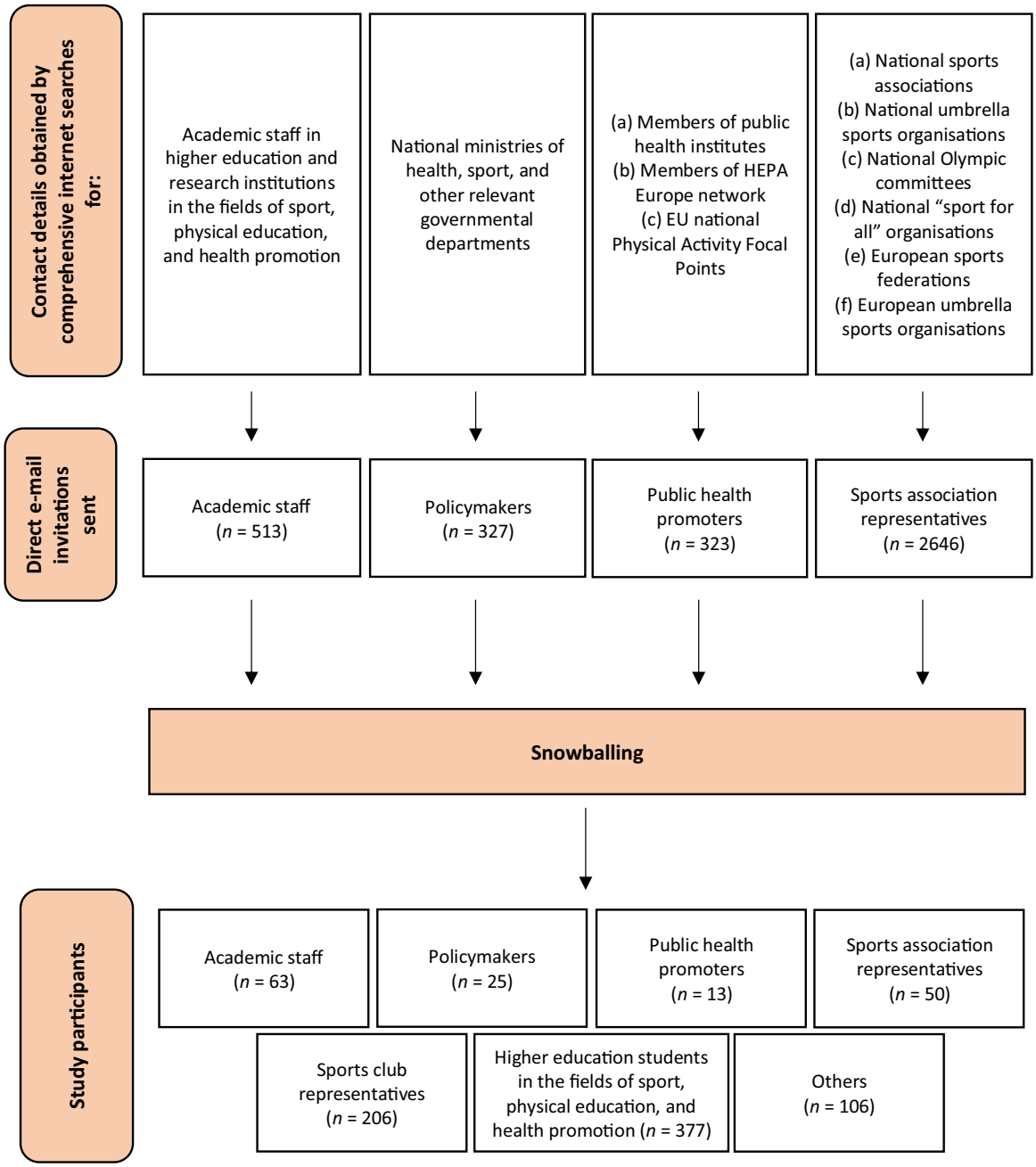
The SCforH online course presents key messages from the SCforH guidelines in plain language. It was developed in three stages. The first stage included a literature review and internet search conducted by three researchers, with the aim to develop course content and get insight into the newest trends and technologies in online educational courses. In the second stage, the three researchers developed the first version of the course in collaboration with IT professionals, graphic designers, and an English language editor. The course was then reviewed and pilot-tested for functionality by an independent assessor. In the third stage, the course underwent a thorough review by 30 experts specialising in physical activity, sport, health, and education from 27 EU countries. Their feedback was implemented, and the final version of the course was translated into 24 European languages by language professionals. The course includes: (i) 7 units with a total of 28 content items (hereafter: "course parts") encompassing textual, pictorial, and video learning materials, interactive exercises, and in-course quizzes; (ii) links to additional SCforH online resources; (iii) course evaluation survey; and (iv) SCforH survey. A certificate is issued to participants after completion of all seven units of the course. This is currently the only educational course on SCforH guidelines. To the best of our knowledge, it is also the only online course aimed at physical activity promotion in the sports setting that is accessible in all official EU languages, facilitating its uptake among diverse audiences. The course is user friendly and tailored to various stakeholders in the sports sector.

