

Sport practice as an educational mean for positive values and behaviours

Short title: Sport practice as an educational mean

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DECLARATIONS

Conflicts of Interest:

nothing to declare.

Funding:

We gratefully acknowledge Transdisciplinary Research Center in Education and Development (CITeD), do Instituto Politécnico de Bragança, Portugal, Portugal, with the support of the Fundação para a Ciência e Tecnologia (FCT) under project UID/05777/2025, identified by DOI <https://doi.org/10.54499/UID/05777/2025>, and Livewell under the project/support UID/6157/2023.

CRedit authorship contribution statement:

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EDITORIAL INFORMATION

Received: 11 December 2025.

Accepted: 9 January 2026

Edited by:

Pedro Forte

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ABSTRACT

Federated sport represents a non-formal educational context that can foster youth development. However, participation alone does not ensure positive outcomes. This study aimed to examine potential differences by gender, age group (U14 and U18), and federated sports participation or non-participation in developmental assets, satisfaction with sport, and sporting attitudes. The Developmental Assets Questionnaire, the Sports Attitudes Questionnaire, and the Sources of Satisfaction in Youth Sport Questionnaire were administered to 258 participants (mean age 14.41 ± 1.97 ; 134 boys and 124 girls; 80 federated sports practitioners). Then, the ANOVA test was carried out for data analysis. Evidence indicates that *gender* influences social competencies, support, positive identity and internal and external assets, satisfaction and attitudes towards sport. Age group influences developmental assets and satisfaction in sport. Also, practising federated competition has a positive influence on developmental assets, satisfaction and attitudes towards sport.

Keywords: Attitude, Enjoyment; Motivation; Sport; Development

INTRODUCTION

Sport is widely (and lengthily) recognised as a powerful tool for youth development. It has a dual potential to foster both positive/negative values and negative/positive behaviours, necessitating a deeper understanding of the factors influencing these outcomes. It is a non-formal, systemic educational environment that contributes to the development of the individuals involved. Within it, individuals assume diverse roles, including managers, coaches, athletes, referees, volunteers, and spectators. Despite the panoply of individuals involved and interacting in the sporting context, the concern to promote an environment favourable to positive human development is not as significant or as widely acknowledged as it should be, especially among younger age groups. In other words, there should be a focus on the athletes' development context in the training programmes. While training is often viewed as a way to enhance an individual's athletic performance, it should be equally important (for clubs, parents, and the community) to recognise it as an opportunity to cultivate positive values and behaviours, both as an athlete and as a person, enhancing individuals' socio-emotional development.

According to Bronfenbrenner's bioecological theory (Bronfenbrenner, 1999), every individual's development is subject to proximal processes with the people who interact within their microsystem, as well as in the other interactive contexts - the mesosystem (e.g., family), exosystem (e.g., local community), and macrosystem (e.g., sports federation) - throughout their involvement or lifetime. Thus, the values and behaviours acquired in a sporting context can be transferred to or adopted in other contexts, such as school or society in general. It is often said that "sport is good," and generally it is. So much so that exercise and physical activity have become key priorities in public policy, particularly at the European level and within the World Health Organisation (World Health Organisation, 2018). However, involvement in sport *per se* does not necessarily mean positive effects for the individual, nor are they entirely positive.

The environment, values and behaviours promoted and educated in the sporting context can have negative effects such as drug use (Smith *et al.*, 2010), aggression or violence (Kavussanu *et al.*, 2013; Kimble *et al.*, 2010).

It is recognised that the sporting context, depending on and varying with the type of sport, collective or individual, influences the development of the young athlete. The younger and more immature an individual's physical, mental, social and behavioural development is, the more susceptible they are to positive or negative influences. According to Bronfenbrenner (1999), characteristics of the individual (e.g., age, sex or gender, ethnicity, and/or whether they have a disability) influence the proximal process and, consequently, their own development. For example, in sports science research, it is common to analyse relative age effects (RAEs) by grouping young participants into age-based cohorts according to calendar age (Smith *et al.*, 2018). The typical adolescent period – ages 10 to 19 – is a time of transformation and clearer definition of the individual adult. Another characteristic relevant to analyse is the gender/sex variable, following international policy recommendations to disaggregate the data by it (Global Research Council, 2021). Not only the physical aspects related to sex, but also the educational ones associated with gender representation can influence individual development.

