Impact Evaluation Report of the "Sport with Principles" Method in Colombia (2019 – 2022)

Compiled by
Dr. Karen Petry
Victória Calzolari Soto

Institute of European Sport
Development and Leisure Studies

Cologne, 30th of September 2022

Deutsche
Sporthochschule Köln
German Sport University Cologne

Content

List of Abbrevations

DcP – Deporte con Principios
PYD – Positive Youth Development
S4D – Sport for Development
SwP – Sport with Principles

List of Tables

List of Figures

/

EXECUTIVE SUMMARY

Between 2019 and 2022, four Colombian universities collaborated with the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) to evaluate the impact of a Sport for Development (S4D) approach, more specifically of the method *Deporte con Principios* (Sport with Principles - SwP) in the Colombian regions Norte de Santander and La Guajira. In this investigative process, the Institute of European Sport Development and Leisure Studies from the German Sport University acted as an advisory partner. This report will present the main methodological procedures conducted as well as the research results, as reported by the Colombian counterparts.

A mixed methods approach was implemented. The quantitative instrument *Positive Youth Development (PYD) Questionnaire Long Version (Lerner et al., 2008) - Spanish version* was adapted, validated and then applied to children and youth of about 14 years old on average. For qualitative methods, focus group discussions, and interviews were conducted with relevant social actors in the context (parents/caregivers, coaches and community leaders). Data collection was carried out in the departments of La Guajira and Norte de Santander. The initial project considered Arauca as the third department to take part in this impact evaluation, however, due to social and security issues related to the presence of illegal groups, Arauca was not included.

The pre-test was applied in the 2nd semester of 2021 to an intervention group [n = 93 children and youth (50 male; 43 female)] and to a control group [n = 33 (26 male, seven female)]. The post-test was applied in the 1st semester 2022 to the same intervention group [n = 78 (40 male, 38 female)] and control group [n = 34 (26 male, eight female)]. Looking into the results, a slight improvement in the overall PYD Score is observed between the pre-test (M1=3.73) and the post-test (M2=3.82). The average score in the CHARACTER and CONFIDENCE factors also presented a small but not significant improvement, while COMPETENCE, CARING and CONNECTION remained stable.

Focus Group Discussions were conducted with 34 children and youth and 32 parents of both La Guajira and Norte de Santander departments. Interviews were conducted with five coaches and two community leaders. Qualitative data was interpreted, codified and categorised, thus allowing the construction of semantic networks and the construction of concepts and identification of the Sport with Principles (SwP) method's impact. This process was supported by the analysis software ATLAS.ti Web (Version 3.15.0-2022-03-09).

Interviewed actors perceived strengthened social ties among children and youth, as well as with their parents, coaches and peers. Community leaders argue that the presence of the SwP program in the region generated companionship, equality and social awareness. Maintaining a violence-free sports context is recognized as the children, youth, and parents become aware of the importance of peaceful coexistence.

For future impact studies, we recommend the design of instruments aligned with the aims and objectives of the specific S4D method implemented or a quasi-experimental S4D intervention that corresponds to an existing validated instrument. Secondly, we recommend critically considering the cultural aspects of negotiation and decision-making when employing a diverse group of researchers and collaborators/ advisors.

1   BACKGROUND

Colombian society, in its recent history, has suffered the effects of violence in its multiple expressions, both direct, cultural, and structural. This situation has repercussions on the social practices of the population, to the point of legitimising violence as one of the mechanisms to solve daily problems and conflicts.

The Sport for Development (S4D) Sector Program, financed by the German Federal Ministry for Economic Cooperation and Development (BMZ) and implemented by the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), in association with its Colombian counterparts, capacitates groups of people in conditions of social vulnerability, sports and community leaders, as well as leaders interested in collective well-being, to use sport as a tool to promote development and social transformation in their contexts. In the last year, special interest has been focused on the regions of Norte de Santander, Arauca, and La Guajira, due to their geographic position as border areas and the flow of migrant population; in addition to the phenomenon of violence that continues to be present due to territorial disputes.
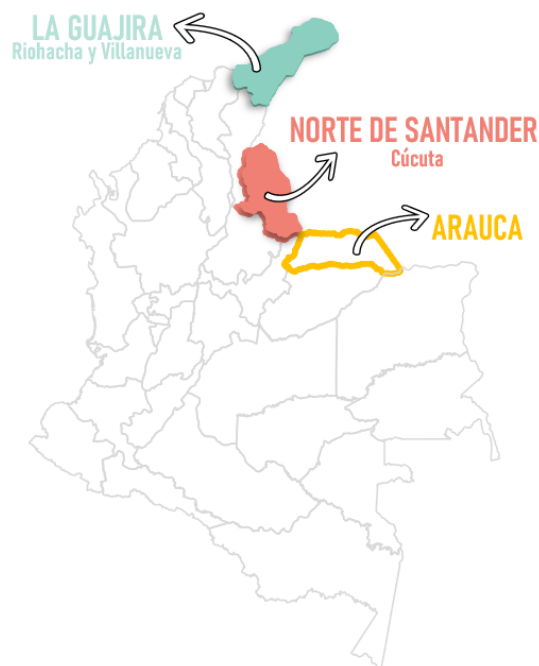
Figure 1: Map of Colombia (Source: adapted by the authors)

1.1   "Deporte con Principios (Sports with Principles) Method"

In collaboration with international and local partners of the S4D Sector Program, the Sport with Principles (SwP) method was developed. It aims to develop trust and social skills of children, adolescents, and young people through a reflective sport pedagogy approach. The method is guided by five "principles" or values, which are compatible with the universal principles of development and peace.

6

Table 1: Guiding values of the "Sport with Principles" method

VALUE	DEFINITION
Discipline	The ability to act in an orderly and persevering manner to achieve a goal or objective.
Respect and Tolerance	The ability to accept those people or situations that are different from what each person considers correct or valid within their beliefs.
Confidence	Having the certainty or hope, in oneself or in other people, that it is possible to achieve what one aspires to.
Empathy	The intention to understand feelings and emotions, trying to experience objectively and rationally what another individual feels.
Fair play and justice	The fraternal treatment towards the "opponent", respectfulness towards the referee, etc.