Study design and participants

In this course evaluation study, the SCforH course and SCforH online survey were disseminated from June 2021 to November 2022. Direct email invitations to participate in the course were sent to 3809 participants from 36 European countries, including all EU member and candidate countries, Iceland, Norway, Switzerland, and the United Kingdom (Figure 1). All contacted individuals were encouraged to share the course invitation with their organisation members, students, and other potential participants.

All participants in the course were invited to complete the course evaluation and SCforH surveys. The final study sample included 840 participants from 34 European countries (Table 1). The participation in the course and surveys was voluntary. Prior to responding to the questionnaire, participants provided their informed consent. The study protocol was approved by the Scientific and Ethics Committee of the University of Zagreb, Faculty of Kinesiology (reference number: 10/2021). The study was conducted in accordance with the Declaration of Helsinki.

Figure 1 Flowchart of the sampling process



Measures

The level of the participants' engagement in the course was assessed by analysing web trigger events associated with actions taken by participants during their course attendance. In specific, we gathered information on their overall time spent in the course and the number of course parts they completed.

Course quality was assessed using the EDUcational Course Assessment TOOLkit (EDUCATOOL) post-course questionnaire (Matolić, Jurakić, Greblo Jurakić, et al., 2023). The questionnaire has 12 items asking about participant's: (i) *reaction* (items on satisfaction, relevance and engagement); (ii) *learning* (items on knowledge acquisition, knowledge retention, skill development, skill retention, and attitude change); (iii) *behavioural intent* (items on utilisation of knowledge and utilisation of skills); and (iv) *expected outcomes* (items on improved personal performance and other benefits). Participants provided their responses on an 11-point Likert scale, ranging from 0 ("completely disagree") to 10 ("completely agree"). Using the EDUCATOOL Calculator (Matolić, Jurakić, Greblo Jurakić, et al., 2023), the total score in each of the evaluation components (i.e., *reaction*, *learning*, *behavioural intent*, and *expected outcomes*) was calculated as the arithmetic mean of responses to the respective questionnare items, linearly transformed to a scale from 0 to 25 points. The overall evaluation score (0–100 points) was calculated as the sum of participant's scores in the four evaluation components.

Table 1 Characteristics of the study sample

Category	*n*	%
Stakeholder type		
Academic staff[a]	63	7.5
Policymaker	25	3.0
Public health promoter	13	1.5
Sports association representative	50	6.0
Sports club representative	206	24.5
Student[b]	377	44.9
Other	106	12.6
European Union residency		
Yes	758	90.2
No	82	9.8
Region[c]		
Central and Eastern Europe	506	60.2
Northern Europe	29	3.5
Southern Europe	219	26.1
Western Europe	86	10.2
Awareness of SCforH guidelines[d]		
Yes	161	54.4
No	135	45.6

Note. SCforH = Sports Club for Health. [a]Academic staff in higher education and research institutions in the fields of sport, physical education, and health promotion. [b]Higher education students in the fields of sport, physical education, and health promotion. [c]Region of Europe according to EuroVoc. [d]Surveys for students and "Other" did not include the question on awareness of SCforH guidelines. Also, not all of the remaining participants responded to the question.

Higher scores denote better course quality. The questionnaire has adequate validity and reliability (Matolić, Jurakić, Greblo Jurakić, et al., 2023). More details about the questionnaire and its measurement properties can be found elsewhere (Matolić, Jurakić, Greblo Jurakić, et al., 2023).

