



DÉPORVIDA: a character strengths positive intervention among young soccer players

David Tomé-Lourido¹ · Elkin Andrés Flórez-Domínguez² · Laura Fraga-García² · Marisa Salanova³ · Fabrizio Sors⁴ · Mauro Murgia⁴

Received: 23 July 2021 / Accepted: 16 October 2021 / Published online: 25 November 2021
© The Author(s) 2021

Abstract

In recent years, various intervention programs have been developed to enhance the quality of life of young athletes. This is particularly important for those who live in residences of professional clubs, far from their families. In this regard, we designed a positive psychology intervention program called “DÉPORVIDA”, aimed at enhancing character strengths. To assess the efficacy of this 8-week intervention, we tested 28 young soccer players from a Spanish professional club. The intervention program used a strength-based approach from the values in action (VIA) model, and was conducted by club employees with formal academic education. Data were analysed using a set of 2 × 2 (intervention × time) mixed design ANOVAs. Results revealed different trends for the intervention and the control groups participants for seasonal performance satisfaction and percentage of time feeling happy/unhappy, highlighting consistent changes in the desired direction. Overall, the results indicate that the DÉPORVIDA program is a useful tool to promote positive development in young athletes.

Keywords Character strengths · Sport satisfaction · Psychological well-being · Soccer players

Introduction

Currently in the world of professional soccer, many underage players are incorporated each year into the professional team structures, some even moving from their family environment and entering the club’s residences. These migrations are mostly national, but also international, made with the promise of future high salaries and lucrative contracts [1]. Considering the number of annual sports licenses, and the quantity of existing professional players, only a small percentage of these players manage to reach the soccer elite and get a professional contract [2, 3]. As a consequence, many players leave sports clubs when they reach adulthood without having completed basic studies and having grown up far from their families [4].

Given this reality, in recent years, various intervention programs have been proposed in the field of education and sports, with the aim of improving the quality of life of these young players [5–7]. Other interventions focused on increasing sports participation and health status levels of young athletes [8], as well as transmitting values considered socially positive [9, 10]. These interventions were based on a positive development perspective, providing young people with the opportunity to accumulate optimal experiences through their participation in organized activities [11, 12]. This participation allows young players to have a healthy, satisfying and productive life, developing social relations and taking part to cultural activities. The positive psychology perspective emerged in the ‘50 s and ‘60 s of the twentieth century, allowing the study and dissemination of research related to the positive aspects of the human being. Its influence has been highly relevant in various scientific fields such as education, public health, neuroscience and organizational sciences [13].

Intervention programs based on optimal development and positive experiences are linked to several widely studied phenomena in positive psychology, both at the collective level such as positive institutions [14], and at an individual level such as positive emotions and the flow experiences

✉ David Tomé-Lourido
david.tome.lourido@udc.es

¹ University of A Coruña, A Coruña, Spain

² Real Club Deportivo de la Coruña, S.A.D., A Coruña, Spain

³ Universitat Jaume I, Castellón de la Plana, Spain

⁴ Department of Life Sciences, University of Trieste, Trieste, Italy

[15], or positive personality traits [16]. Focusing on traits, within positive psychology they are considered as positive psychological characteristics that can predict various forms of well-being and performance [17]. These traits are commonly called “character strengths”, conceptualized as positive features reflected in thoughts, feelings and behaviours, which differ in people based on moral and cultural values [18]. Like all personality traits, character strengths are expressed along a continuum, where three zones can be identified [19]: underuse (insufficiently expressed strengths in situations that call for them), overuse (overexpressed strengths relative to the situation), and optimal use (appropriate degree of expression for a given situation).

Within sport, there is little evidence regarding the use of intervention programs based on personal strengths by sport psychologist, but enhancing character strengths could become a fundamental part of the strategies that optimize athletes’ performance Brady and Grenville [20]. Athletes should be considered as a unique amalgam of their talents, traits and resources that gives them a competitive advantage in their performance context [21]. According to this perspective, helping athletes to develop their unique and exclusive strengths would allow them, potentially, to develop a solid sports confidence.

Boosting character strengths implies improving other variables that increase psychological adjustment, when individuals are taught to use character strengths within the optimal use zone. Based on results from randomized controlled trials, it has been suggested that character strengths facilitate exceptional performance and predict an increase in well-being, self-regulation and satisfaction with one’s own psychological needs for relatedness, competence, and autonomy [22, 23].

Looking at the relationship of character strengths with these variables in greater depth, interventions carried out using character strengths led to improvements in performance satisfaction [24, 25]. Similarly, other studies recently showed how character strengths are tightly related to perceived happiness, well-being, and the absence of ill-being [26, 27]. This relationship found in many cross-sectional studies turns out to be stable over time [27].

Concerning the association between character strengths and self-regulation, research has shown positive relationships between these two variables in cross-sectional and randomized-control designs [28]. Mindfulness training stands out as a promising method to strengthen this relationship, enhancing character strengths over long periods of time [28, 29]. Finally, regarding basic psychological needs, strengths use provides a key support in the attainment of greater need satisfaction. The need satisfaction has a direct influence on motivation, as the perception of satisfying the needs of competence, autonomy and relatedness generates a state of self-determination [30–32].

In line with previous interventions with young athletes aimed at promoting their positive optimal development, we have designed an intervention program called “DÉPORVIDA”. This program specifically aims to discover and enhance character strengths in young soccer players, improving their levels of sports performance satisfaction, well-being, self-regulation, and basic psychological needs. In addition, DÉPORVIDA seeks to overcome the existing research-practice gap within the study and intervention on character strengths, where practice moves faster and faster and it is necessary to empirically study the effectiveness of the interventions [33].

The DÉPORVIDA program is based on the values in action (VIA) model, the most widely used one on character strengths [34]. This model identifies 24 strengths, grouped around 6 virtues, as shown in Table 1. Character strengths are seen to be the psychological ingredients defining the virtues [35]. The validity of the VIA model has been confirmed in numerous investigations [18, 36, 37], across 75 nations [38], including the validation work in a cross-cultural sample of 447,573 participants [17].