1.2 Research Project

GIZ cooperated with four Colombian universities to plan and conduct an impact evaluation in the three regions of interest. They are UNIMINUTO (Bogotá, D.C.), University Francisco de Paula Santander (Norte de Santander), University Cooperativa de Colombia (Arauca) and University of La Guajira (La Guajira). The German Sport University cooperated in an advisory manner throughout the investigative process.

1.2.1 General Objective

To adapt, develop and implement quantitative and qualitative instruments to measure the impact achieved with the implementation of the "Sport with Principles" method in groups of children and youth from the regions of La Guajira, Norte de Santander, and Arauca.

1.2.1.1 Specific objectives

1. Identify the contribution of sport to human development
2. Evidence of understanding, implementation and transfer of the values targeted by the SwP Method.
3. Evidence of the dissemination of the SwP method is reflected in the different social contexts in which the children and youth participating in the process live in.

1.2.2 Ethical Considerations

In accordance with the ethical standards in academic research, parents, caretakers, and other research subjects were informed of the purpose and methods of the investigation. Informed consent for data and image usage was provided by participants and responsible guardians for underage subjects. Extensive data collection and compilation protocols were developed.

1.3 Timeline

2019	Development of preliminary analytical categories Defining research design; selection of instruments	
2020	**QUANTITATIVE** *Piloting* - Application of selected instrument - Qualitative and quantitative validation of selected instrument (translation and follow-up questions) - Writing protocol for data collection	**QUALITATIVE** *Piloting* - Peer validation of interview and focus groups discussions guides - Writing protocol for data collection
	Consent form signed by parents, caretakers and/or responsible guardians	
2021	*Data Collection (PRE-TEST)* - Application of validated instrument in La Guajira and Norte de Santander *Data Analysis* - 2nd phase of validation of selected instrument (Exploratory and Confirmatory Factorial Analysis - EFA & CFA) - Statistical analysis of pre-test data - Presentation of partial results	*Piloting* - 2nd analysis of data collection instruments
	Writing of academic articles related to the validation of instruments (not yet published)	
2022	*Data Collection (POST)* - Application of validated quantitative instrument in La Guajira and Norte de Santander *Data Analysis* - Statistical analysis of POST-TEST data - Statistical analysis of the impact (PRE-POST)	*Data Collection (POST)* - Application of qualitative instruments in La Guajira and Norte de Santander *Data Analysis* - Transcription of interviews and Focus Group Discussions (FGD) - Coding and categorisation of data according to preliminary categories
	Triangulation of both quantitative and qualitative data Presentation of final results	

2   THEORETICAL FRAMEWORK

Considering the diverse background of the researchers involved in this study, as well as the multi-dimensionality of the intervention and the context itself, it was necessary to develop a logical framework. A theory of change is characterised by providing the possibility of framing and organising the perspectives or possibilities expected from a given intervention in a social context. Hence, it facilitates the evaluation of the impact that such actions produce in the community. The following framework was developed by the Colombian partners.

STRATEGY		Carry out the implementation of the method: coaches and teachers will be prepared and trained to understand the methodological process to be implemented with the children and youth in each of the three departments. Likewise, the interventions and, subsequently, the impact on the mentioned social contexts will be evaluated.			
NECESSARY CONDITIONS FOR CHANGE	Short term	Capacitate coaches in the Sport with Principles (SwP) method in order to identify the methodological processes required for optimal development with the NNJA in order to meet the objectives.			
	medium term	Convene the social actors that are part of the community to take part in the sport sessions. Hence, the process will be socialised with the children and youth, parents, teachers in formal educational institutions, coaches, and community leaders.			
	long term	Measure the impact of the implementation of the method in the departments of La Guajira, Norte de Santander, and Arauca.			
IMPACT		Disseminate the method in the community and by capacitating coaches - including at the inter-institutional level.	Capacitate children and youth on the values targeted by the SwP method. Create sports spaces where socialisation and strengthening of the social fabric that comprises each of the communities is encouraged.	Create awareness of the importance of acting with principles and values with others as a way of improving coexistence and living in peace.	Promote the transfer of such learning into the school, family, sports, and community environments in order to permeate the entire community where children and youth live.
CHANGE		**Stronger and healthier forms of social interaction within sports, domestic, educational and community settings.** **Awareness of the importance of acting with principles aligned with peace, healthy coexistence, and positive human development.**			

Figure 2: "Sport with Principles" Impact Evaluation Theory of Change (Developed by Colombian partners)

3 METHODOLOGY

This section will present the methodology undertaken to evaluate the impact of the "Sport with Principles" approach.

3.1 Research Design

The research proposes a mixed methodology where more precise data collection processes will be carried out to analyse and understand the social reality of the contexts investigated. It involves collecting data from the use of data collection instruments, such as semi-structured interviews, focus groups and questionnaires, thus proceeding to analysis, integration, and joint discussion (Ñaupas, Mejía, Novoa and Villagómez, 2014).

3.1.1 Quantitative Design

3.1.1.1 Data Collection Instrument

The Five Cs of Positive Youth Development by Lerner (2008) questionnaire (Spanish version: Cuestionario Perspectiva de Desarrollo Juvenil Positivo) was adapted and validated to be used with the targeted population. Subjects must respond on a 5-point Likert scale to 83 questions, distributed in five factors, which correspond to each of the C's. To guarantee the congruence of the instrument and the research object – that is, the Colombian target population, a lengthy validation process of the PYD Questionnaire was conducted by the Colombian partners. See Annexes for the complete process and its result.

Table 2: Positive Youth Development Factor and Sub-Item Structure

FACTOR	SUB-ITEM
Character	Social Conscience Values Diversity Conduct Behaviour Personal Values
Competence	Academic Competence Social Competence Physical Competence Grades
Caring	Caring
Connection	Connected to family Connected to neighbourhood Connected to school Connected to peer
Confidence	Self-Worth Positive Identification

3.1.1.2 Quantitative Sample

Due to security concerns related to illegal armed groups in Arauca, it was decided to only conduct the study in the departments of La Guajira and Norte de Santander. The questionnaire was printed and a total **of 231 responses** were collected by interviewers trained by the researchers. During the pre-test, 112 children and young people responded, of which 76 were male and 36 female. In the post-test, 64

were male and 41 female, making a total of 105. The complete discrimination of the sample is presented in Tables 3 and 4 below.