We also collected data on participant's: type of involvement in the sports sector (i.e., stakeholder type); country of residence; and prior awareness of the SCforH guidelines. Based on their type of involvement in the sports sector, the participants were classified into the following categories: (i) academic staff in higher education or research institutions in the fields of sport, physical education, and health promotion (hereafter: "academic staff"); (ii) representatives of governmental bodies (hereafter: "policymakers"); (iii) representatives of public health institutes and/or national Physical Activity Focal Points (hereafter: "public health promoters"); (iv) sports association representatives; (v) sports club representatives; (vi) higher education students in the fields of sport, physical education, and health promotion (hereafter: "students"); and (vii) others. Based on the country of residence, we classified participants into residents of EU countries and non-EU countries and four regions according to EuroVoc, including Central and Eastern, Northern, Southern, and Western Europe (Publications Office of the European Union, 2014). Prior awareness of SCforH guidelines was assessed using a binary (yes-no) question.

Data analysis

We checked the normality of distributions of time in course and course quality variables using Shapiro-Wilk test, histograms, and Q-Q plots. Given that the distributions were not normal, we used non-parametric statistics.

We calculated medians, their 95% confidence intervals using the method proposed by Bonett and Price (2002), and interquartile ranges for course quality and time in course variables in the overall sample and by stakeholder type, EU residency, region of Europe, and prior awareness of the SCforH guidelines.

Multivariate differences in four evaluation components and time in course by stakeholder type, EU residency, region of Europe, and prior awareness of the SCforH guidelines were tested using the c-sample test of location. This was followed by a set of Kruskal-Wallis tests of univariate differences between the groups. Post-hoc pairwise comparisons were performed using Mann-Whitney *U* test with Bonferroni correction. In all the analyses, p value of less than .05 indicated a statistically significant difference. We did not analyse differences in the number of completed course parts, because this measure of engagement in the course had very low variability.

The data analysis was performed using R (Version 4.2.2; R Foundation for Statistical Computing, Vienna, Austria) and RStudio (Version 2022.12.0.353; Posit, Boston, MA, USA) with "dplyr" (Wickham et al., 2023), "stats", and "MNM" (Nordhausen et al., 2018) packages.

Results

Engagement in the course and assessments of course quality

The vast majority of participants (92%) completed all 28 parts of the course, and the median time in course was 27.60 min. In the overall sample, the medians of all EDUCATOOL items were high, ranging from 8.00 to 9.00 (Table 2). *Reaction* was the evaluation component with the highest median (21.67), while the sample medians of all three remaining evaluation components were equal (20.00). The median overall evaluation score was 82.50.

Multivariate differences

There were significant multivariate differences in course quality and time in course between stakeholder types, EU and non-EU residents, and participants from different regions of Europe ($p < .001$ for all three comparisons; Table 3). However, we did not find statistically significant multivariate differences in course quality and time in course by prior awareness of SCforH guidelines ($p = .260$).

Univariate differences

We found significant differences between stakeholder types in *reaction* ($p = .002$), *learning* ($p < .001$), *behavioural intent* ($p < .001$), *expected outcomes* ($p = .003$), and time in the course ($p = .002$; Table 3). A post-hoc analysis revealed several pairwise differences between stakeholder types. For example, compared with sports club representatives, students provided lower ratings for *learning* ($p < .001$), *behavioural intent* ($p < .001$), and *expected outcomes* ($p = .018$). Students also provided lower ratings for *behavioural intent*, compared with sports association representatives ($p = .016$). Policymakers spent more time in the course than academic staff ($p = .033$).

Table 2 Evaluation of the Sports Club for Health (SCforH) online course: Quality and participant engagement

Measure	Median (95% CI[a])	IQR
EDUCATOOL questionnaire item		
(1) Overall, I am satisfied with this course.	9.00 (9.00, 9.00)	2.00
(2) I find this course useful.	9.00 (9.00, 9.00)	2.00
(3) I was fully engaged in this course.	8.50 (8.01, 8.99)	3.00
(4) I acquired new knowledge in this course.	8.00 (8.00, 8.00)	3.00
(5) I will be able to retain this knowledge over the long term.	8.00 (7.51, 8.49)	3.00
(6) This course helped me develop skills.	8.00 (7.51, 8.49)	3.00
(7) I will be able to retain these skills over the long term.	8.00 (8.00, 8.00)	3.00
(8) Taking this course increased my interest in the subject.	9.00 (8.51, 9.49)	3.00
(9) I will use the knowledge acquired in this course.	9.00 (8.51, 9.49)	3.00
(10) I will use the skills developed in this course.	8.00 (8.00, 8.00)	3.00
(11) Participation in this course will improve my performance.	8.00 (8.00, 8.00)	4.00
(12) My participation in this course will result in other benefits.	8.00 (8.00, 8.00)	3.00
EDUCATOOL evaluation component		
Reaction	21.67 (21.26, 22.07)	5.83
Learning	20.00 (19.76, 20.24)	6.00
Behavioural intent	20.00 (19.39, 20.61)	7.50
Expected outcomes	20.00 (20.00, 20.00)	7.50
EDUCATOOL overall evaluation score	82.50 (81.11, 83.89)	23.94
Time in course (min)	27.60 (26.93, 28.27)	14.32