Based on previous scientific evidence, as well as on the activities of the DÉPORVIDA program—which are specifically designed to act on the character strengths described in the VIA model—we hypothesized the program to be

Table 1 Character strengths of the peterson and seligman model (2004)

Virtues	Strengths
1. Wisdom	- Creativity - Curiosity - Judgment - Love of learning - Perspective
2. Courage	- Bravery - Perseverance - Honesty - Zest
3. Humanity	- Love - Kindness - Social intelligence
4. Justice	- Teamwork - Fairness - Leadership
5. Temperance	- Forgiveness - Humility - Prudence - Self-regulation
6. Transcendence	- Appreciation of beauty and excellence - Gratitude - Hope - Humor - Spirituality

effective in promoting the desired improvements. In particular, we expect to observe improvements in terms of sport performance satisfaction, well-being, self-regulation and basic psychological needs.

Methods

Participants

The sample consisted of 28 players belonging to the base soccer categories of the Real Club Deportivo de La Coruña S.A.D, who came from different geographical locations within Spain. Participants were 85% of the players who lived in the club’s official residence. Their age ranged between 14 and 19 years ($M = 16.07$; $SD = 1.63$). Their competition level was regional and national, and their experience in soccer practice ranged from 8 to 16 years ($M = 11.61$, $SD = 2.08$).

Participation in the program was voluntary and was proposed to all 33 players who lived in the club’s residence. An explanatory video of the program was presented to all players. In this video, they were invited to participate in the DÉPORVIDA program, and to attend a meeting where objectives and activities would be explained. Among all players, 10 agreed to participate to the program, 18 did not agree to participate but accepted to serve as a control group, and the remaining 5 did not participate to the study. All participants involved in the study completed all the assessment phases.

The current Spanish and European regulations regarding data protection were considered at all times. The study followed the recommendations of the Ethics Commission of Research of the University of A Coruña and the Declaration of Helsinki (1964). Informed consent was obtained for each participant; regarding underage players, informed consent was obtained from the parents and the club, considering the overall transfer of rights that they give to the club once the season begins.

Design and measures

A quasi-experimental study was carried out, as shown in Fig. 1, where the intervention group appears in the first row, while the control group appears in the second row.

The program activities were additional to the normal training schedule of the players, and were carried out in group, for eight consecutive weeks, between February and April 2019. All activities were directed by the club employees with formal academic education (in psychology, pedagogy or sports science); in addition, all of them had a university master’s degree in teaching. In each workshop, the different strengths of the VIA model were trained. Activities were not directly related to soccer, but it was used as the basis for the explanation of various principles. The schedule of the activities, their objectives, as well as their relationship with each character strength and dependent variables, can be found in Appendix. These activities were scheduled during participants’ free time, not to interfere with the normal daily activities of all players living in the club’s residence (i.e., school classes, training and competitions). For this reason, some activities were carried out during the weekends. The activities had a variable duration, depending on their characteristics, ranging between 1 and 3 h.

Independent variables

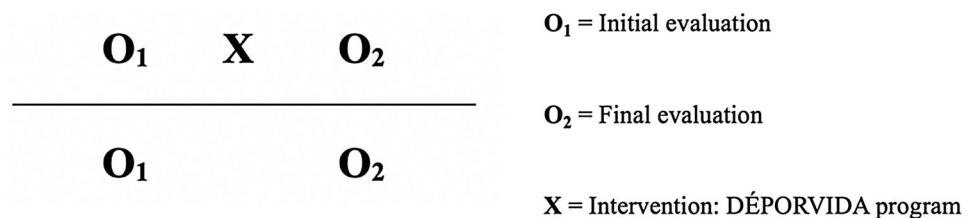
The first independent variable was Intervention, with two levels: (1) intervention with the activities of the DÉPORVIDA program (intervention group); (2) no intervention (control group). The second independent variable was Time, with two levels: (1) initial evaluation; (2) final evaluation.

Dependent variables

The dependent variables measured during the initial and final evaluations were the following ones.

Sport performance satisfaction The Performance Satisfaction Scale was used [39], which evaluates performance satisfaction at the present time, throughout the season, and assessing the entire sports career. The three items can be used individually, or as a factor, since together they have a Cronbach’s alpha of 0.74. Responses are collected on a 5-point Likert scale: 1 = Very dissatisfied, 2 = Dissatisfied; 3 = Neither satisfied nor dissatisfied; 4 = Satisfied; 5 = Very satisfied.

Fig. 1 Quasi-experimental design of the intervention



Well-being

The following scales were used:

- a) the Fordyce Questionnaire [40], translated into Spanish and available on the University of Pennsylvania website [41]. This questionnaire presents a test–retest reliability coefficient of 0.86. Participants indicate the percentage of time in which he/she is happy, neutral and unhappy, totalled up to 100% between the three. In addition, subjects must evaluate their degree of perceived happiness from 1 to 10.
- b) the Spanish adaptation of Ryff's Psychological Well-being Questionnaire was used [42], which presents the following factors: self-acceptance, positive relationships, autonomy, control of the environment, personal growth and purpose in life. The values of Cronbach's alpha in these factors are ranging from 0.70 to 0.84. Responses are collected on a 6-point Likert scale ranging from 1 (completely disagree) to 6 (completely agree).

Self-regulation

The factors of Emotional Control and Attention Control of the Spanish Adaptation of the Test of Performance Strategies 3 Competition Subscale were used [43]. These factors are measures of the athletes' capacity for self-regulation (cognitive and emotional) during competition [39]. The first factor had a value of Cronbach's alpha of 0.85 and the second factor of 0.77. Responses are collected on a 5-point Likert scale: 1 = Almost never, 2 = Rarely; 3 = Sometimes; 4 = Often; 5 = Almost always.

Basic psychological needs

The Spanish adaptation of the Basic Needs Satisfaction in Sport Scale was used [30]. This questionnaire contains the following factors: autonomy-choice, autonomy perceived as internal locus of control, autonomy-will, competence and relatedness. The composite reliability values of these factors ranged from 0.87 to 0.95. Responses are collected on a 7-point Likert scale ranging from 1 (completely disagree) to 7 (completely agree).

Data analyses

All analyses were performed using the IBM SPSS Statistics statistical package, version 25.0. The following data analyses were carried out sequentially: first, the descriptive statistics for all dependent variables were calculated. Next, pre-test values of intervention and control groups were compared by means of one-way ANOVAs. Third, mixed design 2×2 ANOVAs were conducted for each independent variable.

Finally, as follow-up tests for the dependent variables showing a significant interaction, a set of repeated measures and between groups ANOVAs were conducted. For all analyses, the alpha level was set at 0.05.

Results

The descriptive statistics of the study variables before and after the program implementation, both for the intervention (INT) and control (CON) groups, are reported in Table 2.

No significant differences were found in any dependent variable at the beginning of the study (i.e., at pre-test). Thus, the two groups were suitable for a quasi-experimental study [44].