Table 3: Quantitative Questionnaire Sample

LA GUAJIRA	PRE		POST	
	MALE	FEMALE	MALE	FEMALE
Intervention Group 1	6	14	6	14
Intervention Group 2	16	9	14	9
Control Group	4	7	5	8
TOTAL	26	30	25	31
	56		56	

NORTE DE SAN-TANDER	PRE		POST	
	MALE	FEMALE	MALE	FEMALE
Intervention Group 1	16	5	10	3
Intervention Group 2	12	15	8	7
Control Group	22	0	21	0
TOTAL	50	20	39	10
	70		49	

It is important to note that intervention and control groups are comprised of children and young people that accepted and decided to take part in the sports sessions. As to avoid exclusive practices, researchers and coaches did not establish a mandatory equal gender split.

3.1.1.3 Quantitative Analysis

Preliminary quantitative analysis was conducted by the Colombian partners. Unfortunately, their statistical tests did not isolate the intervention group from the control group data. Therefore, we asked for the original data set, which was sent then late July 2022**.**

Considering that small sample size have lower statistical power and may present unreliable statitiscal significance and effect size estimation, it was decided to conduct descriptive analysis with IBM SPSS Statistics for Windows and calculate averages scores and create graphs with Microsoft Excel.

3.1.2   Qualitative Design

The qualitative method allows the construction of knowledge through the verbal and textual data collected. It allows the interpretation of the social reality that comprises each of the different contexts and the understanding of the social phenomena. It can be an efficient mechanism for understanding the cases narrated by the participating social actors. This research project used two different yet similar qualitative data collection methods: semi-structured interviews, which were applied to coaches and community leaders, and focus group discussions with children, youth and parents.

3.1.2.1 Semi-Structured Interviews

Semi-structured interviews employed a blend of closed and open questions about the topic. They allowed for the objective comparison of interviewees while also providing an opportunity to spontaneously explore further relevant topics.

	COACHES	COMMUNITY LEADERS
MAIN CATEGORIES	1. Introductory questions	1. Introductory questions
	2. Early experiences with the SwP method	2. Identification of social problems present in the community
	3. Evaluating own work with the SwP method	3. Knowledge of the SwP method
	4. Perceptions of children and parents participating in their SwP sessions	4. Equality of Rights
	5. Perceptions of children's and youths' physical, motor and emotional skills	5. Perception of the SwP method
	6. Equality of rights	6. Further comments and suggestions
	7. Perception of the SwP method	
	8. Further comments and suggestions	

3.1.2.2 Focus Group Discussions

Focus Group Discussions allowed the exchange of opinions and ideas about a common social issue. They provided the opportunity to observe the inconsistencies and variations that exist in a particular community in terms of beliefs, experiences and practices.

MAIN CATEGORIES	CHILDREN AND YOUTH	PARENTS
	1. Icebreaker	1. Icebreaker
	2. Introductory questions	2. Introductory questions
	3. Early experiences with the SwP method	3. Early experiences with the SwP method
	4. Understanding of the SwP principles/values	4. Understanding of the SwP principles/values
	5. Perceptions of their own coaches	5. Perception of their children's behaviour and social interactions
	6. Self-evaluation of physical, motor and emotional skills	6. Perceptions of children's and youths' physical, motor and emotional skills
	7. Equality of rights	7. Equality of rights
	8. Further comments and suggestions	8. Perception of the SwP method
		9. Further comments and suggestions

3.1.2.3 Qualitative Sample

Table 4: Sample of Focus Groups and Interviews

INSTRUMENT	NORTE DE SANTANDER				LA GUAJIRA				TOTAL
	Intervention Group 1		Intervention Group 2		Intervention Group 1		Intervention Group 2		
	Code*	*n*	Code	*n*	Code	*n*	Code	*n*	
FOCUS GROUPS	NNAJG1NS	8	NNAJG2NS	8	NNAJG1LG	8	NNAJG1LG	10	**34**
	PADRES G1NS	8	PADRES G1NS	8	PADRES G1LG	8	PADRES G2LG	8	**32**
	ENTRE G1NS	1	ENTRE G2NS	1	ENTRE G1LG	1	ENTRE G2LG	2	**5**

SEMI-STRUC-TURED INTER-VIEW	LIDERCO G1NS	1	LIDERCO G2NS	1	LIDERCO G1LG	0	LIDERCO G2LS	0	2
	TOTAL	18	TOTAL	18	TOTAL	17	TOTAL	20	73

*NNAJ = children and youth groups; PADRES = parents; ENTRE = coaches; LIDERCO = community leaders.

3.1.2.4 Qualitative Analysis

In order to conduct an accurate analysis of the reality being investigated, the data collected is codified and categorised, thus allowing the construction of semantic networks and the construction of concepts and identification of the SwP method's impact. This process is supported by the analysis software AT-LAS.ti Web (Version 3.15.0-2022-03-09).

The following steps were conducted:

1. Transcription of interviews and focus group discussions
2. Creation of the hermeneutic unit
3. Organisation of primary documents considering the region and the groups of social actors with their respective codes
4. Each group is first analysed by region, and then the information is analysed in total.
5. Coding and categorisation

The coding process followed a logical and extensive process. First, theoretical coding allowed the preliminary organisation of the information. Then, open coding was used to create concepts for further comparison between possible facts and cases in each of the social contexts. Axial coding followed in order to reorganise the coded information, as to clarify the phenomenological associations inside the data. Finally, selective coding builds the central and subcategories, identifying the global phenomenon of all contexts investigated (Flick. 2012. p 198).