Note. IQR = interquartile range; EDUCATOOL = EDUCational Course Assessment TOOLkit. [a]95% confidence interval for median calculated using the method proposed by Bonett and Price (2002).

Compared with EU residents, participants from non-EU countries provided higher ratings for all four evaluation components ($p < .001$ for all), while spending less time in the course ($p = .007$).

Significant differences in all four evaluation components were also found between participants from different regions of Europe ($p < .001$ for all). A post-hoc analysis revealed several pairwise differences by region of Europe. For example, compared with participants from Central and Eastern Europe and Southern Europe, participants from Western Europe provided lower ratings for *reaction, learning, behavioural intent*, and *expected outcomes* ($p < .001$ for all eight comparisons). Participants from Northern Europe provided lower ratings for *reaction* than participants from Central and Eastern Europe ($p = .014$) and higher ratings for *learning* than participants from Southern Europe ($p = .019$).

We did not find significant differences in any of the evaluation components and time in course between the groups of participants by prior awareness of SCforH guidelines ($p > .05$ for all).

Discussion

Key findings

The main findings of this study are that the stakeholders in the European sports sector: (i) were highly engaged in the SCforH online course; and (ii) provided excellent ratings for all aspects of course quality. The course scored particularly high in the *reaction* component, that is, the degree to which it is satisfying, useful, and engaging to participants. The time spent in course and assessments of course quality were generally similar between those with and without prior awareness of the SCforH guidelines. However, some aspects of course quality were rated slightly higher by residents of countries outside the EU and in Central and Eastern Europe, and slightly lower by students, compared with other course participants.

Engagement in the course

The high number of completed course parts and high median time in the SCforH online course may be suggestive of active engagement and good retention of participants, aspects often identified as challenging in the context of online learning courses (Allen & Seaman, 2013). Previous research on massive open online courses has revealed that completion rates for self-assessment tasks across different topics range from 8.0% to 23.1% among learners with different educational backgrounds (Gomez Zermeño & Aleman de la Garza, 2016). In another study, 44.8% of students reported that they plan to complete all activities of an online course (Engle et al., 2015). These figures are considerably lower than the observed engagement in the SCforH online course. A possible reason for such large differences in engagement may lie in the fact that the SCforH online course was distributed only to potential participants with presumably high interest in the topic.

Course quality

Reaction

The aspects of SCforH course quality pertaining to *reaction* (i.e., satisfaction, relevance, and engagement) received similar or higher ratings, compared with online courses evaluated in previous studies (Ludwikowska, 2021; Tratnik et al., 2017). High satisfaction with and perceived relevance of the SCforH online course may facilitate the learning processes, thereby increasing the likelihood of substantial improvements in knowledge, skills, and attitudes (Chong

Table 3 Evaluation of the Sports Club for Health (SCforH) online course: Between-group differences