A set of mixed design 2×2 ANOVAs showed significant time × intervention interactions for the following indicators: seasonal performance satisfaction [$F(1, 26) = 9.191$; $p = 0.005$; $\eta_p^2 = 0.261$]; percentage of time experienced as happy [$F(1, 26) = 8.945$; $p = 0.006$; $\eta_p^2 = 0.256$]; and percentage of time experienced as unhappy [$F(1, 26) = 7.682$; $p = 0.01$; $\eta_p^2 = 0.228$]. The three significant interactions consistently showed an effect of the intervention in the desired direction (Fig. 2).

For the variables showing a significant interaction, within groups pre- vs. post-test comparisons were performed. The results revealed that the intervention group, at the end of the intervention, presented an increase in Seasonal performance satisfaction [$F(1, 9) = 7.364$; $p = 0.024$; $\eta_p^2 = 0.45$]. Instead, the control group presented a decrease in the Percentage of time experienced as happy [$F(1, 17) = 10.842$; $p = 0.004$; $\eta_p^2 = 0.389$] and an increase in the Percentage of time experienced as unhappy [$F(1, 17) = 9.154$; $p = 0.008$; $\eta_p^2 = 0.35$]. No significant differences were found for the other comparisons.

Finally, the post-test results for these three variables were compared between the two groups. The results revealed that the intervention group had lower values in Percentage of time experienced as unhappy, compared to the control group [$F(1, 26) = 4.308$; $p = 0.048$; $\eta_p^2 = 0.166$]. Conversely, no significant differences were found for the seasonal performance satisfaction and the percentage of time experienced as happy.

Discussion

In the present study, we tested whether an intervention program based on the discovery and development of one's own character strengths, called DÉPORVIDA, entailed higher levels of sports performance satisfaction, well-being, self-regulation, and satisfaction of basic psychological needs.

Table 2 Descriptive statistics of the dependent variables in the pre-test and post-test

Constructs and indicators	Intervention group				Control group			
	Pre-test		Post-test		Pre-test		Post-test	
	M	SD	M	SD	M	SD	M	SD
Sport performance satisfaction	3.83	0.36	4.10	0.32	3.94	0.68	3.72	0.99
Current PS	4.00	0.47	3.80	0.63	3.78	1.06	3.50	1.43
Seasonal PS	3.60	0.52	4.20	0.42	3.72	0.96	3.44	1.20
Sports career PS	3.90	0.74	4.30	0.68	4.33	0.49	4.22	1.00
Well-being	/	/	/	/	/	/	/	/
Perceived happiness	7.60	1.17	8.00	0.94	7.72	0.90	7.00	1.82
% Happy time	60.00	24.15	65.50	19.36	66.67	12.60	55.83	17.00
% Unhappy time	17.50	14.77	13.50	8.18	12.78	6.91	24.44	15.42
% Neutral time	22.50	16.37	21.00	16.63	20.56	9.38	19.72	10.21
Self-acceptance	4.90	0.91	4.88	0.78	5.06	0.86	4.99	0.77
Positive relationships	4.82	1.33	4.76	0.85	4.73	1.16	4.93	1.06
Autonomy	4.63	0.94	4.78	0.61	4.59	0.79	4.47	0.77
Control of the environment	4.52	0.87	4.66	0.63	4.52	0.61	4.44	0.84
Personal growth	5.18	0.60	5.05	0.71	4.69	0.93	4.99	0.72
Purpose in life	4.86	0.42	4.74	0.56	4.66	0.78	4.81	0.76
Self-regulation	/	/	/	/	/	/	/	/
Emotional control	4.08	0.54	3.90	0.94	4.11	0.62	4.15	0.80
Attentional control	4.33	0.68	4.28	0.97	4.40	0.72	4.26	0.62
Basic psychological needs	5.87	0.48	6.01	0.43	5.95	0.63	5.86	0.46
Relatedness	5.94	0.53	6.18	0.48	5.84	0.85	5.91	0.72
Autonomy locus of control	6.27	0.56	6.53	0.39	5.78	0.99	5.78	1.00
Autonomy choice	5.15	0.98	5.48	0.92	5.38	0.75	5.38	0.69
Autonomy will	5.83	1.05	5.67	0.57	6.13	0.70	6.02	0.60
Competence	5.92	0.53	6.14	0.58	6.23	0.75	6.17	0.63

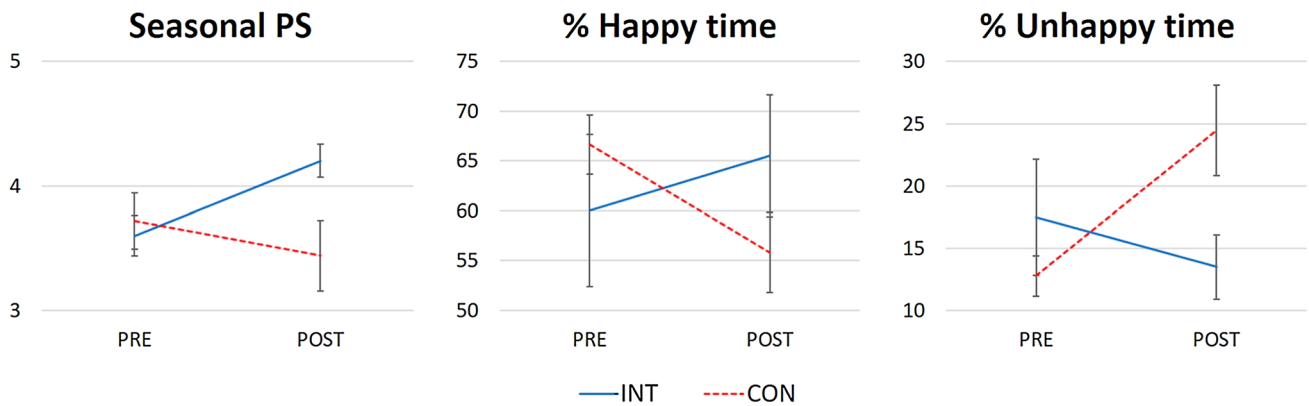


Fig. 2 Statistically significant interactions. The graphs show the three statistically significant interactions that emerged from the ANOVAs, namely for seasonal performance satisfaction, percentage of

time experienced as happy, and percentage of time experienced as unhappy. The error bars show the standard error of the mean

The results provided empirical support to this hypothesis for some of these constructs. In particular, different trends emerged for participants of the intervention and control groups between pre- and post-test for seasonal performance satisfaction and percentage of time feeling happy/unhappy,

highlighting consistent changes in the desired direction. Specifically, the within group comparisons revealed that the seasonal performance satisfaction increased from pre-test to post-test only in the intervention group; instead, in the control group the time experienced as happy decreased and

that experienced as unhappy increased. Moreover, at post-test, the intervention group participants reported less time experienced as unhappy than the control group.