3.2 Methodological Process

Following the theoretical framework presented in the previous section, a logical process is carried out. The Figure below is an adaptation of the reports presented by the Colombian partners.
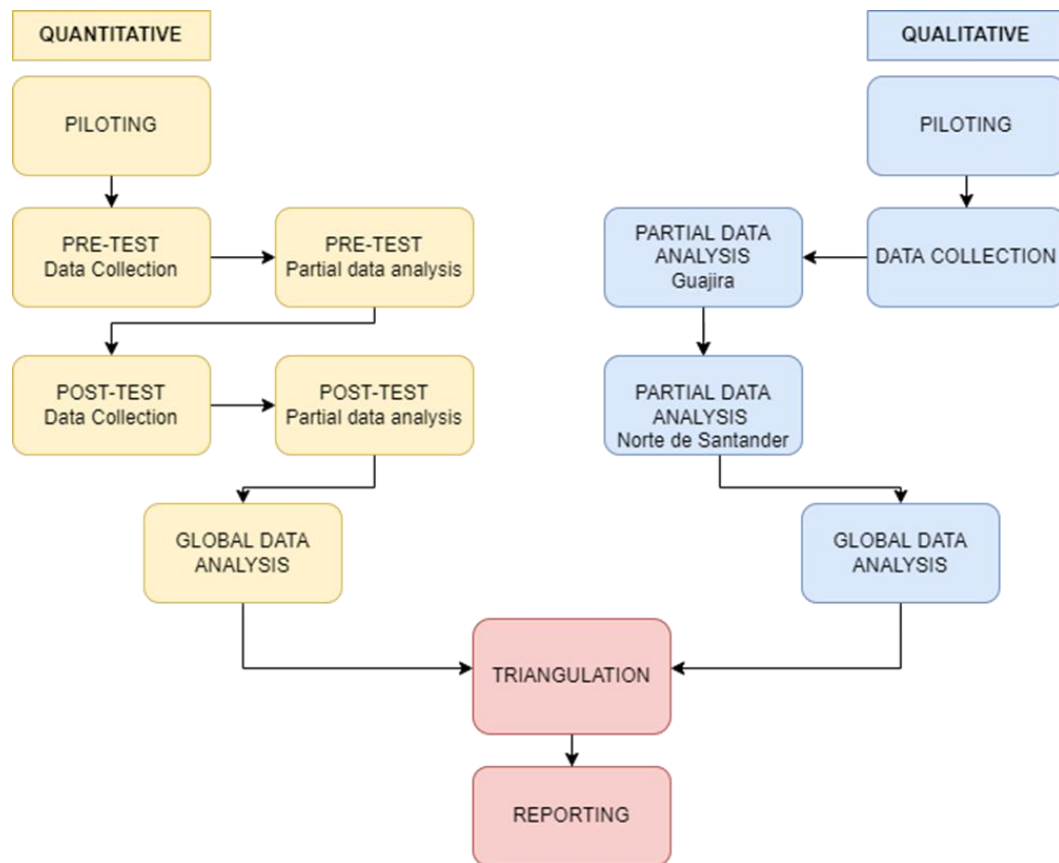
Figure 3: Data Collection and Triangulation Process (Adapted from earlier reports presented by the Colombian partners)

3.3 Methodological Matrix

Taking into consideration the mixed-methods approach as defined by the researchers, a methodological matrix was presented. This matrix proposes a structural correlation of the objectives, the theoretical framework, as well as the qualitative and quantitative instruments. The categories were socialised and validated by the group of researchers.

Table 5: Operational Matrix

SPECIFIC OBJECTIVE	CATEGORY	SUBCATEGORY	INSTRUMENTS	
			PRE	POST
#1 Identify the contribution of sport to human development Relevance of sport in holistic education and its impact on society	Social Sport A holistic mechanism that contributes to the human development of society in general Gutiérrez, Escartí and Pascual (2009)	a) Community b) Human Development c) Inclusion d) Sports e) Family f) Community	*Positive Youth Development (PYD) Questionnaire Long Version (Lerner et. Al., 2008) Spanish version*	*Focus Groups: Children and Youth Parents Interview: Community Leader Coaches/Instructor*

#2 Evidence of understanding, implementation and transfer of the values targeted by the SwP Method. Learning of values in order to put them into practice, assimilate them and transfer them to other contexts such as school, family, and community, therefore fostering social change.	<u>Values</u> Values included in the SwP method GIZ (2019)	g) Discipline h) Tolerance & Respect i) Empathy j) Fair Play & Justice k) Trust l) Social Skills m) Development of values n) Understanding of values o) Implementation of values (transfer)		*Positive Youth Development (PYD) Questionnaire Long Version* *(Lerner et. Al., 2008)* *Spanish version*
#3 Evidence of the dissemination of the SwP method is reflected in the different social contexts in which the children and youth participating in the process live in. Measure the impact that such action generates in the community, and it is possible to demonstrate the scope of social sport.	<u>Social Change</u> "The visible or perceptible expression of mutation processes of a very dissimilar nature: modification in the conception of the world, biological, demographic, institutional changes" Velasco (2009) (p. 116)	p) Sports environment q) Family environment r) Community environment s) Educational environment t) Social Impact u) Methodological efficiency v) Social interaction		

4   QUANTITATIVE RESULTS

Considering both intervention groups and control groups of each region, 61% of respondents identified themselves as male and 39% as female (n = 231). On average, respondents were about 14 years old (n = 231, M = 13,65, SD = 1,77).

4.1   Internal consistency and normality tests

Considering both pre- and post-test records, internal consistency proved to be excellent for all 83 items (α = .994), as well as for the five dimensions pertaining to the PYD questionnaire. That is, CHARACTER consists of 21 items (α = .904), COMPETENCE consists of 19 items (α = .996), CARING consists of 9 items (α = .987), CONNECTION consists of 22 items (α = .986) and CONFIDENCE consists of 12 items (α = .981).

4.2   Positive Youth Development

The 5 C's component introduces five key characteristics that are the building blocks of PYD. The Five Cs were developed based upon experience and reports of practitioners as well as a review of the literature and include: 1) Competence, 2) Confidence, 3) Connection, 4) Character, and 5) Caring (Lerner, 2006; Bowers et al., 2010). It has been reported that youth exemplifying lower levels of the Five Cs face a greater risk of experiencing personal, social, and risk/behavioural problems (Lerner et al., 2008). These risk behaviours include depression, delinquency, and substance abuse (Robinson, A. M. et al., 2012). Respondents must answer in scale ranging from 1 (e.g., strongly disagree) to 5 (e.g., strongly agree). Average scores in the pre-test are labelled as M1, while M2 are post-test averages.