Adherence to a particular context or activity, such as sport, is based on the individual's motivation, satisfaction, or pleasure. Satisfaction has previously been found to predict adherence (Scanlan *et al.*, 1993) and maintenance in sport (Guillet *et al.*, 2002). It is common for satisfaction to be integrated into or associated with the definitions of various theories of intrinsic motivation, namely Self-Determination Theory by Deci and Ryan (1985) and Flow by Jackson and Csikszentmihalyi (1999). Satisfaction can be considered a positive affective state related to the evaluation of the structures, processes, and outcomes associated with the sporting experience (Chelladurai & Riemer, 1997). Thus, through involvement in the sporting context, the individual will experience feelings such as pleasure, enjoyment, and fun, contributing to

their maintenance within the context. The study of athlete satisfaction is also interesting because of its positive relationship with group cohesion (Turman, 2008), self-esteem (Shaffer & Wittes, 2006) and perceived competencies (Fairclough, 2003). However, the practice of sport can involve mixed feelings or affective states, as evidenced by negative correlations between satisfaction and burnout (Schmidt & Stein, 1991), sport abandonment (Molinero *et al.*, 2006), and anxiety (Grossbard *et al.*, 2009; Kavussanu *et al.*, 2013). Previous studies have found that sources of satisfaction in youth sport differ according to personal characteristics, i.e., age/age group (Santos & Gonçalves, 2016), and according to contextual characteristics, such as the parental relationship (Scanlan & Lewthwaite, 1986). Other studies observe the negative effects of early specialisation on the enjoyment of female adolescent athletes, considering that these athletes may cope with their sporting challenges and construct their own interpretations of the sporting climate and their relationships with peers, coaches, and significant others (Soares *et al.*, 2023). The previous authors also find that as young female players matured, their perceptions of enjoyment changed notably, particularly in the context of youth female basketball. These athletes showed decreases in Self-referenced competencies, Effort expenditure, Competitive excitement, Affiliation with peers, and Positive parental involvement as they became older. The importance of the sporting context effects on sources of enjoyment was observed, particularly at state and national levels. So, the present study intends to analyse the effects of youth on different sport settings.

While satisfaction and enjoyment play crucial roles in maintaining participation, ethical behaviour determines the educational value of sport. In response to unethical behaviours, various initiatives have been developed, including the National Plan for Ethics in Sport (2012) and the ERASMUS Sport programmes (European Commission, 2022). These initiatives focus on combating violence, racism, discrimination, doping, and match-fixing. This is not a recent concern, with Lee (1996) proposing a way to assess anti-sportsmanship, cheating, convention,

and athletes' commitment. Studies have been conducted to examine contextual differences between players from clubs at different competitive levels (amateur/professional) (Domingues & Gonçalves, 2012) or contextual environments (urban/rural) (Santos & Gonçalves, 2015). While in some cases the values are identical, in others the differences in attitudes towards unsportsmanlike behaviour and cheating are accentuated. As Santos and Gonçalves (2015) note, this can be seen as a subversion of sporting values, to the detriment of other social values, such as group cohesion or recognition within the community. In other words, they adopt less ethical sporting attitudes to guarantee victory for their group, their team and greater appreciation from their community. Gonçalves *et al.* (2010) found that athletes with higher levels of ego-orientation are more likely to adopt unsportsmanlike attitudes and to cheat than athletes with higher levels of task-orientation. Given these findings, this study explores how participation in federated and non-federated sport relates to developmental assets, satisfaction, and sporting attitudes. Based on this knowledge and given that coaches can manipulate the motivational climate during training and games, they should be more aware and competent to develop non-formal education processes through the training and competition process that promote positive values and behaviours in sport that can be transferred to everyday life, while boosting individual and collective sporting performance.

The various contextual dispositions (e.g., family, school, sports) influence the young person's development and motivation, enjoyment, and values. There are various models of positive youth development, such as the "Five C's" model (Lerner *et al.*, 2005) and the Larson model for evaluating learning experiences (Larson *et al.*, 2006). However, it should be noted that none of these models is specific to the field of sport (Holt *et al.*, 2017), although, as in other programmes with young people, their positive development can be monitored. For example, the Developmental Assets Profile (DAP) (Search Institute, 2005) involves assessing the presence of external and internal youth development assets in the respective programmes. External assets

are grouped into categories such as support and limits, and expectations. Internal assets are grouped into categories such as positive identity, positive values, commitment to learning and social competencies. Monitoring the impact of young people's participation in different programmes, or in a given programme, is essential to adjust them. As the DAP is not a specific instrument for the area of sport, it allows us to obtain contextual and personal information on young people's development.