These results are consistent with previous studies. The relationship between interventions based on positive psychology and performance satisfaction has been established in previous research [45, 51]. Regarding the relationship between enhancing character strengths and well-being, in terms of percentage of time perceived as happy/unhappy, our results are consistent with previous studies showing that character strengths discovery is strongly linked to happiness indicators [46, 47], as well as other studies related to well-being in both general population [48] and adolescents [37]. Recent research shows that strengths-based intervention promotes enhancements in various aspects of well-being [49], both hedonic and eudemonic (positive emotions, engagement, positive relationships, meaning and accomplishment). In fact, psychological well-being and strengths are closely linked to athletic performance [20].

Although the positive relationship between character strengths and some of the basic psychological needs, such as autonomy, has been previously reported [50], no significant differences were found in this study. We cannot exclude that the small sample size of the present study prevented similar effects from being observed. The other dependent variable for which there were no significant results was

self-regulation, perhaps due to the choice of inappropriate methods for its measurement. Indeed, the activities of the DÉPORVIDA program were carried out to promote general self-regulation, while the selected instrument evaluates this construct more specifically during sports competitions.

The current study is limited due to its quasi-experimental nature, since there was no randomization when assigning the participants to the groups. Therefore, although the program promoted improvements in the players who participated in it, the results cannot be extended to the population as a whole with the same degree of validity that a purely experimental investigation would have. Future lines of research could focus on improving the allocation of participants to groups, increasing the sample size, and replicating this program in other sports. In addition, future versions of the program should better design the training for self-regulation and select more suitable tools to measure its effects, to appropriately evaluate also this variable.

To conclude, the present study shows that there is favourable evidence regarding the validity of the DÉPORVIDA program to promote the development of character strengths. In line with the other similar programs in the field of education and sport, this program fosters positive development in young athletes. Given that its nature is not directly associated with soccer, DÉPORVIDA could be applied and tested also in other sports.

Appendix

DÉPORVIDA program activities

Name	Intervention day and duration	Objective	Structure	Character strengths	Dependent variable
Week 1					
1. Program presentation	<ul style="list-style-type: none"> ● Intervention day: 1 ● Duration: 2 h 	Introduce the concept of strengths, the importance of recognizing and working on them	<ul style="list-style-type: none"> ● Belén Varela Conference “Personal strengths in my life”. Expert in organization and people, she lectures and advises on talent management 	Perspective Hope Love of learning Kindness Self-regulation	Well-being Basic psychological needs
2. Defects	<ul style="list-style-type: none"> Intervention day: 2 ● Duration: 2 h 	Promote a positive attitude in program activities	<ul style="list-style-type: none"> ● Record personal defects on paper ● Break the sheet into pieces ● Put the pieces together, reinforce the idea of leaving the negative aside, and during each activity, focusing on the positive 	Perspective Hope	■ Well-being

Name	Intervention day and duration	Objective	Structure	Character strengths	Dependent variable
3. Story workshop	<ul style="list-style-type: none"> ● Intervention day: 3, 4, 6 ● Duration: 1 h per day 	Learn to write stories	<ul style="list-style-type: none"> ● Day 3: explanation of structure and examples ● Day 4: creating a story (1) Choice of characters and their personality ● Day 6: creation of the story (2) Script and writing 	Creativity Social intelligence	■ Basic psychological needs
Week 2					
4. Emotion workshop I	<ul style="list-style-type: none"> ● Intervention day: 8 ● Duration: 2 h 	Literacy in emotional language	<ul style="list-style-type: none"> ● Explanation of evocation and emotional management concepts 	Self-regulation Creativity	■ Self-regulation
5. Film: “CAMPEONES”	<ul style="list-style-type: none"> ● Intervention day: 10 ● Duration: 2 h 	Reflect on values and strengths	<ul style="list-style-type: none"> ● Movie viewing ● Dialogue about observed strengths 	All	Well-being
6. Family tree	<ul style="list-style-type: none"> ● Intervention day: 11 ● Duration: 1 h 	Become aware of family and roots	<ul style="list-style-type: none"> ● Draw a tree locating parents, grandparents, uncles and cousins ● Share the tree with peers 	Gratitude Love	Well-being
7. Film: “INSIDE OUT”	<ul style="list-style-type: none"> ● Intervention day: 12 ● Duration: 2 h 	Deepening the understanding of emotions	<ul style="list-style-type: none"> ● Movie viewing ● Dialogue about observed emotions 	Self-regulation Creativity Social intelligence	Well-being Self-regulation
Week 3					
8. Emotion workshop II	<ul style="list-style-type: none"> ● Intervention day: 15 ● Duration: 2 h 	Literacy in emotional language	<ul style="list-style-type: none"> ● Concept fixation and role-playing 	Self-regulation Creativity	■ Self-regulation
9. VIA Test	<ul style="list-style-type: none"> ● Intervention day: 18, 19 ● Duration: 1 h per day 	Obtain outstanding strengths	<ul style="list-style-type: none"> ● Day 18: performing VIA test individually ● Day 19: individual interview in which they evaluate from 1 to 10 how each of them represents them 	All	Well-being
Week 4					
10. Sharing experiences: Aye (club player)	<ul style="list-style-type: none"> ● Intervention day: 23 ● Duration: 2 h 	Know the life of a residence partner, their experiences, strengths and learning	<ul style="list-style-type: none"> ● Guest conference following a timeline, highlighting important moments in their life and relating it to their strengths ● Questions / debate about their strengths and the relationship with their experiences 	Perspective Social intelligence Spirituality Humor Gratitude Kindness Hope	Sport performance satisfaction Well-being
11. Friends tree	<ul style="list-style-type: none"> ● Intervention day: 24 ● Duration: 1 h 	Be aware of the close people who accompany us	<ul style="list-style-type: none"> ● Draw a tree locating the friends in the roots, trunk or branches ● Share the tree with peers 	Gratitude Love	Well-being
12. Training with “Genuine Team”	<ul style="list-style-type: none"> ● Intervention day: 25 ● Duration: 2 h 	Become aware of the wealth that diversity brings	<ul style="list-style-type: none"> ● Joint training with the Club team made up of players with intellectual disabilities and who participate in the Genuine League 	Teamwork Judgment Social intelligence Prudence Honesty	Basic psychological needs Sport performance satisfaction
Week 5					
13. Stories of strengths	<ul style="list-style-type: none"> ● Intervention day: 31 ● Duration: 2 h 	Be aware of how they use their strengths	<ul style="list-style-type: none"> ● Making stories that show when each of your personal strengths has been used or has been reflected 	All	Basic psychological needs
14. What really matters	<ul style="list-style-type: none"> ● Intervention day: 32 ● Duration: 3 h 	Reflect on the things that really matter	<ul style="list-style-type: none"> ● Attend the “What really matters” Congress where participants heard inspiring and exemplary life stories 	All	Basic psychological needs