4.2.1   Competence

Competence is defined as having a positive outlook on one's own actions in specific areas, including social, cognitive, academic, and vocational realms (Phelps et al., 2009). In general, the average score within the intervention group for this factor was M1 = 4,16 in the pre-test and M2 = 4,15 in the post-test. In the pre-test, the highest score is observed in the sub-item *GRADES*, while PHYSICAL COMPETENCE is the lowest. Both ACADEMIC COMPETENCE (M1=4,33; M2=4,40) and SOCIAL COMPETENCE (M1=4,24; M2=4,34) present slight improvement between the pre and post-tests, while PHYSICAL COMPETENCE (M1=3,64; M2=3,60) and GRADES (M1=4,41; M2=4,28) show a small deterioration.
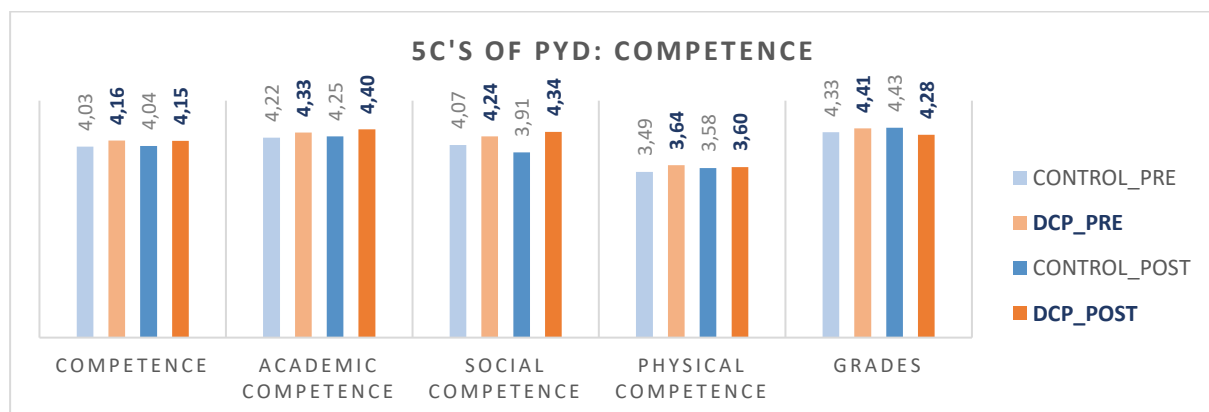

Figure 4: Average score on COMPETENCE factor of intervention and control groups on pre (N=112)- and post-tests (N=105)

4.2.2 Confidence

Confidence refers to a young person who exhibits a largely positive sense of self-worth and who also exhibits self-efficacy (Phelps et al., 2009). The intervention group presented an overall improvement in their CONFIDENCE (M1= 3,67; M2= 3,79), especially in the item of POSITIVE IDENTIFICATION (M1=3,49; M2=3,71).
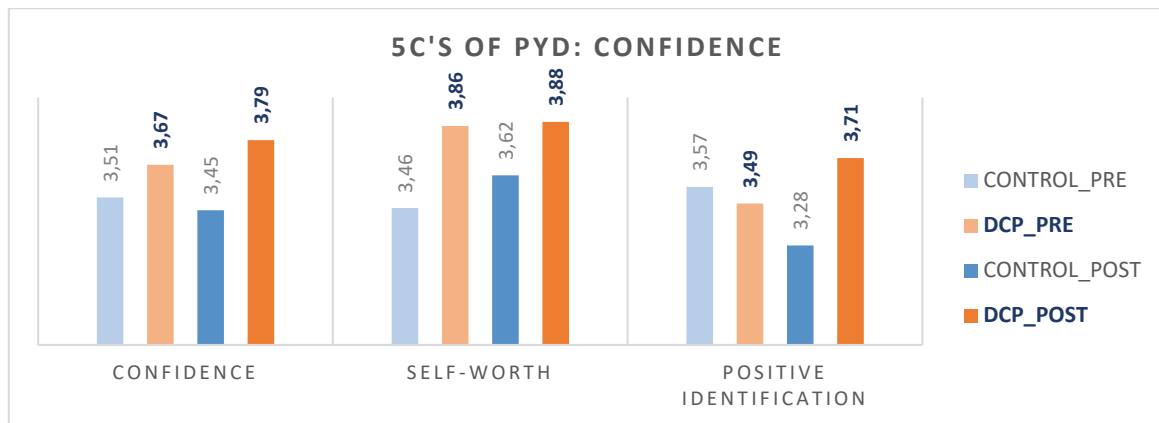

Figure 5: Average score on CONFIDENCE factor of intervention and control groups on pre (N=112)- and post-tests (N=105)

4.2.3 Connection

Connection is manifested through constructive and encouraging relationships with people and institutions such as school, family, and peers. The overall score for the intervention group in the CONNECTION factor improved from the pre-test (M1 = 4,14) to the post-test (M2 = 4,17). Slight increases are observed in the items CONNECTED TO FAMILY (M1=4,42; M2=4,60) and CONNECTED TO SCHOOL (M1=4,12; M2=4,26), while CONNECTED TO NEIGHBOURHOOD (M1=3,95; M2=3,93) and CONNECTED TO PEER (M1=4,07; M2=3,91) see a small deterioration.