In Portugal, access to education up to the 12th grade is free and includes physical education classes to promote physical activity and sports literacy. During their time at school, they come into contact with a variety of sports, mainly in physical education classes, but also in non-curricular recreational and leisure activities and in School Sport activities (a non-federated sporting regime that takes place apart from the competitions organised by the respective sports federation). These experiences allow young people to assess their attitudes, values and feelings about sport and their (dis)mobilisation for federated sport. Despite the extensive research on sports participation or physical education, few studies have examined the differential impacts of being federated vs non-federated sports (Muñoz, Prados, and Segura, 2024; Fajardo, Jiménez, and González-Serrano, 2020) on social aspects such as enjoyment, parental involvement, and development assets, particularly in the Portuguese context. Therefore, some questions arise regarding the development of young people, namely the effects on developmental assets, satisfaction, and attitudes during sports activities by age group, gender, and federated sports practice.

Given the recognition of sport as a powerful means of non-formal education and the need to identify complementary pathways to foster positive values and behaviours in youth, this quantitative, descriptive, inferential, cross-sectional study aims to explore the relationships among sports practice, developmental assets, satisfaction, and sporting attitudes. Specifically, the study seeks to: a) examine the effects of age group on sources of satisfaction, sporting

attitudes, and developmental assets, addressing the hypothesis that these variables differ significantly across developmental stages; b) assess the effects of gender on these same dimensions, responding to the research question of whether boys and girls exhibit distinct profiles in terms of satisfaction, attitudes, and developmental resources; and c) analyse the impact of involvement in federated sport, testing the hypothesis that young people engaged in federated sport demonstrate higher levels of satisfaction, more positive sporting attitudes, and stronger developmental assets compared to their non-federated peers.

METHODS

This quantitative, descriptive, inferential cross-sectional study explores the relationships between sports practice, developmental assets, satisfaction, and sporting attitudes.

The study was approved by the Ethics Committee of the Faculty of Sports Sciences and Physical Education of the University of Coimbra, as part of the Sports and Physical Activity Development Plan 2016-2020, under reference CE/FCDEF-UC/00242016.

Sample

The sample was selected for spatial convenience; the young people are regular users of the municipal sports hall in the municipality of Vila Nova de Poiares (in 2023 it is calculated to have 7.140 inhabitants, 654 inhabitants with ages between 10-19 years, from those 323 are males, and 311 are female (PORDATA, 2025), district of Coimbra, Portugal, where some of the authors of this study work. A total of 258 young people aged between 12 and 18 ($M=14.41\pm1.97$) took part in this study, 134 males and 124 females, 80 practice federated sport (practitioners), 138 belonging to the under-14 age group (aged 12 to 14) and 120 belonging to the under-18 age group (aged 15 to 18). The aggregation into two age groups was a methodological choice to dilute the effects of relative age and maturity. Using

G*Power, the sample size for a one-way ANOVA with two groups (12-14 years and 15-18 years) was calculated, resulting in Effect Size (f) - Assuming a medium effect size ($f = 0.25$), Significance Level (α) - 0.05, and Power ($1-\beta$) - 0.80. Based on these parameters, the required sample size per group is approximately 64 participants. For the two groups, the total sample size would be 128 participants fulfilling this requirement. Because the sample was selected by spatial convenience, generalizability is limited. However, including federated and non-federated athletes from diverse age groups enhances the study's relevance.