Name	Intervention day and duration	Objective	Structure	Character strengths	Dependent variable
15. Family strengths	<ul style="list-style-type: none"> ● Intervention day: 33 ● Duration: 1 h 	Know the strengths of a family member, relate them to their own	<ul style="list-style-type: none"> ● VIA test application to a family member ● Group sharing and reflection on the strengths of their relatives and their transmission 	All	Well-being Basic psychological needs
Week 6					
16. Sharing experiences: Juan Francisco (club analyst)	<ul style="list-style-type: none"> ● Intervention day: 38 ● Duration: 2 h 	Know his life in Guatemala, his sports retirement, his experiences, strengths and learning	<ul style="list-style-type: none"> ● Guest conference following a timeline, highlighting important moments in his life and relating it to their strengths ● Questions/debate about their strengths and the relationship with their experiences 	Perseverance Love of learning Bravery Honesty Prudence Kindness	Sport performance satisfaction Well-being
17. Sharing experiences: Javi Sandá (club player)	<ul style="list-style-type: none"> ● Intervention day: 40 ● Duration: 1 h 	Know his life, his experiences, strengths and learning	<ul style="list-style-type: none"> ● Guest conference following a timeline, highlighting moments, important aspects of his life and relating it to his strengths ● Questions / debate about their strengths and the relationship with their experiences 	Perspective Hope Kindness Bravery Honesty Zest	Sport performance satisfaction Well-being
18. Visit Riazor stadium (first team match day)	<ul style="list-style-type: none"> ● Intervention day: 40 ● Duration: 3 h 2 	Live a professional soccer experience up close	<ul style="list-style-type: none"> ● Entrance to the stadium at the foot of the field 1 h before the start of the match ● Visualization of the routine and pre-match warm-up of the players ● Photos and debate about the role of strengths to become professional players 	Judgment Perspective Perseverance Teamwork Appreciation of beauty and excellence	■ Basic psychological needs
19. Sharing experiences: Juanjo (former club player)	<ul style="list-style-type: none"> ● Intervention day: 42 ● Duration: 1 h 	Know his life, his experiences, strengths and learning	<ul style="list-style-type: none"> ● Guest conference following a timeline, highlighting moments, important aspects of his life and relating it to his strengths ● Questions / debate about their strengths and the relationship with their experiences 	Perspective Hope Zest Perseverance Humor Fairness	Sport performance satisfaction Well-being
Week 7					
20. Personal brand	<ul style="list-style-type: none"> ● Intervention day: 44 ● Duration: 1 h 	Raise awareness about the construction of the personal brand and the importance of what they publish on social networks	<ul style="list-style-type: none"> ● Conference by the Club's communication director, Gabriel Barros, about personal branding ● Questions / debate about the strengths of the participants and the relationship with their posts on social networks 	Honesty Creativity Prudence Leadership Social intelligence	Basic psychological needs
21. Sharing experiences: Edu Expósito (first team player)	<ul style="list-style-type: none"> ● Intervention day: 45 ● Duration: 1 h 	Know his life, his experiences, strengths and learning	<ul style="list-style-type: none"> ● Guest conference following a timeline, highlighting moments, important aspects of his life and relating it to his strengths ● Questions/debate about their strengths and the relationship with their experiences 	Perspective Perseverance Self-regulation Humility Bravery Prudence	Sport performance satisfaction Well-being

Name	Intervention day and duration	Objective	Structure	Character strengths	Dependent variable
22. Forgiveness in victims of the FARC guerrilla in Colombia	<ul style="list-style-type: none"> ● Intervention day: 46 ● Duration: 1 h 	Delve into the strength of Forgiveness	<ul style="list-style-type: none"> ● Conference by Andrea, a psychologist and researcher from Colombia who has done a great field work with direct or indirect victims of the FARC guerrilla ● Questions/debate about the strength of Forgiveness 	Forgiveness Social intelligence Fairness Judgment Perspective	Well-being
23. Sharing experiences: Alex Martí (amateur player)	<ul style="list-style-type: none"> ● Intervention day: 46 ● Duration: 1 h 	Know his life, his experiences, strengths and learning	<ul style="list-style-type: none"> ● Guest conference following a timeline, highlighting moments, important aspects of his life and relating it to his strengths ● Questions/debate about their strengths and the relationship with their experiences 	Perspective Hope Zest Perseverance Curiosity Humility Prudence	Sport performance satisfaction Well-being
24. Film: Informe Robinson—Amarelle	<ul style="list-style-type: none"> ● Intervention day: 46 ● Duration: 2 h 	Know his life and prepare his visit at the end of the program	<ul style="list-style-type: none"> ● Movie viewing ● Dialogue about observed strengths 	Appreciation of beauty & excellence Perseverance Love Teamwork Leadership Zest	Sport performance satisfaction Well-being
25. My little pleasures	<ul style="list-style-type: none"> ● Intervention day: 47 ● Duration: 1 h 	Be aware of the little things that bring us pleasure and well-being	<ul style="list-style-type: none"> ● Travel to Monte de San Pedro (A Coruña), a privileged place with great calm and beauty of the city ● Cover a sheet in which they describe what kinds of things give them pleasure and how they feel in those moments ● Walk in the mountains in pairs and share their pleasures ● Sharing of the whole group 	Creativity Love Zest Appreciation of beauty & excellence Gratitude Spirituality	Well-being
26. Why?	<ul style="list-style-type: none"> ● Intervention day: 47 ● Duration: 1 h 	Be aware of how our actions seek personal happiness	<ul style="list-style-type: none"> ● In the Monte de San Pedro (A Coruña), group reflection on the question: Why do I get up every day? From that, the What for? What are you doing ...? What do you say ...? What are you going for ...? Until we conclude that our actions have the sense of seeking to try to be happy and make others happy 	Judgment Perspective Honesty Love Appreciation of beauty & excellence Spirituality	Well-being
27. Share stories of strengths with peers	<ul style="list-style-type: none"> ● Intervention day: 47 ● Duration: 1 h 	Knowing classmates' strengths and experiences that reflect their use	<ul style="list-style-type: none"> ● In the Monte de San Pedro (A Coruña), outdoors and in a quiet place ● Grouped in pairs, and as they walk, they read stories about their personal strengths ● When they have one read, they change pairs and pass on a different one, so everyone knows a strength and how each participant uses it 	Perspective Social intelligence Curiosity Honesty Love Gratitude Kindness	Well-being

