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The future of continuing education and lifelong learning in sport psychology professionals:

A Delphi study

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Abstract

One of the fundamental competencies for psychologists is to practice according to the ethical standards and principles of their profession. Two ways of achieving these standards include engaging in continuing education (CE) and lifelong learning (LL). Sport psychology professionals (SPPs) have frequently noted the importance of engaging in CE and LL to improving one's professional practice, yet no research currently exists specifically examining these concepts in the sport psychology literature. A panel of 16 expert SPPs were invited to participate in a 3-phase Delphi study. This multinational panel of experts was selected based on their involvement in committees charged by sport psychology organizations with developing and implementing CE for their membership. The Delphi approach was used to better understand SPPs' views on: the optimal delivery, assessment, and impact of CE and LL, as well as the SPP's beliefs regarding the "half-life" of knowledge within the sport psychology field. The SPPs in the Delphi mainly worked in academic (65%) or applied (37.5%) settings with an average professional experience of 14 years. While the experts considered CE and LL to be important, they reported limited of engagement and investment in either activity. Moreover, the SPPs predicted an increase in e-learning methods of delivery and anticipated a growing impact of CE and LL in supporting professionals. Finally, the participants predicted a reduction in the "half-life" of sport, but not performance, psychology knowledge over the next 10 years. Such predictions highlight the salience of professional organizations promoting engagement with CE and LL.

Keywords: Professional Training, Lifelong Learning, Professional Development, Effective practice, Delphi methodology

46 Public Significance Statement

47 This study advances the knowledge related to the value of continuing education for the
48 effective care provision by sport psychology professionals. Specifically, a panel of 16 expert sport
49 psychology professionals worked to consensually agree on a definition of continuing education and
50 lifelong learning applicable to the sport psychology field and identify effective ways to plan, deliver
51 and evaluate continuing education in the field.

52 The future of continuing education and lifelong learning in sport psychology professionals:
53 A Delphi study

54 Sport psychology professionals (SPP) are in growing demand (cf. Weir, 2018) and, as
55 scholars seek to meet this demand, they have sought to develop a clearer understanding of the
56 fundamental characteristics (Lubker, Visek, Geer, & Watson, 2008; Sharp & Hodge, 2011) and
57 competencies (Fletcher & Maher, 2013; 2014) that define their work (cf. Wagstaff & Hays, 2019).
58 To professionalize psychological practice and clarify necessary knowledge and skills, a growing
59 emphasis has been placed by scholars on competency-based models of practice, training, and
60 credentialing (cf. Rubin et al., 2007). For example, such foci have led to the development of the
61 cube model of competency (cf. Rodolfa, Bent, Eisman, Nelson, Rehm, & Ritchie, 2005), which has
62 also recently been applied to practice of sport psychology (SP; Fletcher & Maher, 2013).

63 While competence refers to an individual professional's suitability for the profession (Rubin
64 et al., 2007), "it is not a static end point that one achieves, nor should it be viewed in a dichotomous
65 manner" (Fletcher & Maher, 2013, p. 267). In fact, professionals should not be described as
66 competent or incompetent, but on a continuum, ranging from low to high competence (Barnett,
67 Doll, Younggren, & Rubin, 2007). Further, due to the developmental, incremental, and context-
68 dependent nature of competencies (Rubin et al., 2007), it is important for professionals to constantly
69 renew their knowledge. Dubin (1972) argued that one major challenge faced by many professions is
70 to continue developing and maintaining competence while simultaneously increasing specialization
71 and profusion of knowledge. Further, Dubin noted one indicator of this challenge is observable in
72 the constant shrinking of the "half-life" of professional knowledge. The half-life of professional
73 knowledge can be defined as the time it takes before half of the knowledge one gains during
74 training is lost, and one becomes half as knowledgeable than when they completed their training
75 (Neimeyer, Raylor, & Rozensky, 2012b). Neimeyer and colleagues have argued that the half-life of
76 professional psychology knowledge is likely to shrink substantially in the near future (Neimeyer et
77 al., 2012b; Neimeyer, Raylor, Rozensky, & Cox, 2014). Specifically, the half-life of the SP
78 proficiency was estimated by non-sport psychology continuing education experts to be 8.15 years

79 over the next 10 years (Neimeyer et al., 2012b). Neimeyer and colleagues (2012b) anticipated a
80 drop in the half-life of the SP proficiency (-9%) making the SP proficiency the most stable among
81 the APA proficiencies. If compared to other APA specialties, SP has the same deterioration as
82 family psychology, which appears to be the specialty with the fourth most stable knowledge. Sport
83 psychology knowledge stability appears to be more stable than ‘professional psychology’
84 knowledge in general, which Neimeyer and colleagues (2014) anticipated to experience a
85 degradation of 17.8% over the subsequent 10 years.

86 Related to the competency development of psychology professionals is the process of
87 continued professional development (CPD), and which is widely accepted as one of the main pillars
88 to maintain professional effectiveness and excellence (Neimeyer, Taylor, & Cox, 2012a; Wylleman,
89 Harwood, Elbe, de Caluwé, 2009). CPD can be further divided into two components that are worthy
90 of a closer scrutiny: continuing education (CE) and lifelong learning (LL). The American
91 Psychological Association (2015) defined CE as:

92 an ongoing process consisting of formal learning activities that (1) are relevant to
93 psychological practice, education and science; (2) enable psychologists to keep pace with
94 the most current scientific evidence regarding assessment, intervention, and education as
95 well as important legal, statutory, or regulatory issues; and (3) allow psychologists to
96 maintain, develop, and increase competencies in order to improve services to the public and
97 enhance contributions to the profession (p. 2)

98 According to Neimeyer, Taylor, Wear, & Linder-Crow (2012c), CE consists of a wide
99 assortment of professional activities, roles, and responsibilities, aimed at providing opportunities for
100 practitioners to learn and to stay up-to-date with changes in their fields. As a possible partial
101 solution to what Ross (1974) described as the “danger of professional obsolescence” (p. 122), CE
102 has an important role in maintaining optimal professional functioning and acts as a mechanism to
103 ensuring competent and ethical practice (Neimeyer, Taylor, & Wear, 2009; 2010b). Some CE
104 activities previously reported by psychology professionals include self-directed learning (e.g.,
105 reading journal articles), conference attendance, teaching/taking classes, participating in workshops,

106 peer consultation, and scholarly work, or any combinations of these. Yet, this work has almost
107 exclusively been conducted with clinical psychology professionals and there is limited clarity
108 regarding the CE activities and their impact across other disciplines of psychological practice
109 (Neimeyer et al., 2012c).

110 While the value of CE has been demonstrated in general psychology (e.g., Neimeyer,
111 Taylor, & Philip, 2010a; Neimeyer, Taylor, & Wear, 2011), some scholars have raised concerns
112 regarding the mandatory participation in these programs (Adams & Sharkin, 2012; Neimeyer et al.,
113 2009; VandeCreek, Knapp, & Brace, 1990). That is, scholars have noted declining engagement with
114 CE by uninterested attendees motivated by mandatory attendance requirements rather than a
115 genuine interest in learning (Neimeyer et al., 2009). Additionally, scholars have argued that formal
116 CE credits are not the only (or primary) way to guarantee professional development, which instead
117 can unfold from other learning (i.e., informal and incidental) and professional (e.g., peer
118 consultation) activities as well as from personal maturation (Neimeyer et al., 2009).