Figure 6. Average score on CONNECTION factor of intervention and control groups on pre (N=112)- and post-tests (N=105)

4.2.4 Character

Character refers to respect for rules and a sense of right and wrong (Bowers et al., 2010; Phelps et al., 2009). The general factor of CHARACTER presents a slight improvement within the intervention group between the pre- (M1=3,65) and post-test (M2=3,99). Except for the sub-item CONDUCT BEHAVIOUR

(M1=3,96; M2= 3,97) which remained stable, the sub-items SOCIAL CONSCIENCE, VALUES DIVERSITY and PERSONAL VALUES all improved.
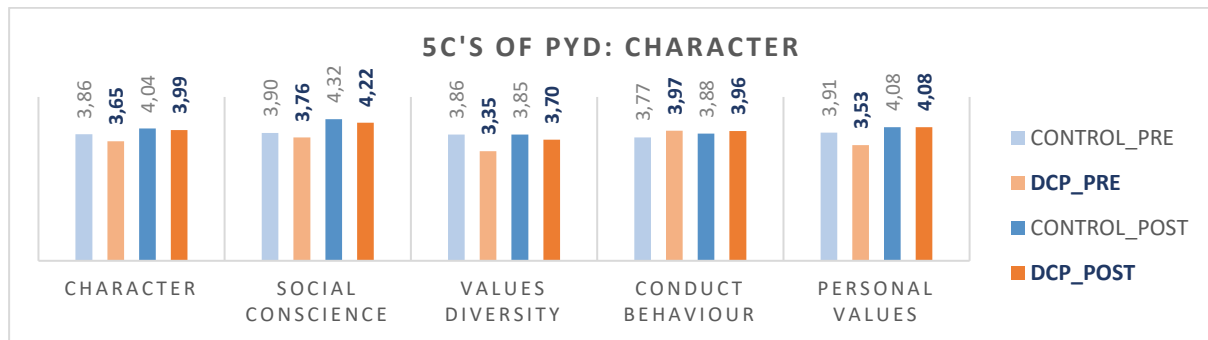
Figure 7: Average score on CHARACTER factor of intervention and control groups on pre (N=112)- and post-tests (N=105)

4.2.5   Caring

Caring is defined as the embodiment of sympathy and empathy for other people, and it consists of one single sub-item. A small deterioration among the intervention group is observed between the pre- (M1=3,05) and the post-test (M2=2,98).
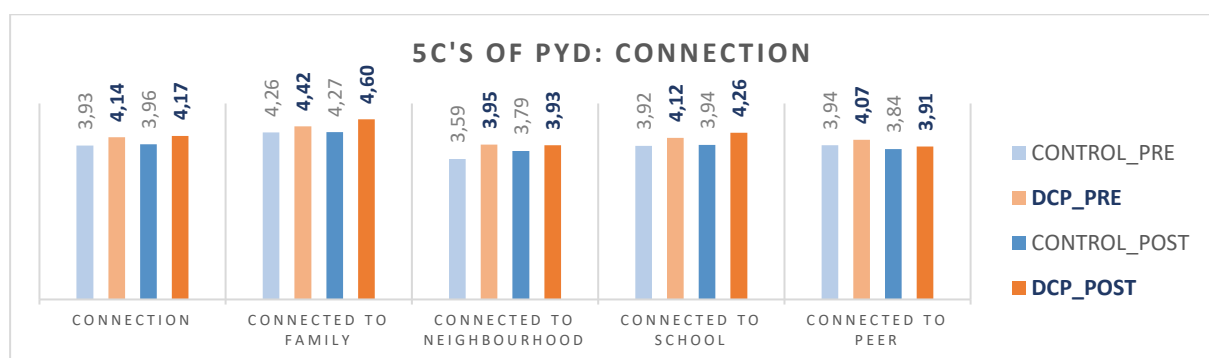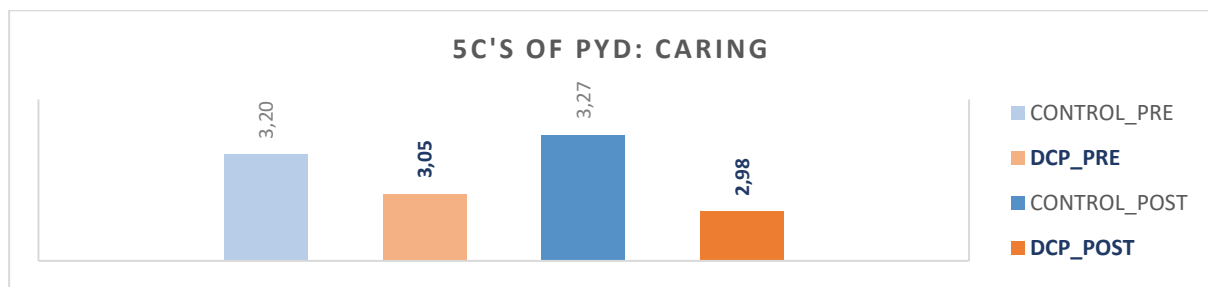

Figure 8. Average score on CARING factor of intervention and control groups on pre (N=112)- and post-tests (N=105)

4.2.6   Global Quantitative Results

The overall score for the intervention group tested in NORTE DE SANTANDER is M1=3,74 in the pre-test and M2=3,92 in the post-test. Improvement is perceived in the factors of CHARACTER, CARING and CONFIDENCE. CONNECTION remained stable, and COMPETENCE presented a small deterioration.
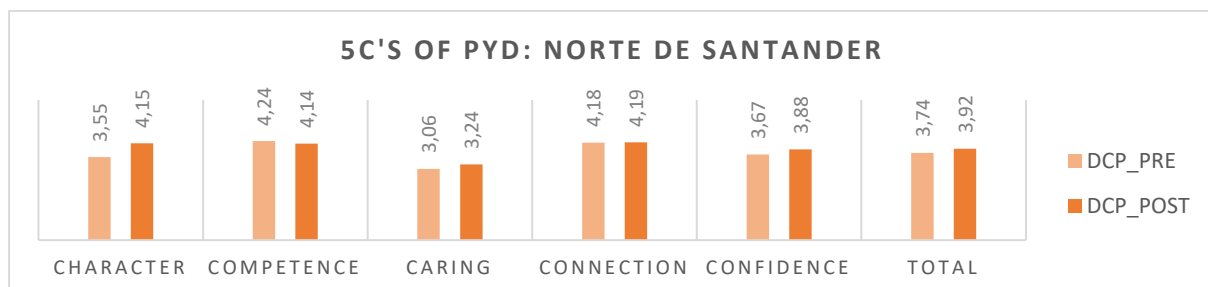
Figure 9. Average score of pre- (N=70) and post-test (N=49) conducted with intervention groups in Norte de Santander