Category	Median ± IQR (95% CI[a])				
	Reaction	Learning	Behavioural intent	Expected outcomes	Time in course
Stakeholder type					
Academic staff[b]	21.67 ± 5.00 (20.05, 23.28)	20.00 ± 7.75 (17.82, 22.18)	20.00 ± 7.50 (18.18, 21.82)	18.75 ± 8.13 (16.33, 21.17)	24.34 ± 16.06 (20.08, 28.61)
Policymaker	22.50 ± 5.00 (20.08, 24.92)	20.50 ± 4.50 (18.80, 22.20)	21.25 ± 5.00 (18.83, 23.67)	21.25 ± 6.25 (19.43, 23.07)	29.30 ± 8.83 (25.90, 32.70)
Public health promoter	22.50 ± 3.33 (21.07, 23.93)	22.00 ± 4.50 (19.42, 24.58)	22.50 ± 5.00 (19.82, 25.18)	21.25 ± 3.75 (19.10, 23.40)	32.08 ± 8.29 (26.02, 38.14)
Sports association representative	22.50 ± 5.63 (20.97, 24.03)	19.25 ± 6.88 (16.95, 21.55)	24.38 ± 6.25 (22.08, 26.67)	20.00 ± 8.75 (17.13, 22.87)	28.78 ± 15.48 (25.48, 32.08)
Sports club representative	22.50 ± 5.83 (22.09, 22.91)	21.50 ± 5.50 (20.52, 22.48)	22.50 ± 6.25 (21.89, 23.11)	21.25 ± 7.50 (20.64, 21.86)	27.13 ± 15.01 (25.44, 28.81)
Student[c]	20.83 ± 4.17 (20.02, 21.65)	19.50 ± 6.00 (19.01, 19.99)	20.00 ± 7.50 (19.39, 20.61)	20.00 ± 7.50 (19.39, 20.61)	28.32 ± 12.67 (27.57, 29.06)
Other	22.50 ± 5.00 (21.70, 23.30)	21.00 ± 4.88 (20.04, 21.96)	21.25 ± 6.25 (20.05, 22.45)	20.00 ± 7.50 (18.80, 21.20)	22.99 ± 16.18 (19.58, 26.40)
p[d]	.002	< .001	< .001	.003	.002
p[e]			< .001		
European Union residency					
Yes	21.67 ± 5.00 (21.26, 22.07)	20.00 ± 6.00 (19.51, 20.49)	20.00 ± 7.50 (19.39, 20.61)	20.00 ± 6.25 (20.00, 20.00)	27.81 ± 13.38 (27.08, 28.53)
No	24.17 ± 3.96 (23.00, 25.33)	22.25 ± 7.00 (20.62, 23.88)	23.75 ± 5.00 (22.59, 24.91)	22.50 ± 6.25 (21.34, 23.66)	22.16 ± 17.85 (17.25, 27.07)
p[d]	< .001	.001	< .001	< .001	.007
p[e]			< .001		
Region					
Central and Eastern Europe	22.50 ± 5.83 (22.09, 22.91)	20.00 ± 6.50 (19.51, 20.49)	21.25 ± 7.50 (20.03, 22.47)	21.25 ± 7.50 (20.64, 21.86)	27.58 ± 15.41 (26.46, 28.70)
Northern Europe	20.00 ± 5.00 (18.69, 21.31)	18.50 ± 5.00 (17.19, 19.81)	18.75 ± 7.50 (16.13, 21.37)	20.00 ± 10.00 (17.38, 22.62)	29.17 ± 12.54 (25.03, 33.31)
Southern Europe	21.67 ± 4.17 (20.85, 22.48)	21.00 ± 4.50 (20.51, 21.49)	22.50 ± 6.25 (21.28, 23.72)	20.00 ± 5.00 (19.39, 20.61)	27.66 ± 12.97 (26.12, 29.20)
Western Europe	20.00 ± 5.42 (18.81, 21.19)	17.00 ± 5.50 (16.28, 17.72)	18.13 ± 6.25 (16.93, 19.32)	16.25 ± 6.25 (15.06, 17.44)	27.24 ± 10.17 (25.32, 29.16)
p[d]	< .001	< .001	< .001	< .001	.180
p[e]			< .001		
Awareness of SCforH guidelines					
Yes	22.50 ± 5.00 (21.68, 23.32)	21.00 ± 6.50 (19.78, 22.22)	22.50 ± 6.25 (21.89, 23.11)	21.25 ± 7.50 (20.03, 22.47)	27.19 ± 15.98 (25.24, 29.15)
No	21.67 ± 5.00 (21.26, 22.07)	21.00 ± 5.50 (20.02, 21.98)	22.50 ± 6.88 (21.28, 23.72)	20.00 ± 7.50 (18.78, 21.22)	28.25 ± 13.81 (26.36, 30.14)
p[d]	.392	.216	.329	.079	.153
p[e]			.260		

Note. IQR = interquartile range. [a]95% confidence interval for median calculated using the method proposed by Bonett and Price (2002). [b]Academic staff in higher education and research institutions in the fields of sport, physical education, and health promotion. [c]Higher education students in the fields of sport, physical education, and health promotion. [d]*p* value from the Kruskal-Wallis test. [d]*p* value from the c-sample test of location [g]Region of Europe according to EuroVoc.