119 Taylor, Neimeyer, Zemansky, and Rothke (2012) highlighted the role of CE as the link
120 between lifelong learning (LL) and professional competence, with all three factors contributing to
121 the development and maintenance of competence among professionals. LL can be defined as, "a set
122 of self-initiated activities (behavioral aspect), and information seeking skills (capabilities) that are
123 activated in individuals with a sustained motivation to learn and the ability to recognize their own
124 learning needs (cognition)" (Hojat, Veloski, Nasca, Erdmann, & Gonnella, 2006, p. 931). While
125 engaging in CE and LL is important to prevent the erosion of competencies (Fletcher & Maher,
126 2013), Wylleman et al. (2009) noted that, despite great attention being placed on the early stages of
127 SP training, only limited attention has been devoted to the LL of experienced SPPs. Thus, there
128 remains a gap in current knowledge regarding how experienced SPPs engage in CE and LL. It
129 follows that research is needed to understand how SPPs conceptualize and operationalize CE and
130 LL. Such research will enable scholars to better comprehend how professionals might continue to
131 develop their skills and update and refine their professional knowledge, and in doing so, maintain
132 and engagement with a sustainable, ethical and effective professional service. Hence, in this study

133 we aimed to develop a consensual definition of CE and LL, and to understand of how SPPs
134 perceived the future of the CE's (1) methods of delivery, (2) assessment of outcome, (3) anticipated
135 impact, and (4) specialization of knowledge, based on the current status quo of the discipline.

136 **Method**

137 **Design**

138 Kaynak and Macauley (1984) described the Delphi method as, "a unique method of eliciting
139 and refining group judgement based on the rationale that a group of experts is better than one expert
140 when exact knowledge is not available" (p. 90). This is a systematic and rigorous approach to
141 gathering opinion and generating consensus on issues that require the input of geographically-
142 dispersed experts. Four are the key elements characterizing the Delphi method: (1) panelists'
143 anonymity, which allows the free expression of the panelists' opinions without incurring in group
144 thinking; (2) feedback, which provides the opportunity to clarify and/or change panelists'
145 perspectives, (3) iteration, which allows the refinements of the panelists' views based on the
146 feedback generated by all the panelists' answers at each round; and finally, (4) statistical analysis of
147 responses, which allows for a quantitative analysis and interpretation of data (Rowe & Wright,
148 1999). The Delphi method was chosen for this study because it provided the opportunity to invite to
149 participate professionals, scholars and practitioners from around the world with expertise in
150 continuing education and experience of planning, delivery, assessment of continuing education.

151 By gathering data using a series of iterative questionnaire stages, the Delphi method aims to
152 gain consensus among experts (Keeney, Hasson, & McKenna, 2011). Each round of questionnaire
153 development is built on the results of the previous round, that are recorded, analyzed, and returned
154 to the experts for reevaluation (Keeney et al., 2011). Over multiple iterations, the experts are asked
155 to consider the composite responses of all the panelists, and reflect on their own responses. Using
156 the Delphi method has some important advantages including inter alia expert anonymity, controlled
157 feedback, and the opportunity to conduct a variety of statistical analyses to assist interpreting the
158 data (Keeney et al., 2011). These characteristics support the research in limiting some of the
159 common shortcomings of conventional pooling techniques, such as dominant participants, noise,

160 and conformity (Dalkey, 1972). Generally, the Delphi methods involve at least a two-step process
161 beginning with identification/elaboration of a set of concepts followed by classification/taxonomy
162 development (Okoli & Pawlowski, 2004). A key tenet of the Delphi method is the proposition that
163 group opinion is more robust than individual opinion (McKenna, 1994), and that group consensus is
164 a useful technique for soliciting the opinions of experts in a given domain (Schmidt, 1997).

165 **The Expert Panel Identification**

166 In this study, the experts were selected following an initial review of literature and a
167 theoretical sampling process aimed at identifying professionals whose area of work align with the
168 scope of the study. In line with guidelines for the Delphi method (Okoli & Pawlowski, 2004), we
169 established two main inclusion criteria for the expert panel. Those criteria were (1) SPPs who
170 currently or formerly were member of CE committees in SP organizations, and (2) whose profiles
171 could cover the heterogeneity of the SP activities. Introductory emails containing an invitation to
172 participate were sent to 40 SPPs. Thirteen professionals immediately declined the invitation because
173 they were too busy to participate, other 11 did not complete the later rounds of the process. This
174 drop-out did not negatively impact the representation of a diverse and inclusive sample regarding
175 gender, race, professional role, average experience, or the geographical dispersion of the panelists.
176 The final panel included 16 SPPs with an average of 14.13 (SD = 7.36) years of professional
177 experience, situated in the United States (5; 31.3%) and the United Kingdom (11; 68.7%). These
178 professionals divided their time between academic (M = 68.38; SD = 30.6) and applied (M = 31.63;
179 SD = 30.6) work (see Table 1).

180 Of the 40 experts who were initially invited to participate, 27 individuals agreed and
181 completed the first round (response rate = 67.5%). All of these professionals also received the
182 invitation to participate in second round, with 19 of them completing the second round (2nd round
183 response rate = 70.4%). Of these 19 professionals, 3 dropped out from the third and last round of
184 data collection, further reducing the sample size to 16 (3rd response rate = 84.2%). This attrition rate
185 of 60% is comparable with other Delphi studies and the final sample for this study was adequate for
186 effectively answering the research question. To elaborate, Martin (1983) argued that the optimal size

187 of the Delphi panel varies depending on the purpose of the study and on the heterogeneity of the
188 population. Generally, Delphi scholars (e.g., Dalkey, Brown, & Cochran, 1970; Delbecq, Van de
189 Ven, & Gustafson, 1975; Ludwig, 1997) have proposed that a panel of 15 to 20 experts could be
190 considered optimal for this methodology to be effective.

191 **Procedure**

192 In line with Okoli and Pawlowski's (2004) guidelines, the experts who agreed to participate
193 were sent an email with instructions to follow a link to the first-round survey hosted by Qualtrics
194 (Qualtrics, Provo, UT). Two follow-up emails were sent to those experts who agreed to participate,
195 but who did not complete the first round of the study. Figure 1 provides a procedural flow chart.

196 The purpose of the first round of the Delphi was twofold: (1) to develop a commonly agreed
197 upon definition of CE and LL, and (2) to develop a conceptual understanding of the SPPs' beliefs
198 regarding CE, specifically focused on the methods of delivery, assessment of outcome, anticipated
199 impact, and expansion and specialization of knowledge. With the aim of developing a SP-specific
200 definition of CE and LL, the panelists were first invited to answer open-ended questions (e.g.,
201 "Based on your experience as a SEPP professional, how would you define the concept of "lifelong
202 learning"?"). Then, they were asked to answer open ended questions (e.g., "Based on your
203 experience as an SEPP professional, what would you describe to be the main and most effective
204 way to assess the outcome of continuing education?") aimed to understand the profession specific
205 knowledge in terms of (1) the methods of CE delivery, (2) the assessment of CE outcome, (3) the
206 anticipated impact of CE, and (4) the expansion and specialization of knowledge within the field
207 (cf. Neimeyer et al., 2012c). The panelists were also asked to rank the importance of engaging in
208 CE to sustain LL using a 5-point Likert scale (1 = "not important at all", 5 = "very important").

209 In the second round of the Delphi, the experts were presented with the list of items. The
210 content of these items was derived from the content analysis completed on the open-ended
211 responses from the first round. Aiming to explore how these panelists predict how CE in SP might
212 be, they were asked to respond according to their prediction, and not their preference, on how the
213 field would change in the following 10 years. Following the work of Neimeyer and colleagues,

214 ratings were made using a 5-point Likert scale with different anchors according to the specific
215 question (Neimeyer et al., 2009; Neimeyer et al., 2012c; Taylor et al., 2012). Specifically, when
216 asked about the delivery format, assessment method, and focus of knowledge, the anchors used
217 were “decrease” (1) or “increase” (5) and when asked about the impact of CE, the anchors were
218 “very little” (1) to “great” (5) impact. Finally, the panelists were asked to indicate what they
219 perceived to be the half-life of professional knowledge in SEPP now and to predict this over the
220 next 10 years. Participants were provided with the opportunity to provide open-ended feedback
221 about any items in the Delphi round.