Name	Intervention day and duration	Objective	Structure	Character strengths	Dependent variable
28. Admiration	<ul style="list-style-type: none"> ● Intervention day: 47 ● Duration: 1 h 	Describe and be aware of why we admire certain people	<ul style="list-style-type: none"> ● In the Monte de San Pedro (A Coruña), delivery of a sheet in which they must describe a person they admire and say the reason for that admiration. These people should be framed in the categories: teacher, soccer player, family and teammate 	<ul style="list-style-type: none"> Appreciation of beauty & excellence Social intelligence Judgment Gratitude Love 	Basic psychological needs
29. Sharing experiences: Ramiro Amarelle (former best player in the World—Beach soccer)	<ul style="list-style-type: none"> ● Intervention day: 47 ● Duration: 1 h 	Know his life, his strengths and professional experiences	<ul style="list-style-type: none"> ● Travel to Monte de San Pedro (A Coruña), meeting with Ramiro Amarelle. He shared his experiences and experiences as a Deportivo player in base categories and as a professional beach soccer player and coach 	<ul style="list-style-type: none"> Perspective Perseverance Love Social intelligence Teamwork Leadership Zest 	<ul style="list-style-type: none"> Sport performance satisfaction Well-being
30. Appreciation of beauty and excellence	<ul style="list-style-type: none"> ● Intervention day: 48 ● Duration: 3 h 	Appreciate and describe what different situations evoke in us	<ul style="list-style-type: none"> ● Movie viewing: “Colombia Magia Salvaje” ● Movie viewing: “Informe Robinson Super Depor, te quiero igual” ● Dialogue/debate on the manifestation of strength “Appreciation of beauty and excellence” in these documentaries 	<ul style="list-style-type: none"> Appreciation of beauty and excellence 	Well-being
31. Conscious use of strengths	<ul style="list-style-type: none"> ● Intervention day: 48 ● Duration: 1 h 	Know the strengths we use and use them consciously	<ul style="list-style-type: none"> ● Record how we use the strengths during the day to day (strengths and actions) ● Design actions to work each of the main strengths 	<ul style="list-style-type: none"> Judgment Perspective Creativity 	Self-regulation
32. Aspects to improve	<ul style="list-style-type: none"> ● Intervention day: 48 ● Duration: 2 h 	Be aware of the improvement aspects that others see in us	<ul style="list-style-type: none"> ● Sending a questionnaire to family, colleagues, teachers and people close to them with the question: What should I improve? ● Delivery and individual reading of answers to the players ● Joint reflection on it. What others think of us add up to realize what we need to improve and to know ourselves better 	<ul style="list-style-type: none"> Judgment Social intelligence Perspective Honesty Love Humility Self-regulation 	Basic psychological needs

Name	Intervention day and duration	Objective	Structure	Character strengths	Dependent variable
Week 8					
33. Sharing experiences: Ángel Vales (analyst of the Spanish national football team)	<ul style="list-style-type: none"> ● Intervention day: 50 ● Duration: 2 h 	Know his life, his strengths and professional experiences	<ul style="list-style-type: none"> ● Visit to the UDC Faculty of Sports Sciences ● Meeting with Ángel Vales in two groups of 5. He has told them his life story, they asked questions and he has left as a final message that in life you have to look at yourself, get to know yourself and work on your strengths and look to the future by establishing goals and objectives 	Perspective Curiosity Judgment Social intelligence Hope	Sport performance satisfaction Well-being
34. Sharing experiences: Alex Pais (former football player)	<ul style="list-style-type: none"> ● Intervention day: 50 ● Duration: 1 h 	Know his life, his experiences, strengths and learning	<ul style="list-style-type: none"> ● Guest conference following a timeline, highlighting moments, important aspects of his life and relating it to his strengths ● Questions / debate about their strengths and the relationship with their experiences 	Perspective Perseverance Humor Leadership Hope Forgiveness	Sport performance satisfaction Well-being

Name	Intervention day and duration	Objective	Structure	Character strengths	Dependent variable
35. Gratitude breakfast	<ul style="list-style-type: none"> ● Intervention day: 51 ● Duration: 1 h 	Express Gratitude and be aware of the value of recognition to others	<ul style="list-style-type: none"> ● Breakfast all together exchanging good times and conversations ● Individual elaboration of a message of thanks to a person who considered that they had not been grateful for any gesture or action that they had had with them, should reflect how they had felt, and what it had meant to them 	Gratitude Love Social intelligence Creativity	Well-being
36. Sharing experiences: Ramón Piña (former club player)	<ul style="list-style-type: none"> ● Intervention day: 51 ● Duration: 2 h 	Know his life, his strengths and professional experiences	<ul style="list-style-type: none"> ● Guest conference following a timeline, highlighting moments, important aspects of his life and relating it to his strengths ● Questions / debate about their strengths and the relationship with their experiences 	Perspective Curiosity Love of learning Judgment Creativity	Sport performance satisfaction Well-being
37. Sharing experiences: Jose Manuel (elite athlete)	<ul style="list-style-type: none"> ● Intervention day: 52 ● Duration: 2 h 	Know his life, his strengths and professional experiences	<ul style="list-style-type: none"> ● Guest conference following a timeline, highlighting moments, important aspects of his life and relating it to his strengths ● Questions/ debate about their strengths and the relationship with their experiences 	Judgment Creativity Perseverance Bravery Honesty Leadership	Sport performance satisfaction Well-being

Name	Intervention day and duration	Objective	Structure	Character strengths	Dependent variable
38. Tin and box	<ul style="list-style-type: none"> ● Intervention day: 53 ● Duration: 2 h 	<p>Surprise them with messages of their positive aspects</p> <p>Provide a memento of the program that reflects what they did and who they are</p>	<ul style="list-style-type: none"> ● Finally, as a compilation of the numerous experiences they had throughout the program, they were given a tin with messages from family, teachers, coaches, colleagues and friends who answered the following questions: How do you describe me? At what point did I help you? When did I surprise you? ● They have also been given a picture that collects photos of the activities carried out, of the most important people in their lives, and at the same time their strengths and the words that describe them appear 	<p>Self-regulation</p> <p>Creativity</p> <p>Social intelligence</p> <p>Honesty</p> <p>Appreciation of beauty & excellence</p>	Well-being

Acknowledgements The authors want to thank the collaboration of the Real Club Deportivo de La Coruña S.A.D. and those who participated in the program's activities (former players, executives, coaches, etc.). Furthermore, we are especially grateful for the collaboration of Belén Varela and Ramiro Amarelle.