& Songan, 2016; Ludwikowska, 2021). High self-reported engagement in the SCforH online course corroborates the conclusions drawn from the objective measures of engagement (i.e., the number of completed course parts and time in course).

Learning

Previous research has shown that a positive attitude towards change is important for successful implementation of new initiatives (Hower et al., 2019; Rafferty et al., 2013). The SCforH online course scored very high in *attitude change*, which indicates its excellent potential to motivate implementation of new SCforH initiatives. The scores for *knowledge acquisition* and *skill development* in the SCforH online course were somewhat lower, compared with previous studies (de Araujo Guerra Grangeia et al., 2016; Ludwikowska, 2021). Despite that, they can still be considered as very high. Previous research suggested that the perceived level of knowledge acquisition is an important driver of student satisfaction with a course (Tratnik et al., 2017), which may partially explain high satisfaction with the SCforH online course. In terms of *knowledge/skills retention,* the SCforH online course scored higher than courses evaluated in a previous study (Diamantidis & Chatzoglou, 2014). However, it should be noted that the corresponding questionnaire items used in the current study refer to participant's perceived future ability to retain knowledge and skills acquired in the course (i.e., envisaged knowledge and skills retention). Hence, they may not adequately reflect the true retention of knowledge and skills that could only be assessed over the long term.

Behavioural intent

In the two *utilisation* items, the SCforH online course scored similar to or higher than educational courses evaluated in previous studies (Diamantidis & Chatzoglou, 2014; Ludwikowska, 2021). It should be noted that the two *utilisation* items in the EDUCATOOL questionnaire asked about behavioural intent as opposed to the actual behaviour that could only be assessed over the long term. However, given that behavioural intentions are strongly related to behaviour (Conner & Armitage, 1998), it may be that the SCforH online course would receive similarly high scores also for the actual behaviour. Furthermore, a previously evaluated educational "game", received somewhat higher ratings for utilisation (Diehl et al., 2017) than the SCforH course. To improve scores in the *utilisation* items, future editions of the SCforH online course could considered gamification as an additional educational strategy.

Expected outcomes

In terms of *expected outcomes*; namely, *improved personal performance* and *other benefits,* the SCforH online course scored similarly high as educational courses evaluated in previous studies (Aoun & Johnson, 2002; Chiu & Wang, 2008). It is important to note that these scores refer to predicted benefits of course attendance as opposed to true benefits that could only be assessed over the long term, as in some previous studies (Diamantidis & Chatzoglou, 2014; Doyle et al., 2012).

Overall evaluation score

The overall evaluation score for the quality of SCforH course (82.50 out of 100 points), slightly exceeded the average quality score for online courses, that is, around 76% of the maximum score, and matched the average score for, generally higher-rated, face-to-face courses, that is, around 81% of the maximum score (Lowenthal et al., 2015). Two prominent online educational course platforms, Coursera and edX, have received average ratings for content, interactivity, instructor presence, and course design ranging 4.36–5.86 and 4.51–5.78 out of 7 points, respectively (Glory et al., 2019; Hanifa et al., 2019). The SCforH online course received an overall evaluation score that falls at the top of these ranges, highlighting its high quality. However, it should be noted that due to methodological differences (e.g., different course quality assessment methods, follow-up periods, and analytical approaches), our results may not be directly comparable to the results of previous studies.

Between-group comparisons

Differences in the engagement in SCforH course and assessment of course quality between various types of stakeholders in the sports sector may be explained by differences in professional roles and responsibilities. It was previously suggested that learners with higher task value tend to remain longer engaged in the course (Chiu & Wang, 2008). Due to possible sense of being directly responsible for sports promotion, policymakers may have a high subjective task value (Eccles, 1983) for participating in the SCforH online course, which could explain their longer engagement in the course, compared with academic staff. Another reason could be the official recognition of the importance of SCforH guidelines by governmental bodies in the EU (Pedišić, Oja, et al., 2022), which could have provided additional motivation for policymakers for high engagement in the SCforH online course. Lower time in SCforH course among academic staff may be explained by potentially lower level of interest in the topic or time constraints. Research also shows that courses tailored to trainees' job demands are more likely to facilitate the application of acquired knowledge and/or skills in their respective workplaces (Diamantidis & Chatzoglou, 2014). Representatives of sports clubs and associations are likely to have direct opportunities to implement SCforH initiatives as part of their work (Geidne et al., 2019). This may be the reason why they provided higher ratings for the SCforH course in the *behavioural intent* items, compared with students. It could also be that the task value of SCforH course is lower among students, compared with representatives of sports clubs and associations, due to competing academic obligations and possibly less developed time management skills (Shaikh & Asif, 2022).