222 For this study, we adopted Keeney et al.’s (2011) threshold for determining consensus. That
223 is, we deemed consensus to have been reached when at least 75% of the experts were within a
224 standard deviation of the acceptability threshold. To elaborate, the second round included the
225 review of the additional feedback and the identification of those items that did not reach consensus.
226 Finally, following the removal of those statements that did reach consensus, the third round was
227 launched, sending an individualized survey to each expert for final feedback and commentary. After
228 the third-round consensus was reached. This process unfolded between December 2017 and August
229 2018.

230 **Results**

231 In this three-round Delphi study the authors aimed to develop a consensual definition of CE
232 and LL in SP and learn from SPPs about the planning, delivery, and assessment of CE. The data are
233 presented by round.

234 **Round 1.** During the first round of the Delphi method, the panelists were invited to provide
235 their personal definitions of CE and LL as well as narrative responses to the four elements of CE: (1)
236 delivery, (2) assessment, (3) impact, and (4) content. A preliminary content analysis of the responses
237 was conducted to identify possible themes (see Hsieh & Shannon, 2005; Miles, Huberman, &
238 Saldana, 2014). This content analysis was completed in two parts by the first two authors. Initially,
239 these authors independently familiarized themselves with the raw data and assigned preliminary
240 descriptive codes to these data. They then reviewed their independently developed codes and

241 collaboratively sought patterns, discussed any differences in interpretation to develop themes and a
242 working definition of CE and LL. A similar process was followed to analyze answers provided by
243 the panelists to specific questions aimed to learn about their views on the CE methods of delivery,
244 assessment of outcomes, anticipated impact, and expansion and specialization of knowledge. CE was
245 conceptualized as “an ongoing engagement in formally organized and recognized professional
246 opportunities for the development of new knowledge, understanding, and the application of best
247 practice to support a meaningful, ethical, and effective career, as well as to improve services to the
248 public and profession” (see Table 2). The same process also led to the development of the definition
249 of LL, which was conceptualized as “one's desire to explore and engage in ongoing information-
250 seeking and self-reflective activities to satisfy one's personal curiosity and self-development
251 throughout one's career, but which are not necessarily a professional obligation" (see Table 3).
252 Finally, using a 5-point Likert scale (1 = not at all; 5 = extremely), the panelists were also asked to
253 rank the importance of the role that CE plays in fostering LL ($M = 4$; $SD = 0.61$) and to describe the
254 percentage of their time they dedicated to planning ($M = 23.06$; $SD = 16.7$), delivering ($M = 35.69$;
255 $SD = 23.18$), and attending ($M = 41.25$; $SD = 31.59$) CE programs (see Table 2 and 3).

256 **Round 2.** Following content analysis of the qualitative data from Round 1, the panelists
257 were first asked to provide feedback on the definitions (see Table 2 and 3). Specifically, they were
258 asked to rank, on a 5-point Likert scale (1 = not at all; 5 = extremely), how exhaustive and
259 representative these definitions were, and how important it is for SPPs to adhere to CE and LL
260 according to these definitions. The experts perceived these definitions as exhaustive ($M_{CE} = 3.89$;
261 $SD_{CE} = 1.2$; $M_{LL} = 3.79$; $SD_{LL} = 1.08$) and applicable ($M_{CE} = 4.47$; $SD_{CE} = 0.51$; $M_{LL} = 4$; $SD_{LL} =$
262 0.75). Similar results, although slightly higher, were found also in terms of these panelists' opinion
263 of the importance for SPPs to adhere to them ($M_{CE} = 4.21$; $SD_{CE} = 0.63$; $M_{LL} = 3.95$; $SD_{LL} = 1.03$)
264 and to foster professional culture based on them ($M_{CE} = 4.42$; $SD_{CE} = 0.61$; $M_{LL} = 4.32$; $SD_{LL} =$
265 0.75). When invited to provide any further comments or feedback about these definitions the
266 panelists did not add any content-based feedback, but did provide positive remarks about the quality
267 of the definitions.

268 The panelists were also asked to rank a variety of items in response to 4 main stems focused
269 on CE and specifically on its four aspects of delivery, assessment, impact, and expansion and
270 specialization of knowledge. These items were based on a combination of the experts' independent
271 views and feedback on research-informed categories presented to them in Round 1 (see Table 4 and
272 5). In line with the procedure undertaken by Keeney et al. (2011), we analyzed the results of the
273 expert ranking calculating mean and standard deviation of the participants' ratings for each of the
274 items. Panelists' ratings within ± 1 standard deviation of the whole panel mean were considered
275 within the acceptability threshold and deemed to have reached consensus and therefore retained.
276 Those ratings outside of the ± 1 standard deviation of the mean were, instead, considered outside
277 the acceptability threshold. The panelists failed to reach the 75% acceptability threshold for 20 of
278 the 32 statements (Table 6). Following these analyses 20 of the original items did not reach
279 consensus and were included in third round in an attempt to stimulate further reflection and reach
280 consensus about the items as appropriate or inappropriate (cf. Keeney et al., 2011).

281 **Round 3.** During the final round, panelists were presented with the 20 statements that did
282 not reach the 75% consensus threshold in Round 2. In line with the recommendations of Keeney et
283 al. (2011), for each of these items we indicated the group mean and standard deviation. The
284 panelists were then asked to read the comments and ratings of other panelists, to reflect on their
285 own judgements, and then provide ratings of the remaining items. This round gave the experts an
286 opportunity to further clarify the information and their judgments about the importance of each
287 individual item. The analysis of the data showed that the experts reached consensus on twelve of
288 these items, while the remaining eight did not reach consensus.

289 Finally, based on the consensually developed definitions, they were also asked to rate, on a
290 scale 1-100, their involvement (e.g., dedicated time), interest (e.g., commitment to), and investment
291 (e.g., financial) in CE and LL (Table 7). Interestingly, when asked about CE these panelists
292 expressed very high interest ($M = 83.5$; $SD = 13.02$), but very much lower involvement ($M = 55.94$;
293 $SD = 23.47$) and investment ($M = 44.56$; $SD = 25.98$). Similar differences, although with lower

294 general scores, also characterized the answers focused on LL with higher interest ($M = 65.13$; $SD =$
295 25.11) and lower involvement ($M = 47.25$; $SD = 25.98$) and investment ($M = 40.44$; $SD = 26.75$).

296 Finally, the experts were asked their view of the “half-life” of knowledge accrual, or length
297 of time to learn the required knowledge to practice in sport, exercise, and performance psychology.
298 Participants gave ratings for the current half-life and their prediction of this 10 years in the future.
299 Interestingly, the experts predicted a slight decrease of the half-life of knowledge accrual in sport
300 and exercise between now ($M_s = 8.65$, $SD_s = 4.34$; $M_e = 7.74$, $SD_e = 5.02$) and the next 10 years (M_s
301 $= 8.35$, $SD_s = 4.96$; $M_e = 7.55$, $SD_e = 5.43$). This reduction of knowledge was not observed for
302 performance psychology, which was predicted to have a current half-life of 7.2 years ($SD_p = 3.68$),
303 which would increase over the next 10 years ($M_p = 7.7$; $SD_p = 4.7$).

304

Discussion

305 In this study, we aimed to extend the knowledge regarding how expert SPPs conceptualize
306 and operationalize CE and LL. As such, a consensually agreed definition of CE and LL was
307 developed based on the panelists’ expertise in CE. Moreover, the Delphi process has enabled us to
308 identify an important professional consensus regarding best practice for CE and LL methods of
309 delivery, assessment of outcomes, anticipated impact, and, specialization of knowledge.