Funding Open Access funding provided thanks to the Universidade da Coruña/CRUE-CSIC agreement with Springer Nature.

Declarations

Conflict of interest The authors declare that there is no conflict of interest regarding the publication of this article.

Human and animal rights The treatment of human rights in the study followed the recommendations of the Research Ethics Commission of the University of A Coruña and the Declaration of Helsinki (1964). This article does not contain any animal studies conducted by any of the authors.

Ethical approval The study followed the recommendations of the Ethics Commission of Research of the University of A Coruña and the Declaration of Helsinki (1964).

Informed consent Informed consent was obtained for each participant.

Open Access This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if changes were made. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit <http://creativecommons.org/licenses/by/4.0/>.

References

- Littlewood M, Mullen C, Richardson D (2011) Football labour migration: an examination of the player recruitment strategies of the ‘big five’ European football leagues 2004–5 to 2008–9. *Soc Sci Res* 12(6):788–805. <https://doi.org/10.1080/14660970.2011.609680>
- Güllich A (2014) Selection, de-selection and progression in German football talent promotion. *Eur J Sport Sci* 14(6):530–537. <https://doi.org/10.1080/17461391.2013.858371>
- Kassis M, Schmidt SL, Schreyer D, Torgler B (2017) Who gets promoted? Personality factors leading to promotion in highly structured work environments: evidence from a German professional football club. *Appl Econ Lett* 24(17):1222–1227. <https://doi.org/10.1080/13504851.2016.1267841>
- Anderson G, Miller RM (2011) The academy system in English professional football: business value or “following the herd”? Research paper series No 2011/43. University of Liverpool Management School
- Bisquerra-Alzina R, Hernández-Paniello S (2017) Psicología positiva, educación emocional y el programa aulas felices. *Papeles Del Psicólogo* 37(1):58–65. <https://doi.org/10.23923/pap.psicol2017.2822>
- Cruz J, García-Mas A, Stambulova N, Lucidi F, Márquez S, Reyes S, Serpa S, Jaenes JC (2017) Psytool design and theoretical background. Communication at the XIV ISSP World Congress, Sevilla (Spain).
- García-Mas A, Rosado A, Serpa S, Marcolino P, Villalonga C (2018) Content analysis of the agents of change” disposition to change” after attending the psytool program. *Rev Psicol Deporte* 27(3):31–36
- Duda JL, Quested E, Haug E, Samdal O, Wold B, Balaguer I, Hall H (2013) Promoting adolescent health through an intervention aimed at improving the quality of their participation in Physical Activity (PAPA): background to the project and main trial protocol. *Internat J Sport Exe Psychol* 11(4):319–327. <https://doi.org/10.1080/1612197x.2013.839413>
- Côté J, Hancock DJ (2016) Evidence-based policies for youth sport programmes. *Internat J Sport Pol Polit* 8(1):51–65. <https://doi.org/10.1080/19406940.2014.919338>
- Koh KT, Ong SW, Camiré M (2016) Implementation of a values training program in physical education and sport: perspectives from teachers, coaches, students, and athletes. *Phys Educ Sport Pedagog* 21(3):295–312. <https://doi.org/10.1080/17408989.2014.990369>
- Holt NL, Neely KC (2011) Positive youth development through sport: a review. *Rev Iberoam Psicol Ejercicio y el Dep* 6(2):229–316
- Larson RW (2000) Toward a psychology of positive youth development. *Am Psychol* 55(1):170–183. <https://doi.org/10.1037/0003-066x.55.1.170>
- Donaldson SI, Csikszentmihalyi M, Nakamura J (2011) *Applied Positive psychology: Improving everyday life, health, schools, work, and society*. Routledge Academic
- Salanova M, Schaufeli WB, Xanthopoulou D, Bakker AB (2010) The gain spiral of resources and work engagement: sustaining a positive worklife. In: Bakker AB, Leiter MP (eds) *Work engagement: a handbook of essential theory and research*. Psychology Press, pp 118–131
- Csikszentmihalyi M (2014) *Flow and the foundations of positive psychology*. Springer
- Bakker AB, Hetland J, Olsen OK, Espevik R (2019) Daily strengths use and employee well-being: the moderating role of personality. *J Occup Organ Psychol* 92(1):144–168. <https://doi.org/10.1111/joop.12243>
- Ng V, Cao M, Marsh HW, Tay L, Seligman ME (2017) The factor structure of the values in action inventory of strengths (VIA-IS): an item-level exploratory structural equation modeling (ESEM) bifactor analysis. *Psychol Assess* 29(8):1053. <https://doi.org/10.1037/pas0000396>
- Azañedo CM, Fernández-Abascal EG, Barraca J (2014) Character strengths in Spain: validation of the values in action inventory of strengths (VIA-IS) in a Spanish sample. *Clín Salud* 25(2):123–130. <https://doi.org/10.1016/j.clysa.2014.06.002>
- Littman-Ovadia H, Freidlin P (2019) Positive psychopathology and positive functioning: OCD, flourishing and satisfaction with life through the lens of character strength underuse, overuse and optimal use. *Appl Res Qual Life*. <https://doi.org/10.1007/s11482-018-9701-5>
- Brady A, Grenville-Cleave B (2017) *Positive psychology in sport and physical activity*. Routledge
- Ludlam KE, Butt J, Bawden M, Lindsay P, Maynard IW (2016) A strengths-based consultancy approach in elite sport: exploring super-strengths. *J Appl Sport Psychol* 28(2):216–233. <https://doi.org/10.1080/10413200.2015.1105881>
- Shin J, Jang H, Hyun M (2015) Stress coping and emotional regulation mediate between character strengths and adjustment. *Korean J Stress Res* 23(3):109–118. <https://doi.org/10.17547/kjsr.2015.23.3.109>
- Young KC, Kashdan TB, Macatee R (2015) Strength balance and implicit strength measurement: new considerations for research on strengths of character. *J Posit Psychol* 10(1):17–24. <https://doi.org/10.1080/17439760.2014.920406>
- Harzer C, Ruch W (2015) The relationships of character strengths with coping, work-related stress, and job satisfaction. *Front Psychol*. <https://doi.org/10.3389/fpsyg.2015.00165>
- Pang D, Ruch W (2019) Fusing character strengths and mindfulness interventions: benefits for job satisfaction and performance. *J Occup Health Psychol* 24(1):150–162. <https://doi.org/10.1037/ocp0000144>
- Coghlan A, Filo K (2016) Bringing personal character strengths into the production of the leisure experience. *Leis Sci* 38(2):100–117. <https://doi.org/10.1080/01490400.2015.1087355>
- Gander F, Hofmann J, Proyer RT, Ruch W (2019) Character strengths – stability, change, and relationships with well-being changes. *Appl Res Qual Life*. <https://doi.org/10.1007/s11482-018-9690-4>
- Pang D, Ruch W (2019) The mutual support model of mindfulness and character strengths. *Mindfulness* 10(8):1545–1559. <https://doi.org/10.1007/s12671-019-01103-z>
- Littman-Ovadia H, Niemiec RM (2016) Character strengths and mindfulness as core pathways to meaning in life. In *Clinical perspectives on meaning*. Springer, pp 383–405
- De Francisco C, Parra FJ, Arce C, Vélchez MDP (2018) Preliminary empirical validation of the “basic needs satisfaction in sport scale” with a sample of Spanish athletes. *Front Psychol* 9:1057. <https://doi.org/10.3389/fpsyg.2018.01057>
- Linley PA, Nielsen KM, Gillett R, Biswas-Diener R (2010) Using signature strengths in pursuit of goals: effects on goal progress, need satisfaction, and well-being, and implications for coaching psychologists. *Int Coach Psychol Rev* 5:6–15
- Ryan RM, Deci EL (2017) *Self-determination theory: basic psychological needs in motivation, development, and wellness*. Guilford Press
- Niemiec RM (2017) *Character strengths interventions: a field guide for practitioners*. Hogrefe Publishing
- Peterson C, Seligman ME (2004) *Character strengths and virtues: a handbook and classification*. Oxford University Press. <https://doi.org/10.5860/choice.42-0624>
- Ruch W, Gander F, Wagner L, Giuliani F (2019) The structure of character: on the relationships between character strengths and