Interesting results were obtained when comparing EU and non-EU residents; while EU residents spent more time in the SCforH online course, residents of non-EU countries provided higher ratings for the quality of the

course. The fact that the course was available in all 24 official languages of the EU may have positively affected the level of engagement in the course among EU residents. By contrast, the course was available in the official languages of only three non-EU countries included in this study (Serbia, Switzerland, and the United Kingdom), which may have negatively affected the level of engagement in the course among participants from some non-EU countries. Furthermore, a range of physical activity and sport policies in the EU emphasise the importance of "sport for all" (Christiansen et al., 2014). However, the implementation of such strategies was found to be challenging (Klepac et al., 2020; Pratt et al., 2021), which may have lowered the perceived value and expected outcomes of the SCforH course among some participants. If the "physical activity policy to practice disconnect" (Pratt et al., 2021) is more pronounced in the EU than in non-EU countries, this could partially explain why EU residents provided lower ratings for the SCforH course.

In a previous study (Matolić, Jurakić, Podnar, et al., 2023), sports organisations from the Central and Eastern region of Europe were found to be more committed to promoting HEPA, compared with those in Western Europe. It might be that stakeholders in the sports sector from Central and Eastern Europe place a stronger value on participating in educational courses on the promotion of physical activity in the sports setting, such as the SCforH course. This would explain why SCforH course participants from Central and Eastern Europe provided higher ratings of course quality, compared with participants from Western Europe.

Research has found that learners with prior experience in areas related to the content of a given course are more inclined to complete the course (Lee & Choi, 2011). Prior knowledge of the subject may also improve learning outcomes (Hailikari et al., 2008). However, this was not confirmed in the current study, because we did not find statistically significant differences by prior awareness of the SCforH guidelines in any of the analysed variables.

Practical implications

Our findings show that the SCforH online course is an adequate tool for dissemination of SCforH guidelines among stakeholders in the European sports sector; from sports clubs to higher organisational levels such as sports associations and governmental bodies. The positive feedback on the quality of SCforH online course, justifies continued efforts to widely disseminate the course, with the aim to improve national implementation of SCforH guidelines in European countries. However, the course could be further refined to improve its ratings among students, residents of EU countries, and participants from Western Europe, based on the findings of the current study. More generally, findings of this study could inform the development of other online courses intended for the stakeholders in the European sport sector.

Strengths and limitations

The strengths of this study include: (i) a large sample of participants including various types of stakeholders in the European sports sector; (ii) a large number of included countries; (iii) a comprehensive quantitative assessment of course quality; and (iv) objective assessment of participant engagement in the course using web trigger events.

The study also had several limitations. First, the survey did not include questions about sociodemographic characteristics of participants, such as gender and age, nor did the student survey include questions about their country of origin and college/university. Therefore, the representation of different sociodemographic groups and regional distribution in the survey could not be determined. Second, while useful for reaching populations that are otherwise difficult to reach, snowball sampling does not allow to determine the response rate. Owing to the sampling strategy, the sample may not be fully representative of the study population. The generalisability of our findings may have been further compromised by disproportionate response rates from different countries. Third, given that the participants completed the course evaluation survey immediately after the course, we could only assess behavioural intent (instead of actual behaviour) and expected outcomes (instead of actual outcomes).

Conclusions

It can be concluded that the level of participant engagement in the SCforH course is high. The quality of SCforH course is also high, as perceived by a wide range of stakeholders in the European sports sector. These findings demonstrate that the SCforH online course is an adequate tool for dissemination of SCforH guidelines in Europe.

Some aspects of course quality are rated slightly lower by residents of EU countries (compared with residents of non-EU countries), participants from Western Europe (compared with participants from Central and Eastern Europe), and students (compared with representatives of sports clubs and associations). These findings can be used to refine the SCforH online course and improve the content of new training courses tailored to stakeholders in the European sports sector.

Future studies evaluating the quality of SCforH course should consider using sampling methods that would improve generalisability. They would also benefit from conducting a follow-up survey, to determine the extent to which participants: (i) use knowledge and skills acquired in the course; and (ii) profit from attending the course in terms of improved performance and other gains.

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Conflict of interest

The authors report no conflict of interest.

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