310 The panel of SPPs in this study had expertise in developing CE programs in SP and agreed
311 on a common definition of CE and LL. Further, the Delphi method led to a characterization of CE
312 as the structured and formal engagement in a process aimed “to support a meaningful, ethical, and
313 effective career, as well as to improve services to the public and profession”. While, the
314 engagement in CE has been advocated by scholars (e.g., Hutter, van der Zande, Rosier, &
315 Wylleman, 2018; Wylleman et al., 2009), the results of this Delphi process can be interpreted as
316 indicating that SPPs should avoid engaging in CE due to an obligation to meet the expectations of
317 professional bodies, and might instead seek to frequently engage in LL. To elaborate, the experts in
318 this study reached a consensus definition of LL as an individual’s desire to “explore and engage in
319 ongoing information-seeking and self-reflective activities to satisfy one's personal curiosity and
320 self-development”. This desire could be fostered by educational programs promoting attitudinal and

321 behavioral change allied with LL (Wise et al., 2010). The potential value of such programs is
322 evident from recent studies in which experienced SPPs have highlighted how their participation in
323 CE programs is a fundamental component of their LL (Quartiroli, Etzel, Knight, & Zakrajsek,
324 2019), and in which engaging in CE and LL have been noted as strategies advanced SPPs employ to
325 foster their SP professional quality of life (Quartiroli, Knight, Etzel, & Zakrajsek, 2019).

326 The panel of experts in this study included an engagement in self-reflective activities as
327 important aspect of their LL. Such findings align with the extant body of work on reflective practice
328 in SP, which has been illustrated as a means to fostering and sustaining positive and effective career
329 development (Cropley, Baldock, Neil, Mellalieu, Wagstaff, & Wadey, 2016; Haberl & Peterson,
330 2010). Given these observations, it is salient for SPPs to be cognizant of both CE and LL aspects of
331 their professional (and personal) development. Lastly, while professionals' engagement in CE is
332 often a requirement for their participation in professional organizations and for retaining professional
333 qualifications and credentials, an individual's LL reflects a personal choice which is rarely reported
334 or captured by professional organizations. Hence, LL activities present an autonomous personal and
335 professional opportunity which professionals must prioritize and resource to maximize their benefit.

336 **Methods of Delivery**

337 In agreement with previous research published in general psychology (see Neimeyer et al.,
338 2012c), the experts in this study agreed that there would be an increased use of e-learning methods of
339 delivery of CE (i.e., internet-based programs), and a movement toward mainly video-based
340 presentations. On the other hand, they perceived a decreased use of in-person presentation-based
341 programs, although the use of group activities and hands-on workshops to deliver CE content was not
342 anticipated to change in the future. E-learning methods have the advantage of being able to reach a
343 great number of practitioners, while being at a fairly low cost (Wise et al., 2010), and it is perhaps not
344 surprising that SP organizations, such as the Association for Applied Sport Psychology, the
345 International Society of Sport Psychology and the APA Society for Sport. Exercise and Performance
346 Psychology are overtly investing in this method of delivery. Yet, possible challenges might unfold

347 when trying to develop and distribute these modules to areas of the world where technology or
348 internet connection might not be as advanced.

349 **Assessment of CE**

350 Focusing on the assessment of CE programs, the experts were asked to predict the future of
351 the methods of assessment as well as the focus of assessment for these programs. The experts in the
352 panel anticipated an increase in the assessment of the general learning as well as the specific
353 learning outcomes of CE programs. Moreover, they predicted an increase in the use of assessment
354 modalities that tested the application of CE program material and a small increase in the assessment
355 of skills, knowledge, and competencies developed during these programs. Interestingly, the experts
356 also predicted an increase in the need for assessments of participants' satisfaction with CE
357 programs. In terms of how these experts perceived CE's outcomes to be assessed, they predicted the
358 greatest increase in reflection- and case-based assessment methods. The view proffered by the
359 experts about the assessment of CE programs aligns with the growing focus on evidence-and
360 competence-based practice in other domains of psychological practice (see Kaslow, Grus,
361 Campbell, Fouad, Hatcher, & Rodolfa, 2009; Neimeyer et al., 2012c). It follows that efforts to
362 evaluate the practice outcomes of CE programs could lead to the development of more evidence-
363 based CE, and in turn, supporting a greater engagement with these programs (Neimeyer et al.,
364 2009).

365 **The anticipated impact of CE**

366 Concerning the anticipated impact of CE programs in SP, the panel predicted a growth in
367 attention dedicated by professionals to the outcomes of these programs in the future, showing a
368 positive view of how these programs may impact the profession over the next 10 years.
369 Specifically, the participants predicted these programs to better support SPPs in keeping up-to-date
370 with their professional knowledge and to translate this knowledge into practice. These experts also
371 predicted that these programs will have increasingly more impact on maintaining and enhancing
372 SPP's professional competence, providing a stronger protection of the public. While these
373 predictions provide an important message for SP organizations in terms of planning and formalizing

374 engagement in CE programs, it is important to note that formal CE programs are not the only source
375 for professional development (Neimeyer et al., 2009). Indeed, there are various other sources of
376 professional development including informal and incidental forms of professional development
377 (Goodyear & Lichtnberg, 2008; Tod, Hutter, & Eubank, 2017). To elaborate, while informal CE
378 may be engaging in by reading journals, attending conference, peer consulting (Goodyear &
379 Lichtnberg, 2008), incidental forms encompass those situations where learning is secondary to the
380 goal of the activity itself. For example, Skovholt and Starkey (2010), noted that psychology practice
381 itself can be a source of professional development for practitioners. These forms of informal and
382 incidental professional development might find their foundation in an individual's attitude toward
383 LL. In fact, it appears that positive attitude towards to LL may predict a greater engagement in
384 many of these activities (Taylor et al., 2012). For this reason, it may be very important for SPPs to
385 cultivate their own personal positive attitudes towards LL as well as for graduate programs and
386 professional organizations to support their students and members in these efforts. In addition, trying
387 to describe the journey of these professionals, Skovholt and Starkey (2010) identified how
388 professional development is not only the results of formal and informal sources of learning, but
389 instead it is also supported by a continuing personal maturation.

390 **Knowledge expansion and specialization**

391 When asked about the future of the profession in terms of its focus, the experts predicted an
392 increased focused on contextual (i.e., exercise, sport, performance), population (i.e., exercisers,
393 amateur, professional, and elite athletes, artists, military, coaches, etc.) and content (i.e., clinical,
394 educational) specializations. This growing specialization seems to align with trends previously
395 identified in the general psychology literature (cf. Kaslow et al., 2009). Moreover, these results
396 could be explained in relation to the panelists' assessment of the shrinking "half-life" of knowledge,
397 specifically of the sport and exercise psychology specialization, and leading to a stronger need for
398 updated and specialized knowledge. Yet, this panel of experts did not predict a similar trend for
399 performance psychology specialization, whose half-life was instead predicted to increase. This
400 difference in prediction might require further exploration given the growing numbers of

401 professionals working in non-athletic performance contexts. Interestingly, this panel of experts did
402 not predict a similar trend for performance psychology specialization, whose half-life was instead
403 predicted to increase. This difference in prediction might require further exploration given the
404 growing numbers of professionals working in non-athletic performance contexts.

405 *With this study, we furthered the current existing literature focused on continue education*
406 *and lifelong learning, being one of the very first studies focusing specifically on sport psychology*
407 *professionals. However, while we paid particular attention to develop a possible internationally*
408 *applicable definition of CE and LL, due to the fact that 24 of the invited panelist dropped from this*
409 *study limited our sample of experts with professionals from the USA and the UK. In the future,*
410 *scholars may need to expand this exploration to experts from other countries and continent. This*
411 *process may lead to either test the validity of these results to our cultural contexts or to culturally*
412 *grounded alternative definitions of CE and LL.*

413 **Conclusion**

414 In conclusion, this Delphi study has provided valuable expert consensus on defining what
415 CE and LL mean in the SP field and profession. Further, this study presents a first exploration of
416 CE in the SP field, and which showcases fast and substantially changing delivery (e.g., methods,
417 assessment, content, impact) and significance, as more organizations develop certification and
418 qualification programs. These findings point to the importance of developing and engaging in
419 formal and informal CE programs and for SPPs to embrace LL throughout their professional career.