Instruments

Sources of Enjoyment in Youth Sport Questionnaire [SEYSQ] (Wiersma, 2001) - obtained for the Portuguese version by Santos and Gonçalves (2012), which consists of an introduction and 20 items that assess five factors associated with satisfaction. The answers are classified using a Likert scale, from 1 to 5, where 1 means totally disagree and 5 means totally agree. This instrument is validated for youth aged 12-18 years old. The Portuguese version includes four quadrants (intrinsic - non-achievement; intrinsic - achievement; extrinsic- non-achievement; extrinsic - achievement) and five factors: 1) Self-referenced competency - relating to perceptions of mastery and achievement derived from reaching personal performance goals; 2) Other-referenced Competency and Recognition - perceptions of competence and control coming from third parties, such as social recognition for sporting results and positive social regard; 3) Effort Expenditure - perception of effort expended, which reflects commitment and work; 4) Affiliation with peers - positive social relationships with colleagues; 5) Positive parental involvement, positive social relationships with parents, such as support. An example of an item that assesses competencies referenced by others and recognition is "Doing techniques that other boys/girls my age can't do", and an item that assesses positive parental involvement is "Having the stimulus/encouragement of my parents".

Development Assets Profile [DAP] (Search Institute, 2005) - obtained for the Portuguese version by Santos and Gonçalves (2012), consisting of 20 items, which are preceded by an introduction. This instrument is validated for youth aged 12-18 years old. The Development Assets are presented in two higher-order dimensions (external, internal), through personal factors (Support, Boundaries and expectations, Commitment to learning, Positive values, Positive identity), and measure four factors from a contextual perspective (Social, Family, School and Community). The answers are classified on a Likert scale from 1 to 4, with the following meanings: 1 - Never or rarely, 2 - Sometimes, 3 - Often, and 4 - Almost always. The Portuguese version includes the following internal assets: Commitment to learning (liking reading and learning; caring about school; doing homework; being encouraged to try new things); Positive values (standing up for your beliefs; taking responsibility; avoiding alcohol, tobacco and drugs; valuing honesty and helping and respecting others) and Positive identity (optimism; locus of control and self-esteem). The internal assets are: Support (support from parents, family and other adults; parent-youth communication; helpful neighbours) and Boundaries and expectations (good role models; clear rules at school and at home; monitoring from family and neighbours). As an example of an item that assesses support, we have 'Parent(s) who try to help me succeed', while for the positive identity factor, we have 'I overcome challenges in a positive way'.

According to Santos and Gonçalves (2012), the results of the confirmatory factor analysis relating to the overall fit of the models show a coefficient of Mardia-Based Kappa 0.28 and Satorra Bentler Scaled $\chi^2(28) = 42.7$, significant for $p < .005$ for DAP and Mardia-Based Kappa = 0.30 and $\chi^2(28) = 61.25$, significant for $p < .005$ for SYESQ. The fit indices NFI = .96 and CFI = .98 had results above the cut-off value of 0.90.

Sport Attitudes Questionnaire (SAQ) (Lee, 1996) - attitudes towards sport were assessed using the aforementioned questionnaire, which comprises 23 items designed to identify respondents'

opinions on how they practise sport. The SAQ comprises four dimensions: cheating, anti-sportsmanship, convention, and commitment. The answer is given on a Likert scale from 1 to 5, where 1) totally disagree and 5) totally agree. The Portuguese version was translated and validated by Gonçalves et al. (2006). As an example, one item assesses cheating, 'I would cheat if it helped me win', and another assesses unsportsmanlike behaviour, 'As it is not against the rules to put psychological pressure on opponents, I can do it'.

The Portuguese versions of the SAQ (Gonçalves et al., 2006), SEYSQ and DAP (Santos & Gonçalves, 2012) have been used in prior studies within the Portuguese language (Santos & Gonçalves, 2016; Soares et al., 2023; Reverdito et al., 2023), ensuring their reliability for the current sample.

Procedures

The respondents were contacted to complete the questionnaires, with their anonymity and the confidentiality of the results guaranteed, and, depending on their age group, their parents were asked for consent. The questionnaires were completed during the 2016-2017 sports season and took approximately 20 minutes, with an introductory explanation by the researchers of their purpose and how to complete them.

Data Analysis

To examine the effects of gender, age group, and sport activity on sources of enjoyment in youth sport, attitudes towards sport, and developmental assets, ANOVA was employed. Before conducting the ANOVA, the assumptions of normality and homogeneity of variances were verified using the Shapiro-Wilk test (Tabachnick & Fidell, 2007). No violations of the assumptions were found, ensuring that the ANOVA results are valid and reliable. Data analysis was performed using JASP version 0.18.3.