- virtues. *J Posit Psychol*. <https://doi.org/10.1080/17439760.2019.1689418>
36. Brdar I, Kashdan TB (2010) Character strengths and well-being in Croatia: an empirical investigation of structure and correlates. *J Res Pers* 44(1):151–154. <https://doi.org/10.1016/j.jrp.2009.12.001>
 37. Toner E, Haslam N, Robinson J, Williams P (2012) Character strengths and wellbeing in adolescence: structure and correlates of the values in action inventory of strengths for children. *Personal Individ Differ* 52(5):637–642. <https://doi.org/10.1016/j.paid.2011.12.014>
 38. McGrath RE (2014) Character strengths in 75 nations: an update. *J Posit Psychol* 10(1):41–52. <https://doi.org/10.1080/17439760.2014.888580>
 39. Tomé-Lourido D (2018) Evaluación de habilidades psicológicas en deportistas, y su relación con la ansiedad y el procesamiento atencional. (Unpublished doctoral dissertation). University of Santiago de Compostela. <https://www.educacion.gob.es/teseo/mostrarRef.do?ref=1710402>
 40. Fordyce MW (1983) A program to increase happiness: further studies. *J Couns Psychol* 30(4):483–498. <https://doi.org/10.1037/0022-0167.30.4.483>
 41. University of Pennsylvania (2019) Fordyce emotions questionnaire. <https://www.authentichappiness.sas.upenn.edu/es/testcenter>
 42. Díaz D, Rodríguez-Carvajal R, Blanco A, Moreno-Jiménez B, Gallardo I, Valle C, Dierendonck DV (2006) Adaptación española de las escalas de bienestar psicológico de Ryff. *Psicothema* 18(3):572–577
 43. Tomé-Lourido D, Arce C, Ponte D (2018) Adaptation of the test of performance strategies competition subscale to Spanish. *Psicothema* 30(1):123–129. <https://doi.org/10.7334/psicothema2017.124>
 44. León OG, Montero I (2015) Métodos de investigación en psicología y educación. McGraw-Hill
 45. Luthans F, Avolio BJ, Avey JB, Norman SM (2007) Positive psychological capital: measurement and relationship with performance and satisfaction. *Pers Psychol* 60(3):541–572. <https://doi.org/10.1111/j.1744-6570.2007.00083.x>
 46. Ortega-Maldonado A (2018) It is time to act! Empirical findings on how to enhance psychological well-being and performance through positive interventions. (Unpublished doctoral dissertation). Universitat Jaume I. <https://www.educacion.gob.es/teseo/mostrarRef.do?ref=1675614>
 47. Peterson C, Ruch W, Beermann U, Park N, Seligman ME (2007) Strengths of character, orientations to happiness, and life satisfaction. *J Posit Psychol* 2(3):149–156. <https://doi.org/10.1080/17439760701228938>
 48. Schutte NS, Malouff JM (2018) The impact of signature character strengths interventions: a meta-analysis. *J Happiness Stud* 20(4):1179–1196. <https://doi.org/10.1007/s10902-018-9990-2>
 49. Park N, Peterson C, Seligman ME (2004) Strengths of character and well-being. *J Soc Clin Psychol* 23(5):603–619. <https://doi.org/10.1521/jscp.23.5.603.50748>
 50. Wagner L, Gander F, Proyer RT, Ruch W (2019) Character strengths and PERMA: investigating the relationships of character strengths with a multidimensional framework of well-being. *Appl Res Qual Life*. <https://doi.org/10.1007/s11482-018-9695-z>
 51. Hausler M, Strecker C, Huber A, Brenner M, Höge T, Höfer S (2017) Distinguishing relational aspects of character strengths with subjective and psychological well-being. *Front Psychol*. <https://doi.org/10.3389/fpsyg.2017.01159>

Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.