The overall score for the intervention group tested in LA GUAJIRA is M1=3,73 in the pre-test and M2=3,71 in the post-test, which implies stability. Improvement is perceived in the factors of CHARACTER, COMPETENCE and CONNECTION. CONFIDENCE remained stable, while a deterioration is observed for the CARING factor.
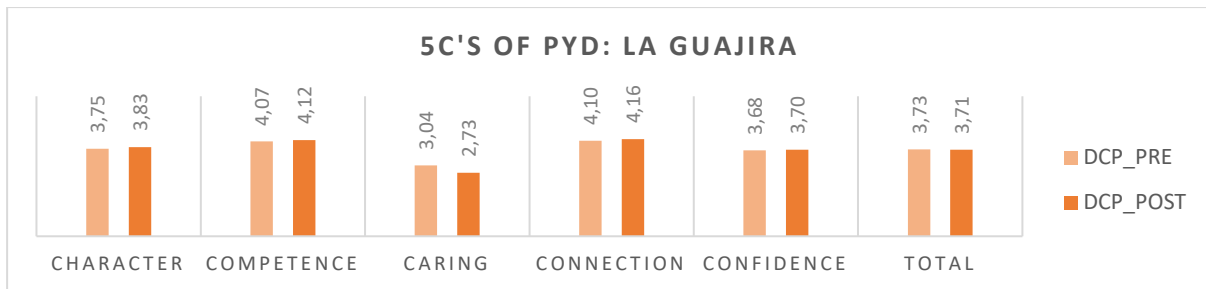
Figure 10: Average score of pre (N=56) and post-test (N=56) conducted with intervention groups in La Guajira

Considering both regions, there is a slight improvement for the intervention group of the overall score (M1=3,73; M2=3,82), specifically in CHARACTER (M1=3,65; M2=3,99) and CONFIDENCE (M1=3,67; M2=3,79). COMPETENCE, CARING and CONNECTION remained stable.

Figure 11: Average score of pre (N=112) and post-test (N=105) conducted with intervention groups in both regions

5   QUALITATIVE RESULTS

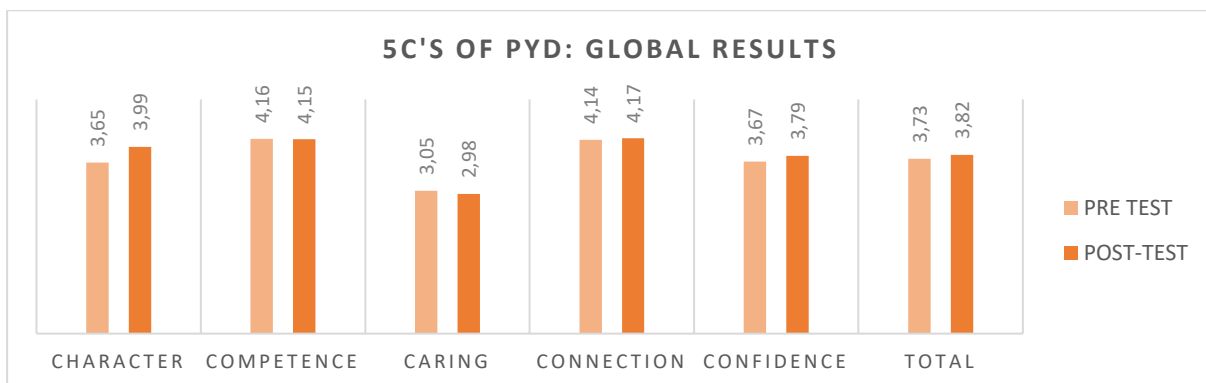Considering the number the volume of interviews and focus groups in each of the regions studied, a Sankey Diagram was developed. A Sankey Diagram aims to provide a visualisation of the flow of data from coding to interpretation, the categories, and their interconnections. The thickness of "energy glow" is proportional to the relevance of each category and its connection to the primary documents. The relevance of the categories within the interviews and focus group guidelines are demonstrated in the Figure below: a) a priori perception of values; b) preliminary social interaction; c) appreciation for the method; d) motor and emotional development; e) formation in values; f) understanding of values; g) dissemination of the method; h) Sport with Principles and SDGs.
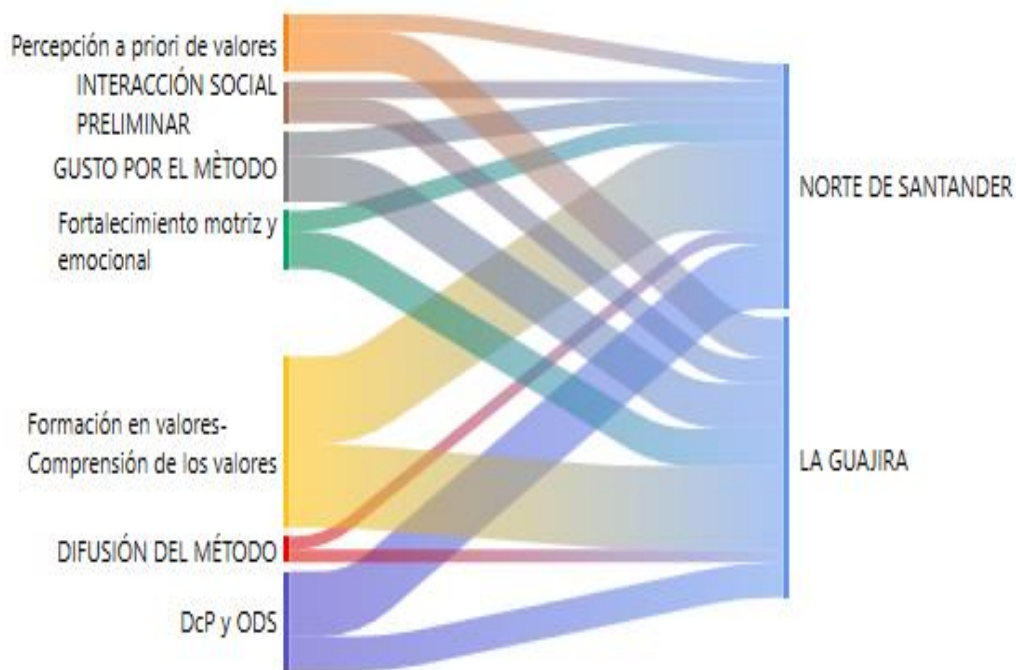
Figure 12: Sankey Diagram: Flow of data in Norte de Santander and La Guajira

However, results will be presented according to the Methodological Matrix and the operational categories 1) Social Sport, 2) Values, and 3) Social Change. Perceptions from Children and Youth and External Social Actors (Parents, Coaches and Community Leaders) are discriminated against as well.