RESULTS AND DISCUSSION

Development Assets

As a result of the statistical analysis carried out using ANOVA, there were statistically significant differences as the age group progressed, with developmental assets being lower in the under-18 group (Table 1), particularly in Boundaries and Expectations, Positive Values, Family, School, Community, and Internal and External. Those lower levels align with the Search Institute's (2005) theoretical model of Developmental Assets and with Benson's (2002) conclusions. The result reinforces a cross-cultural trend across the different countries where the instrument has been used.

Table 1. Effects of Age Group and Gender on Developmental Assets.

	Age Group				Gender			
	U14	U18	F	P	Male	Female	F	P
Support	23.3±6.3	21.9±6.2	2.986	.085	23.5±5.7	21.7±6.7	6.003	.015 ^b
Boundaries & Expectations	21.7±6.1	19.45±6.4	8.139	.005 ^a	21.1±5.9	20.2±6.8	1.377	.242
Commitment to learning	19.4±7.1	18.0±6.4	3.073	.081	18.9±6.7	18.6±6.9	.170	.681
Positive Values	19.4±9.6	15.6±8.0	11.449	.001 ^a	18.4±9.5	16.8±8.5	1.952	.164
Positive Identity	20.2±6.6	19.4±6.1	.993	.320	20.9±6.2	18.7±6.4	7.724	.006 ^a
Family	23.2±5.9	21.6±5.6	5.036	.026 ^b	22.8±5.4	22.0±6.1	1.477	.225
School	20.8±6.8	19.1±6.4	4.688	.031 ^b	20.6±6.3	19.3±7.0	2.532	.113
Community	17.1±7.7	14.4±7.1	8.491	.004 ^b	16.5±7.2	15.2±7.9	1.851	.175
Social	22.6±5.3	21.4±5.5	2.838	.093	22.6±5.4	21.4±5.3	3.335	.069
Internal	20.3±5.5	18.6±4.6	6.601	.011 ^b	20.2±5.1	18.7±5.1	5.485	.020 ^b
External	22.8±5.3	21.1±5.7	5.844	.016 ^b	22.7±5.1	21.2±5.9	4.968	.027 ^b

^a $p < .01$ ^b $p < .05$

Table 2. Effect of Sport Experience – Federated VS Non-Federated on Development Assets.

	Sport Experience			
	Federated	Non- Federated	F	p
Support	23.7±5.3	22.2±6.6	3.308	.070
Boundaries & Expectations	20.9±6.3	20.5±6.4	.154	.695
Commitment to learning	19.5±6.8	18.4±6.8	1.416	.235
Positive Values	19.1±7.6	17.0±9.6	2.927	.088
Positive Identity	21.1±6.2	19.3±6.4	4.499	.035 ^b
Family	22.9±5.1	22.2±6.1	.769	.381
School	19.9±7.1	20.0±6.5	.018	.894
Community	17.6±7.0	15.1±7.7	5.850	.016 ^b
Social	22.9±5.1	21.7±5.5	2.798	.096
Internal	20.6±5.0	19.0±5.2	5.326	.022 ^b
External	22.7±5.2	21.7±5.7	1.901	.169

^a $p < .01$ ^b $p < .05$

The U14 group shows good levels of assets in the categories Support, Limits and Expectations, Family, Social, and External Factors. The U18 group also has good levels of assets in the Support, Family, Social and External categories. The values between 15 and 20 are considered reasonable, with the range of values presented by both groups across the most diverse categories and factors, except for the under-18 age group in the Community category (14.4 ± 7.1), which falls into the range defined as weak. However, it can be considered a transitional value, not too weak (range 0-8). According to the values presented for the Support category, we can infer that young people envisage strong communication ties with their parents, reflecting family support, as well as receiving support from contexts other than the family. The concern with lower development assets levels comes from their direct negative association with substance use behaviours (Manrique-Millones et al., 2021).

About the differences between the age groups in the Boundaries and Expectations category, the reduction for the under-18 group may reflect the increase in academic/school demands, since in addition to clear rules and the consequences of infractions in the different contexts - family, school and neighbourhood - this category is strongly related to young people's results, particularly academic ones (Search Institute, 2005).