420 Scholars raised concerns regarding the mandatory participation in CE (Adams & Sharkin,
421 2012; Neimeyer et al., 2009; VandeCreek et al., 1990), and noted declining engagement with CE by
422 attendees who have limited interest in learning (Neimeyer et al., 2009). LL has been identified as the
423 result of personal and individual efforts and, unlike CE, is not formally mandated by professional
424 organizations. For this reason, fostering individual interest in LL may be a salient focus of education
425 and professional training. Based on our results, it is evident that LL should be fostered in the early
426 stages of SPP professional training and practice and then be maintained throughout an individual's
427 professional journey. It follows that SPPs must seek opportunities to engage in LL, while

428 professional organizations, qualification and training programs, and professional networks should
429 concurrently foster conditions to facilitate this search. Moreover, based on our results, there remain
430 opportunities to explore the level, motive, and quality of engagement in CE and LL among SPPs.
431 Given the varying estimations of the half-life of the profession, it is important that researchers to
432 continue to differentiate between and promote CE and LL within the sport, exercise, and
433 performance psychology disciplines. Specifically, we see an important future for LL as a component
434 of satisfactory, ethical and effective practice and we hope other scholars will take this forward.

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436

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438 **References**

- 439 Adams, A., & Sharkin, B. (2012). Should continuing education be mandatory for re-licensure?
440 Arguments for and against. In G. J. Neimeyer & J. M. Taylor (Eds.), *Continuing professional*
441 *development and lifelong learning: Issues, impacts and outcomes* (pp. 157–178). Hauppauge, NY:
442 Nova Science.
- 443 American Psychological Association (2015). *Standards and Criteria for Approval of Sponsor of*
444 *Continuing Education for Psychologists*. Retrieved from
445 <https://www.apa.org/about/policy/approval-standards.pdf>
- 446 Barnett, J. E., Doll, B., Younggren, J. N., & Rubin, N. J. (2007). Clinical competence for practicing
447 psychologists: Clearly a work in progress. *Professional Psychology: Research and Practice, 38*,
448 510-517. doi: 10.1037/0735-7028.38.5.510
- 449 Cropley, B., Baldock, L., Mellalieu, S. D., Neil, R., Wagstaff, C. R. D., & Wadey, R. (2016). Coping
450 with the demands of professional practice: Sport psychology consultants' perspectives. *The Sport*
451 *Psychologist, 30*, 290-302. doi: 10.1123/tsp.2015-0125
- 452 Dalkey, N. C. (1972). The Delphi method: An experimental study of group opinion. In N. C. Dalkey, D.
453 L. Rourke, R. Lewis, & D. Snyder (Eds.). *Studies in the quality of life: Delphi and decision-*
454 *making* (pp. 13-54). Lexington, MA: Lexington Books.
- 455 Dalkey, N. C., Brown, B. B., & Cochran, S. W. (1970). *The delphi method, IV: Effect of percentile*
456 *feedback and feed-in of relevant facts*. Santa Monica, CA: Rand Corporation.
- 457 Delbecq, A. L., Van de Ven, A. H., & Gustafson, D. H. (1975). *Group techniques for program*
458 *planning: A guide to nominal group and Delphi processes*. Scott Foresman. Glenview, IL
- 459 Dubin, S. S. (1972). Obsolescence or lifelong education: A choice for the professional. *American*
460 *Psychologist, 27*, 486-528. doi: 10.1037/h0033050
- 461 Fletcher, D., & Maher, J. (2013). Toward a competency-based understanding of the training and
462 development of applied sport psychologists. *Sport, Exercise, and Performance Psychology, 2*, 265-
463 280. doi: 10.1037/a0031976
- 464

- 465 Fletcher, D., & Maher, J. (2014). Professional competence in sport psychology: Clarifying some
466 misunderstandings and making future progress. *Journal of Sport Psychology in Action*, 5, 170-185.
467 doi: 10.1080/21520704.2014.965944
- 468 Gardner, F. L., & Moore, Z. E. (2004). The multi-level classification system for sport psychology
469 (MCS-SP). *The Sport Psychologist*, 12, 89-109. doi: 10.1123/tsp.18.1.89
- 470 Haberl, P., & Peterson, K. (2006). Olympic-size ethical dilemmas: Issues and challenges for sport
471 psychology consultants on the road and at the olympic games. *Ethics & Behavior*, 16, 25-40.
472 doi:10.1207/s15327019eb1601_4
- 473 Hojat, M., Veloski, J., Nasca, T. J., Erdmann, J. B., & Gonnella, J. S. (2006). Assessing physicians'
474 orientation toward lifelong learning. *Journal of General Internal Medicine*, 21, 931-936.
475 doi:10.1007/BF02743140
- 476 Hsieh, H. F., & Shannon, S. E. (2005). Three approaches to qualitative content analysis. *Qualitative*
477 *Health Research*, 15, 1277-1288. doi: 0.1177/1049732305276687
- 478 Hutter, V. R. I., van der Zande, J. J., Rosier, N., & Wylleman, P. (2018) Education and training in the
479 field of applied sport psychology in Europe. *International Journal of Sport and Exercise*
480 *Psychology*, 16, 133-149. doi: 10.1080/1612197X.2016.1162189
- 481 Kaslow, N. J., Celano, M. P., & Stanton, M. (2005). Training in family psychology: A competencies-
482 based approach. *Family Process*, 44, 337-353. doi: 10.1111/j.1545-5300.2005.00063.x
- 483 Kaslow, N. J., Grus, C. L., Campbell, L. F., Fouad, N. A., Hatcher, R. L., & Rodolfa, E. R. (2009).
484 Competency Assessment Toolkit for professional psychology. *Training and Education in*
485 *Professional Psychology*, 3, S27-S45. doi: 10.1037/a0015833
- 486 Kaynak, E., & Macaulay, J. A. (1984). The Delphi technique in the measurement of tourism market
487 potential: the case of Nova Scotia. *Tourism Management*, 5, 87-101. doi: 10.1016/0261-
488 5177(84)90056-6
- 489 Keeney, S., Hasson, F., & McKenna, H. (2011). The Delphi technique. In S. Keeney, F. Hasson, and
490 H. McKenna (Eds.), *The Delphi technique in nursing and health research* (pp. 1-17). Hoboken,
491 NJ: Wiley-Blackwell.

- 492 Lubker, J. R., Visek, A. J., Geer, J. R., & Watson II, J. C. (2008). Characteristics of an effective sport
493 psychology consultant: Perspectives from athletes and consultants. *Journal of Sport Behavior*, *31*,
494 147.
- 495 Ludwig, B. (1997). Predicting the future: Have you considered using the Delphi methodology? *Journal*
496 *of Extension*, *35*, 1-4.
- 497 McKenna, H. P. (1994). The Delphi technique: a worthwhile research approach for nursing?. *Journal of*
498 *Advanced Nursing*, *19*, 1221-1225. doi: 10.1111/j.1365-2648.1994.tb01207.x
- 499 Miles, M. B, Huberman, A. M., & Saldana, J. (2014). *Qualitative data analysis: A method*
500 *sourcebook*. Los Angeles, CA, US: Sage Publications.
- 501 Neimeyer, G. J., Taylor, J. M., & Cox, D. R. (2012a). On hope and possibility: Does continuing
502 professional development contribute to ongoing professional competence?. *Professional*
503 *Psychology: Research and Practice*, *43*, 476-486. doi: 10.1037/a0029613
- 504 Neimeyer, G. J., Taylor, J. M., & Philip, D. (2010a). Continuing education in psychology: Patterns of
505 participation and perceived outcomes among mandated and nonmandated
506 psychologists. *Professional Psychology: Research and Practice*, *41*, 435-441. doi:
507 10.1037/a0021120
- 508 Neimeyer, G. J., Taylor, J. M., & Rozensky, R. H. (2012b). The diminishing durability of knowledge in
509 professional psychology: A Delphi Poll of specialties and proficiencies. *Professional Psychology:*
510 *Research and Practice*, *43*, 364-371. doi: 10.1037/a0028698
- 511 Neimeyer, G. J., Taylor, J. M., & Wear, D. (2010b). Continuing education in psychology: Patterns of
512 participation and aspects of selection. *Professional Psychology: Research and Practice*, *4*, 281-
513 287. doi: 10.1037/a0019811
- 514 Neimeyer, G. J., Taylor, J. M., & Wear, D. M. (2009). Continuing education in psychology: Outcomes,
515 evaluations, and mandates. *Professional Psychology: Research and Practice*, *40*, 617-624. doi:
516 10.1037/a0016655
- 517 Neimeyer, G. J., Taylor, J. M., & Wear, D. M. (2011). Continuing education in professional psychology:
518 do ethics mandates matter?. *Ethics & Behavior*, *21*, 165-172. doi: 10.1080/10508422.2011.551472