In the case of the Positive Values category, the variation becomes more complex, since it reflects personal virtues such as honesty, integrity, responsibility, and moderation, as well as concern for others and for working toward equality and social justice. The reduction in levels with increasing age, to lower levels, may be associated with an increased risk of exposure to environments where there is drug, alcohol and tobacco use, social and school problems and violence.

When analysed by gender, there were statistically significant differences, with girls showing lower levels of developmental assets in the Support and Positive Identity categories, as well as in the Internal and External factors. This may reflect the fact that boys receive more support

from their families and other adults in various contexts, to the detriment of girls. The present study partly contradicts the findings of Gomez-Baya et al. (2022), namely, the gender differences in the external asset Support. On the other hand, the higher scores in the Positive Identity category among male participants reflect greater development of their emerging identity, including self-esteem, an internal locus of control, optimism, and a growing sense of purpose in life. High scores in Positive Identity are associated with increased psychological resilience and reduced risk of psychological distress, including anxiety and depression (Gomez-Baya et al., 2008). The differences between the sexes may reflect academic or family environments, with different demands and expectations regarding young people's life paths. Following the findings of Manrique-Millones et al. (2021), internal assets appear to be stronger predictors of social, emotional, and psychological well-being than external assets. It can be considered that female participants face higher risks in their development due to lower levels of developmental assets.

Federated sports practice (Table 2) was found to influence the Positive Identity and Community categories, as well as the Internal factor, with practitioners showing higher values than non-practitioners. The statistically significant difference in Positive Identity reinforces previous studies indicating that sport promotes identity and self-esteem (Coatsworth & Conroy, 2006). It is also clear that these young people have greater involvement in the community by playing sport in a club, where they interact with other members of society and represent their community in sporting competitions.

Sources of Enjoyment

According to the ANOVA conducted on the sources of satisfaction in youth sport, there were statistically significant differences by age group, gender, and sporting activity (Tables 3 and 4). Other-referenced competency and recognition stand out, with higher values in the U14 age

group, indicating a greater focus on satisfaction with what others mention and communicate to them (i.e., external), at the expense of a more refined self-assessment of their competencies. However, the same age group shows higher levels of Effort Expenditure. Interestingly, this age group scores higher on the Intrinsic, Extrinsic, Realisation, and Non-Realisation dimensions. This study reinforces the findings of Berki and Piko (2017), McCarthy *et al.* (2008) and Santos and Gonçalves (2016) regarding lower age groups having higher levels of satisfaction in sport. The results indicate that contextual changes in the settings where the young person is inserted (sport, school, family, community) result in decreased satisfaction. To delve deeper into variations by age group, it would be interesting to assess differences in coaches' intervention styles, sporting results, or even parental involvement in the sporting context. Other aspects that can be seen as competing with sport and of greater interest and motivation to young people should also be explored, such as the results of sporting activities.

Table 3. Effects of Age Group and Gender on Sources of Enjoyment in Youth Sport and in Sport Attitudes

	Age Group				Gender			
	U14	U18	F	p	Male	Female	F	p
Self-referenced competency	3.91±1.06	3.66±1.06	3.625	.058	4.08±.81	3.49±1.22	21.401	.000a
Other-referenced competency and recognition	3.49±1.19	3.03±1.17	9.840	.002a	3.68±.98	2.83±1.26	36.624	.000a
Effort Expenditure	3.88±1.19	3.56±1.14	4.935	.027b	4.02±.91	3.42±1.34	17.967	.000a
Affiliation with peers	3.95±1.03	3.75±1.02	2.571	.110	4.02±.79	3.68±1.21	7.185	.008a
Positive Parental Involvement	3.86±1.16	3.59±1.10	3.622	.058	3.96±.90	3.50±1.31	10.996	.001a
Intrinsic	3.90±1.09	3.62±1.06	4.452	.036b	4.06±.82	3.46±1.25	21.115	.000a
Extrinsic	3.76±1.01	3.44±.94	6.643	.011b	3.88±.77	3.32±1.11	22.921	.000a
Achievement	3.84±1.01	3.58±.94	4.760	.030b	3.96±.76	3.46±1.13	17.461	.000a
Non-Achievement	3.68±1.06	3.31±1.02	8.054	.005a	3.86±.82	3.12±1.14	35.364	.000a
Cheat	1.89±1.24	2.15±1.28	2.748	.099	2.33±1.27	1.67±1.17	18.570	.000a
Unsportsmanship	2.12±1.28	2.34±1.20	2.069	.151	2.63±1.18	1.78±1.17	33.022	.000a
Convention	3.70±1.37	3.59±1.75	.307	.580	3.84±1.60	3.44±1.50	4.132	.043b
Commitment	3.74±1.32	3.65±1.10	.352	.553	3.78±1.00	3.61±1.42	1.173	.280

^a $p < .01$ ^b $p < .05$

Table 4. Effects of Sport Experience – Federated VS Non-Federated in Sources of Enjoyment in Youth Sport and Sport Attitudes

	Sport Experience		F	p
	Federated	Non-federated		
Self-referenced competency	4.41±.68	.352±1.10	45.116	.000a
Other-referenced competency and recognition	4.05±.81	2.92±1.18	60.518	.000a
Effort Expenditure	4.38±.75	3.44±1.22	40.443	.000a
Affiliation with peers	4.34±.72	3.64±1.07	28.373	.000a
Positive Parental Involvement	4.21±.85	3.52±1.19	21.754	.000a
Intrinsic	4.40±.69	3.49±1.11	46.060	.000a
Extrinsic	4.20±.70	3.35±.99	48.361	.000a
Achievement	4.25±.69	3.48±1.01	39.023	.000a
Non-Achievement	4.21±.69	3.19±1.04	65.119	.000a
Cheat	2.35±1.26	1.86±1.24	8.658	.004a
Unsportsmanship	2.69±1.19	2.01±1.22	17.304	.000a
Convention	4.03±.99	3.47±1.56	7.333	.007a
Commitment	4.13±.87	3.51±1.31	15.421	.000a

^a $p < .01$ ^b $p < .05$

As previously noted by Muñoz *et al.* (2024), parental involvement should be strengthened in both federated and non-federated sports activities for minors, transforming these moments from solely children's leisure time into shared family leisure experiences.

The differences by gender, on the other hand, may reflect the fact that boys usually have higher levels of recreational or federated physical activity than girls (World Health Organisation, 2018). The data reinforce findings from Murcia *et al.* (2007) and Rosado *et al.* (2009), with males showing a greater orientation towards recognition and external sources of satisfaction than females.

Future studies should use a combination of the variables practitioners/non-practitioners and gender to see if there are differences between practitioners and non-practitioners of the same gender. As mentioned by Gonçalves *et al.* (2007), it is important to take into account the demands placed on practitioners by the institutions that provide sport, with special emphasis on girls. Another mistake to avoid is ignoring the fact that not all, and often very few, players can or want to achieve levels of sporting excellence. Beyond gender, the type of sport participation also shapes sources of enjoyment.

In the case of federated sport, the differences in sources of enjoyment between practitioners and non-practitioners are clear. Non-practitioners had lower scores in all factors. This reflects a lack of adherence and participation in the sporting context on a prolonged and regular basis, as well as the Achievement, non-Achievement, Intrinsic, and Extrinsic sources promoted in physical and sporting activities in the school context. Crouch *et al.* (2022) found that athletes in individual sports had lower values across the subcategories (Effort Exerted, Competitive Excitement, Other-Referenced Competency, and Recognition) than athletes in team sports and specialised athletes. In the present study, no significant difference was found by sport type (individual vs team). Overall, federated athletes exhibit higher levels of enjoyment and motivation, supporting the view that structured sport is a positive developmental context. Interestingly, Reverdito *et al.* (2023) observe that youth with more formal sport training report higher levels across all sources of enjoyment variables than those with less training. This reinforces the idea that participation in sport is a significant context in which young people can establish meaningful interpersonal relationships, recognise their competencies, and be recognised by others (Santos *et al.*, 2020).

Sport Attitudes

According to the analysis of sporting attitudes (Table 2), there were no differences across age groups. For the gender variable, there were statistically significant differences across the Cheating, Anti-Sportsmanship, and Convention categories, with boys showing higher levels in all three. This study reinforces the findings of Gonçalves *et al.* (2007), who found that girls valued competence, correct practice and sociability more. It is possible to observe differences in the four variables of sporting attitudes, namely Cheating, Anti-Sportsmanship, Convention and Commitment, between practitioners and non-practitioners. Practitioners scored higher in all factors.