- 519 Neimeyer, G. J., Taylor, J. M., Rozensky, R. H., & Cox, D. R. (2014). The diminishing durability of
520 knowledge in professional psychology: A second look at specializations. *Professional Psychology:
521 Research and Practice, 45*, 92-98. doi: 10.1037/a0036176
- 522 Neimeyer, G. J., Taylor, J. M., Wear, D., & Linder-Crow, J. (2012c). Anticipating the future of CE in
523 psychology: A Delphi poll. In G. J. Neimeyer & J. M. Taylor (Eds.), *Continuing professional
524 development and lifelong learning: Issues, impacts and outcomes* (pp. 371-388).
- 525 Okoli, C., & Pawlowski, S. D. (2004). The Delphi method as a research tool: an example, design
526 considerations and applications. *Information & Management, 42*, 15-29. doi:
527 10.1016/j.im.2003.11.002
- 528 Quartiroli, A., Etzel, E. F., Knight, S. M., & Zakrajsek, R. A. (2019). The multifaceted meaning of sport
529 psychology professional quality of life. *Journal of Clinical Sport Psychology, 1*-23. doi:
530 10.1123/jcsp.2017-0048
- 531 Quartiroli, A., Knight, S. M., Etzel, E. F., & Zakrajsek, R. A. (2019). Fostering and sustaining sport
532 psychology professional quality of life: The perspectives of senior-level, experienced sport
533 psychology practitioners. *The Sport Psychologist, 33*, 148-158. doi: 10.1123/tsp.2017-0140
- 534 Rodolfa, E., Bent, R., Eisman, E., Nelson, P., Rehm, L., & Ritchie, P. (2005). A cube model for
535 competency development: Implications for psychology educators and regulators. *Professional
536 Psychology: Research and Practice, 36*, 347-354. doi: 10.1037/0735-7028.36.4.347
- 537 Ross, A. O. (1974). Continuing professional development in psychology. *Professional Psychology, 5*,
538 122-128. doi: 10.1037/h0037559
- 539 Rowe, G., & Wright, G. (1999). The Delphi technique as a forecasting tool: issues and
540 analysis. *International Journal of Forecasting, 15*, 353-375. doi: 10.1016/S0169-2070(99)00018-7
- 541 Rubin, N. J., Bebeau, M., Leigh, I. W., Lichtenberg, J. W., Nelson, P. D., Portnoy, S., ... & Kaslow, N. J.
542 (2007). The competency movement within psychology: An historical perspective. *Professional
543 Psychology: Research and Practice, 38*, 452-462. doi: 10.1037/0735-7028.38.5.452

- 544 Schmidt, R.C. (1997). Managing Delphi surveys using nonparametric statistical techniques. *Decision*
545 *Sciences*, 28, 763-774. doi: 10.1111/j.1540-5915.1997.tb01330.x
- 546 Sharp, L. A., & Hodge, K. (2011). Sport psychology consulting effectiveness: The sport psychology
547 consultant's perspective. *Journal of Applied Sport Psychology*, 23, 360-376. doi:
548 10.1080/10413200.2011.583619
- 549 Skovholt, T. M., & Starkey, M. T. (2010). The three legs of the practitioner's learning stool: Practice,
550 research/theory, and personal life. *Journal of Contemporary Psychotherapy*, 40, 125-130. doi:
551 10.1007/s10879-010-9137-1
- 552 Taylor, J. M., Neimeyer, G. J., Zemansky, M., & Rothke, S. (2011). Exploring the relationship between
553 lifelong learning continuing education, and professional competencies. In G. J. Neimeyer & J. M.
554 Taylor (Eds.), *Continuing professional development and lifelong learning: Issues, impacts and*
555 *outcomes* (pp. 83-102). New York, NY: Nova Science.
- 556 Tod, D., Hutter, R. I. V., & Eubank, M. (2017). Professional development for sport psychology practice.
557 *Current Opinion in Psychology*, 16, 134-137. doi: 10.1016/j.copsy.2017.05.007
- 558 VandeCreek, L., Knapp, S., & Brace, K. (1990). Mandatory continuing education for licensed
559 psychologists: Its rationale and current implementation. *Professional Psychology: Research and*
560 *Practice*, 21, 135-140. doi: 10.1037/0735-7028.21.2.13
- 561 Wagstaff, C. R. D., & Hays, K. (2019). 'What have the romans ever done for us?': Stakeholder
562 reflections on 10 years of the qualification in sport and exercise psychology. *Sport and Exercise*
563 *Psychology Review*, 15, 32-37.
- 564 Weir, K. (2018). A growing demand for sport psychologists. *Monitor on Psychology*, 49, 50. Retrieved
565 from: <https://www.apa.org/monitor/2018/11/cover-sports-psychologists>
- 566 Wise, E. H., Sturm, C. A., Nutt, R. L., Rodolfa, E., Schaffer, J. B., & Webb, C. (2010). Life-long
567 learning for psychologists: Current status and a vision for the future. *Professional Psychology:*
568 *Research and Practice*, 41, 288-297. doi: 10.1037/a0020424

- 569 Wylleman, P., Harwood, C. G., Elbe, A.-M., & de Caluwé, D. (2009). A perspective on education and
570 professional development in applied sport psychology. *Psychology of Sport and Exercise, 10*, 435-
571 446. doi: 10.1016/j.psychsport.2009.03.008

Table 1. Panelists' Characteristics and Demographics

	Country(ies) of practice	Gender	Highest Degree	Specialization	Years of SP Experience	Professional Activity	
						Academic Work %	Applied Work %
1	USA	F	PhD	Performance Dysfunction	15	85	15
2	UK	F	PhD	Performance Development	10	90	10
3	UK	M	PhD	Performance Dysfunction	20	85	15
4	UK	M	PhD	Performance Impairment	20	50	50
5	UK	F	PhD	Performance Impairment	20	95	5
6	UK	M	PhD	Performance Development	30	85	15
7	USA	F	PhD	Performance Development	7	90	10
8	UK	M	PhD	Performance Dysfunction	14	70	30
9	UK	M	PhD	Performance Development	20	90	10
10	UK	M	PhD	Performance Development	13	95	5
11	UK	F	PhD	Performance Development	20	90	10
12	USA	M	PhD	Performance Development	10	0	100
13	USA	F	PhD	Performance Development	11	50	50
14	USA	M	PhD	Performance Dysfunction	6	100	0
15	USA	F	M.S.	Performance Impairment	3	39	61
16	UK	M	PhD	Performance Termination	8	70	30
Mean					14.43	68.38	31.63
Standard Deviations					6.80	30.6	30.6

* The classification of areas of expertise followed the Multi-Level Classification System for Sport Psychology (MCS-SP; Gardner & Moore, 2004).

Table 2. List of statements offered by the panellists about Continuing Education and Resulting Definition

Continuing Education				
<i>Panellists' responses</i>				
Continuing education is a more organized and formal form of personal and professional development.				
Engagement in relevant professional development activities to ensure knowledge and practice currency and effectiveness				
Continuing education is a part of that lifelong learning concept. It drives you to stay in touch with your profession.				
Formal education that takes place post-compulsory education (e.g., secondary school in the UK)				
Meaningful workshops that do not just "check a box" but enhance practice capability.				
Continuing education is an active, behavioural process of learning that involves staying current with best practices.				
The process of systematically developing in a desired direction				
Continuing education is a formal process of documenting that you are taking steps towards lifelong learning.				
Undertaking additional qualifications to further develop skills and knowledge				
Continuing education is about engaging with various means to up skill knowledge and practical skills. This may be through structured CPD, shadowing, peer supervision/support etc.				
Academic study or further education to ensure that knowledge and competencies remain relevant and in line with current standards.				
Continuing to learn thorough one's career, but continuing education being a more formalized process of delivery and consumption.				
Professionally developed curriculum and resources to advance knowledge				
The process that allows people to continue to learn and develop in a given field				
It relates to being current in one's reading of the literature and in the case of applied work, current best practices in working with athletes.				
Ongoing learning activities that help an individual to fulfil their role competently and maintain currency in terms of knowledge and skills.				
Professional development and CPD activity that furthers a practitioner (or researchers) competencies				
Resulting Definition				
<i>Continuing Education</i> (CE) as "an ongoing engagement in formally organized and recognized professional opportunities for the development of new knowledge, understanding, and the application of best practice to support a meaningful, ethical, and effective career, as well as to improve services to the public and profession."				
Panelists' evaluation of the definition				
	Exhaustive	Applicable	Important to adhere	Important to foster
Continuing Education	3.89 (1.2)	4.47 (0.51)	4.21 (0.63)	4.42 (0.61)

Table 3. List of statements offered by the panellists about Lifelong Learning and Resulting Definition

Lifelong learning				
<i>Panellists' responses</i>				
Ongoing professional development. Seeking new ways of doing things, and developing new answers to old problems by learning and developing one skillset, competencies, and knowledge.				
A reflective process of continual development to positively enhance oneself.				
A process of engaging in a range of activities to develop knowledge, skills and experience across the duration of a person's career.				
Constant desire to learn and grow. A responsibility to stay current on best practices in the literature and a recognition that research informs applied practice, and applied practice informs research.				
A willingness to want to enquire, update and develop				
it is everything we need to be and do in order to maximize our capabilities, potential and keep growing				
The need for professionals to understand that the profession of SEPP is constantly changing based upon new advancements and research.				
A continuing process of self-development				
A continual development in relation to knowledge and skills.				
The pursuit of learning through various means to expand knowledge and understanding across the lifespan				
Staying engaged with current research, but always thinking of how the research informs practice. Never thinking that one knows it all, but continuing to explore and reflect on readings, information, etc.				
pursuing continuing education opportunities, using daily reflection to consider areas of growth, knowing that you will never know everything and you will learn your entire life				
Learning and self-development that continues through life without reaching limits of knowledge				
A consistent process of self-reflexivity				
Continuous professional development over a person's career to ensure sustained evidence based practice				
Learning that takes place formally and informally through experiential, professional development and formal education				
A personal and professional commitment to continually further your education, to improve depth of understanding and competency in actively applying relevant skills, through formal academic and ad hoc study.				
Lifelong learning is the continued effort to become as knowledgeable, capable, and current in every area of your practice - be it applied, teaching, research, assessment, etc.				
interest in continuing education both for applied goals and because of a genuine interest in learning across ones career				
Purposeful efforts to continue improving as a practitioner until I am no longer practicing.				
Having a growth mindset. An approach to information where you are always open to feedback, suggestions, and new research to inform yourself in your practice or in any area of life				
Seeking opportunities to acquire new knowledge and skills as well as to develop and refine those already held.				
Lack of representation of the importance of relating, relationships and connecting with people in engaging ways				
Resulting Definition				
<i>Lifelong learning</i> (LL) as "one's desire to explore and engage in ongoing information-seeking and self-reflective activities to satisfy one's personal curiosity and self-development throughout one's career, but which are not necessarily a professional obligation."				
Panelists' evaluation of the definition				
	Exhaustive	Applicable	Important to adhere	Important to foster
Lifelong Learning	3.79 (1.08)	4 (0.75)	3.95 (1.03)	4.32 (0.75)

Table 4. List of statements offered by the panellists about the delivery and assessment of CE

Based on your experience as an SEPP professional, ...
...what would you describe to be the main and most effective methods to deliver CE?
<p>Interactive, group or 1-1 sessions, aligned with opportunities to interact with other professionals (e.g., webinar or conference). Follow-ups are very important; too often webinar knowledge is not reinforced. On-line /web based modes - webinars, on-line conferences Online webinars and videos are the best way to deliver continuing education. It is more convenient and cost effective. Blended learning - using online and face-to-face contact to support learner needs and to provide different approaches to engaging in learning. DEP method, incorporating a didactic, experiential, and process component to a seminar/workshop. Face-to-face, shadowing/mentoring, live is preferred, in lectures or symposiums, on-line discussion forums or Zoom meetings Face-to-face contact with opportunity for sharing thoughts with others Experiential learning, peer support, reflective practice, CPD events Web-based methods increase the access to CE that can be multiple and diverse. That said traditional courses and workshops are important where practical delivery is required. Matching the method to the intended outcomes to enhance the experience of those taking part is critical. It varies. Certain things work better in certain formats. Workshops providing experiential learning, webinars, lectures all have their place. Concise reading; workshops and conferences; Conference, online workshops and symposia are good. Face to face workshops where knowledge can be communicated, discussed Professional development workshops, learning at conferences, engagement with professional practice groups Power workshops where you have a group of professionals give brief summaries, TED-talk style. Workshops and online webinars In-person learning with structured follow-up by CE professionals to continue focus on certain learned skills. Use up to date literature/evidence-based practices; make the presentation interactive Podcasts and workshops Practical and experientially orientated workshops</p>
...what would you describe to be the main and most effective way to assess the outcome of CE?
<p>Personal reflections and portfolios. Reflections to how knowledge and practice has developed over time - within this there would need to be an aspect of social validation to ensure that the recipient of the service (e.g., client) is benefitting as a result. Surveys given to those receiving the information and possibly the clients as well. Engagement metrics and reflective practice - the learner's reflections on their journey from the start to the end of the activity and an understanding of how they have applied the learning into their practice. With a six month follow-up rather than just immediately after the training Mixed methods -- both qualitative and quantitative means of assessment. Application, watching them at work. Content based questions to address overall competency Tests for knowledge/understanding at the end of the program Demonstration of practical application of the skills and knowledge learnt Practical portfolios-video-based-voice recorded reflections/discussions, blogs Assessment should directly suit the objectives of the education course. No one method would be prioritised here. Perceived satisfaction and contribution of the workshop to self-development. Real assessment would come from one's own practice and self-reflexive practice. A follow-up survey is one thing, but real assessment would have to occur over time to see if the skills and knowledge were actually put into practice and maintained. Assessment could range from a reflection evidence informed and based portfolio to a oral face to face viva. Case study methods Assessment through achievement of stated learning outcomes is the standard process. Learner satisfaction is also relevant. After program survey and subsequent follow-up Feedback from practitioners and their clients, both before and after CE, and compare this feedback Poll practitioners longitudinally on the effect the CEUs have on their day to day practice Engagement figures, evaluation feedback sheets Discussion</p>

Table 5. List of statements offered by the panellists about the delivery and assessment, content, and impact of CE