The data lead us to conclude that the sporting context, as a means of education in values and attitudes, is contradictory: on the one hand, it contributes to increasing positive personal and social values; on the other, it contributes to cheating and unsportsmanlike values, or to recognising and evaluating external competence. The way clubs evaluate their sports practices, and their effects on the development of young athletes, should be the subject of future studies. The fact that respondents who practised sport had higher scores for positive identity, community, various sources of satisfaction, and sporting attitudes may be associated with their personal identity as athletes; as such, they adopt values and attitudes promoted by the group they belong to. It is recognised that the quality of relationships in the micro-context of training and competition affects an athlete's positive identity and self-esteem (Coatsworth & Conroy, 2006).

This study contributes to the analysis of the effects of age group, gender, and federated sports practice on developmental assets, sources of satisfaction in youth sport, and sporting attitudes. This reinforces the methodology and evaluation of the sporting context as a means of non-formal education of values and attitudes.

CONCLUSIONS

This study highlights important insights into developmental assets, sources of enjoyment in youth sport, and sporting attitudes among young people, with variations by age group, gender, and participation in federated sport.

Firstly, younger participants (U14) demonstrated higher levels of developmental assets and greater sources of satisfaction in sport, aligning with the notion that younger athletes may be more supported by their environments and experience sport with more enthusiasm and external validation. However, as age increases, a decline in certain developmental assets becomes

evident, reinforcing the need for ongoing support and attention to youth transitioning into later adolescence.

Gender differences were also apparent, with boys consistently reporting higher levels of developmental assets, sources of enjoyment, and sporting attitudes. These findings suggest that girls may face systemic barriers to receiving the same levels of support and recognition, which may affect their development, satisfaction, and long-term engagement in sport. Addressing these disparities should be a priority for coaches, sport managers, and policy-makers.

Moreover, federated sport participation was positively associated with higher values in positive identity, community engagement, and internal assets, as well as stronger sources of satisfaction and attitudes towards sport. This underscores the potential role of sport as a key context for personal and social development. Nevertheless, higher scores on negative attitudes, such as cheating and anti-sportsmanship, among federated athletes highlight the dual nature of the sporting environment, which can foster both positive and negative behaviours.

These findings underscore the importance of systemic intervention and the involvement of the entire educational community (e.g., parents, schools, neighbourhoods) for the positive development of young people, including those who may face challenges, such as girls and individuals who do not participate in federated sport. Through it, it is possible to compensate for specific gaps in proximal processes to foster their positive development and contribute to the development of adults with pro-social values, attitudes, and healthy habits.

Furthermore, the present study highlights concerns about the detrimental impact of negative attitudes, such as cheating and unsportsmanlike behaviour, among federated players. Adults in sports contexts, particularly directors and coaches, should be more mindful of their role in fostering the positive development of young people, not only in athletic performance and competition outcomes but also as individuals and members of society. Coaches and sports managers may develop plans to foster positive development and a positive environment. For

example, coaches may improve their communication and training process to foster sources of enjoyment, developmental assets and sports attitudes. Sports managers should also contribute to this by defining club policies and strategies that foster a youth-positive developmental environment. Initiatives such as organising joint training sessions, offering educational programs for parents on healthy sportsmanship and sports education, and establishing regular meetings or tutorials between parents and coaches can contribute to positive parental involvement in sport.

This study has several limitations that should be addressed in future research. Limitations include the lack of random sampling, the absence of sport-type differentiation, and a cross-sectional design that prevents causal inference. Notably, differences in the sample between practitioners and non-practitioners, and between genders and age groups, may have influenced the findings. Future studies should include more balanced samples to better understand these variations. Additionally, longitudinal research is needed to explore the long-term effects of involvement in sporting activities on the development of values and attitudes. As participation in sports does not directly lead to changes in these areas, it is crucial to consider how different contexts of practice and individual experiences may shape young people's development over time. Furthermore, examining differences in sources of enjoyment, sport attitudes, and developmental assets across types of sport (team vs individual) and levels of practitioner specialisation (beginner vs elite) could provide deeper insights into how these factors contribute to young people's positive development.

ACKNOWLEDGEMENTS

This work was supported by FCT—Foundation for Science and Technology under the Project UID/05777/2023 (<https://doi.org/10.54499/UID/05777/2023>).

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