Based on your experience as an SEPP professional, ...
...what areas of the professional practice would do you think would be the most impacted by engaging in professional CE?
New applied techniques, tools to assist in developing a professional practice business, counselling skills, new theoretical advances understanding better the processes of delivery - much of what we read is about outcomes but detail to the processes and enhancing the client experience would be impactful
How we treat our athletes and clients from either a research or clinical standpoint. The more we learn the more effective we will be at providing better treatment for our clients.
Knowledge of sport and exercise psychology and contemporary issues.
Integrating evidence-based methods and widening practice options
Knowledge base of the consultant, which would hopefully enhance the skill set of the consultant, which would ideally impact athlete outcomes.
Current practice i.e. being up-to-date on new developments/ways of doing things and reflection
Practicums and case study learning
Ethical decision making, knowledge of issues that continue to change, such as multicultural awareness, evidence based practice.
Increased ability to deliver sessions with clients through enhanced levels of knowledge and skills
Counselling skills, evaluation techniques, developing communication and rapport skills
Currently, there is probably a bias toward theoretical understanding. In the sport and exercise sciences I believe we can do more to upskill professional or practice related methods and competencies. I would go to psychology here for CE.
Ethics (we need that over and over again...); interviewing techniques, how to work with those who are peripheral to the athlete, e.g., parents, significant others, coaches, physicians; helping the athlete cope with "bad news" (injury, being cut from the team); understanding the importance of working with the lower level participants in sport, especially children's programs, non-elite recreational/club/school teams; learning how to "refer out" appropriately, and building the best referral network possible for your practice.
All aspects can be impacted by carefully developed and administered educational programs.
Ethics, multicultural, mentorship
Professional judgement and decision making with clients; self-awareness
The most impact is from modules or workshops on lesser talked about issues, like gender violence and diversity issues in the applied domain. Client interactions
Dealing with novel and more complex case formulations/problem solving
Competency as a provider depends on ongoing continuing education to continue to refine skills, learn and develop skills in new competencies.
Interventions and case conceptualizations
Quality of care; Assessment; Ethics
Therapeutic techniques and approaches
Client-centered approach; self-evaluation; communication skills
...what areas of the professional practice should be the main focus of professional continuing education?
Professional tools, peer-mentoring, professional development, networking
Accounts of esteemed individuals to what they did and how.
Learning how to provide the best treatment for clients would benefit the most when it comes to professional continuing education.
Developing innovative and evidence-based interventions, Self-care - personal coping of practitioners as performers, Contemporary issues in ASEP literature
Current evidence-based practice and skill development
Evidence-based and theory-informed practice
Theory to practice activities and evaluating impact
Ongoing practicums, and supervision when available
Ethics, multicultural awareness, evidence based practice, best practices approaches to consulting.
Application of knowledge
Counselling skill development-most neophytes in my experience often lack the critical skills of counselling
Ethics, diversity, latest research, best practices for referring out.
Professional continuing education can occur in all areas.
Ethics, multicultural and diversity training, crisis intervention
Theory-practice; evidence-based strategies to inform work
Issues of gender violence in sport, and diversity and multiculturalism issues in the field, including harassment, bullying, LGBT issues, and the intersection of race, class and gender.
Evidence based practice
Applied 'real life' scenarios - the things that aren't in the text books...
(1) populations - to increase competencies for working with different individuals; (2) intervention skills (mindfulness, relaxation, attention training, etc) - to develop new applied skills.
Ethics, practicing within competency, basic clinical skills, and guidelines for having a practice.
Clinical mental health
Interventions and case conceptualizations
Proper interventions; Assessment; Ethics
Similar to my last answer, therapeutic approaches and skills in delivery.
From a research perspective, research methods and analysis.
From an evaluation perspective, how to effectively evaluate complex, large scale interventions.
Consultant effectiveness; interpersonal skills; client centered approach

Table 6. Panelists' engagement and perception of Continuing education

Continuing education in the field of SEPP over the next 10 years,...				
	M (SD)	% of Agreement	M (SD)	% of Agreement
...to what extent do you expect each of the following delivery formats to increase or decrease?				
On-site presentations	2.53 (0.77)	89.47		
On-site interactive group activities	3.21 (0.98)	63.16*	2.5 (0.52)	100
On-site experiential workshops & activities	3.11 (0.99)	36.84*	2.75 (0.58)	62.5*
Conference presentations	3.26 (0.56)	78.95		
Professional practice groups	3.58 (0.69)	89.47		
Blended (online + in person) activities	4.11 (0.74)	63.16*	4.25 (0.58)	62.5*
Recorded internet delivered video based training (e.g., podcast, TED talks)	4.47 (0.7)	89.47		
Internet delivered text based training (e.g., slide show, text based program)	4.26 (0.81)	78.95		
Live internet based training (e.g., webinars)	4.58 (0.69)	68.42*	4.63 (0.5)	62.5*
...to what extent do you believe that each of the following of the assessment process is likely to increase or decrease?				
Assessment of the overall CE learning?	3.42 (0.84)	78.95		
Assessment of the specific aspects of the CE learning?	3.63 (0.68)	89.47		
Number of hours of engagement with CE?	3.74 (0.65)	52.63*	3.25 (0.58)	81.25
Evidence of application of the material learned in CE training?	3.74 (0.73)	57.89*	3.56 (0.63)	93.75
Assessment during the CE learning?	3.58 (0.69)	89.47		
Assessment following the CE learning (e.g., 6 month follow	3.42 (0.84)	78.95		
Reflection-based assessment?	3.84 (0.83)	47.37*	3.88 (0.72)	50*
Assessment of the knowledge developed with the CE training?	3.47 (0.7)	57.89*	3.19 (0.54)	68.75*
Assessment of the skills developed with the CE training?	3.53 (0.77)	84.21		
Assessment of the competence developed with the CE training?	3.74 (0.65)	68.42*	3.44 (0.73)	87.5
Participants' perceived satisfaction?	3.63 (0.96)	68.42*	3.56 (0.89)	75
Experts' direct assessment via practice observation?	3.37 (1.07)	57.89*	2.81 (0.98)	62.5*
Case-based assessment methods?	4 (0.58)	68.42*	3.63 (0.81)	81.25
..to what extent do you believe that it will... (Very little - Great deal)				
Increase professional knowledge	4 (0.75)	63.16*	3.75 (0.77)	81.25
Keep professionals up-to-date	4.05 (0.71)	52.63*	4.06 (0.85)	81.25
Translate into practice	3.84 (0.76)	42.11*	3.44 (0.81)	81.25
Maintain professional competency	3.84 (0.76)	42.11*	3.75 (0.58)	68.75*
Enhance professional competency	3.84 (0.76)	42.11*	3.81 (0.75)	62.5*
Protect the public	3.89 (0.88)	68.42*	3.5 (0.82)	81.25
Enhance outcomes	4 (0.82)	36.84*	3.56 (0.81)	81.25
...to what extent do you believe that it will... (Decrease - Increase)				
Focus on contextual specializations (i.e., exercise, sport, performance)	4.21 (0.85)	89.47		
Focus on population (i.e., exercisers, amateur athletes, professional and elite athletes, artists, military, coaches, etc)	4.26 (0.93)	78.95		
Focus on content specializations (i.e., clinical, educational)	4.05 (0.91)	63.16*	3.81 (0.75)	43.75

Table 7. Panelists' engagement and perception of Continuing education

Panelist	Importance of CE to support LL*	Continuing Education Time			Continuing Education			Lifelong Learning		
		Planning	Delivery	Attend	Involvement	Interest	Investment	Involvement	Interest	Investment
1	4	10	30	60	35	90	45	20	75	10
2	4	40	40	20	60	60	50	40	60	40
3	5	20	50	30	90	100	40	50	100	70
4	5	40	10	50	70	90	50	50	70	50
5	4	10	65	25	70	81	61	71	76	62
6	5	15	17	68	30	86	30	92	92	73
7	4	50	45	5	70	90	30	30	50	10
8	5	20	60	20	70	80	80	81	80	80
9	5	45	14	41	80	87	54	81	94	32
10	4	29	50	21	70	70	50	60	76	51
11	5	30	60	10	20	80	20	20	80	15
12	4	40	40	20	50	100	17	10	10	10
13	5	0	20	80	70	100	70	50	40	50
14	3	0	0	100	71	85	30	30	40	10
15	4	0	0	100	19	82	71	61	29	74
16	5	20	70	10	20	55	15	10	70	10
M	4.44	23.06	35.69	41.25	55.94	83.5	44.56	47.25	65.13	40.44
SD	0.61	16.7	23.18	31.59	23.47	13.02	19.91	25.98	25.11	26.75

*Note: This question was answered using a 5-point Likert Scale 1 = "not important at all", 5 = "very important"

Figure 1. Flow chart of the study design