5.1   CATEGORY: SOCIAL SPORT

The SOCIAL SPORT category is comprised of the following operation/subcategories: a) Community; b) Human Development; c) Inclusion; d) Sports; e) Family; and f) Community. Social sport is defined as a holistic mechanism, as well as a social space, that contributes to the human development of society (Gutiérrez, Escartí & Pascual, 2009). The interviews and focus groups have shown that the method "Sport with Principles" fits this definition. The sports sessions have provided a physical arena for de-constructing violent ways of interaction and building new and positive social relations among the children, and with their parents and coaches.

5.1.1   Children and Youth

Children and Youth highlight that taking part in the SwP method is "fun", offering the possibility of "doing something different from school" and "making new friends". Most respondents had a clear interest in sports beforehand, although they would often spend time playing with their mobile phones. They recognise the sports sessions as "learning spaces" that contribute to their human development and well-being.

5.1.2   External Social Actors (Parents, Coaches and Community Leaders)

It is observed that, from the very beginning, parents recognise the role of physical activity and sports in their children's integral development. They appreciate this opportunity, reinforcing the importance of employing children's free time in a constructive manner as well as combating sedentarism among youth.

From the coaches' perspective, capacitating themselves in the method allowed them to build community initiatives and to work with people coming from different socio-cultural and economic backgrounds, thus contributing to the social integration of marginalised groups. Both coaches and parents observed the importance of the communal and local communication channels in advertising the methods and spreading awareness of its objectives.

Social sport is, thus, understood as a holistic and efficient method to develop motor, technical, tactical and above all, social values. That is, human development would be reached in "collective" manner and achieve "collective" results.

5.2   CATEGORY: VALUES

The VALUES category is comprised of the following operation/subcategories: g) Discipline; h) Tolerance & Respect; i) Empathy; j) Fair Play & Justice; k) Trust; l) Social Skills; m) Development of values; n) Understanding of values, and o) Implementation of values (transfer). While social sport is the background for change, discussion of values is essential to make the mechanism work. In other words, the conscious teaching of values during sessions allows for behavioural changes in the children and youth.

5.2.1   Children and Youth

From a general perspective, values are understood as "what you need to be a good person", recognise what is "good" and what is "evil", and make informed decisions during sports practice, at home, at school or in the neighbourhood.

Respect is the most mentioned "principle" by this group, although most admit that they did not behave in a "respectful" manner before taking part in the SwP program. Similar observations are made about empathy. Their description was idealistic and lacked the understanding of "how to act in an empathetic way". Interestingly, some interviewees noted humility as a synonym for honesty and empathy.

Discipline – the second most mentioned value by them – is understood as obeying adults and having the determination to achieve personal and collective objectives.

5.2.2   External Social Actors (Parents, Coaches and Community Leaders)

Parents have a similar understanding of values as their children. They see them as a set of knowledge that allows them to be "good people" in their communities, respecting people's rights and life in general.

The value most mentioned by parents and coaches is discipline. Parents observed their children being more obedient at home (e.g., complying more often with their house chores) and at school (e.g., fewer complaints from teachers about their children's behaviours). Coaches often mentioned improved punctuality throughout the sessions.

Respect and fair play are both highlighted as improved. If before conflicts would be dealt in an aggressive and disrespectful manner at home or at practice, now they are solved with more dialogue, peaceful and diplomatic language.

5.3   CATEGORY: SOCIAL CHANGE

The SOCIAL CHANGE category is comprised of the following operation/subcategories: p) Sports environment; q) Family environment; r) Community environment; s) Educational environment; t) Social Impact; u) Methodological adequacy, and v) Social interaction. Social change is interpreted as a positive improvement of the living conditions of one specific context. More than that, social change can be understood as the "spill-over" effect of an intervention.

5.3.1   Children and Youth

From the children's own perspective, they are now able to understand the meaning and the importance of "principles" and values in their integral development, and apply them at school, at home and in their communities.

They report their own change of perspective and attitudes regarding gender perceptions (e.g., "girls can play too" and "boys should also help with the housework") and motor capabilities (e.g., "people with disabilities also have the right to play").

Emotional and psychosocial improvement can also be observed. They report "feeling sad" due to their family situation (e.g., domestic violence, abusive language at home) or low self-esteem. However, the positive social interactions at the sports sessions promoted self-confidence and taught them how to properly manage their own emotions (e.g. winning and losing).

5.3.2   External Social Actors (Parents, Coaches and Community Leaders)

All interviewed external social actors agree that before taking part in the SwP program, children would often behave disrespectfully, aggressively, and violently; that they lacked discipline and self-confidence; and that boys would discriminate against girls. Mutual distrust was also reported as a common trait of initial sports sessions. Consequently, children avoided expressing themselves or taking part in the activities, fearing they would be bullied.

23

These behaviours are reported to have dramatically changed after a certain time of participation. Coaches declare the method as a mediator to strengthen the social fabric and the implementation of the five principles by the "next generation". This affirmation is reiterated by parents and community leaders. Motor and physical aptitudes and mental well-being are also reported to have improved.

The impact of the method may also have extended to parents and coaches themselves. Community leaders mentioned increasing participation of parents in community activities, especially fathers or male caregivers. That is, the basic foundation of gender equality overflows into the family and community environments.

Coaches often mention the role of the method in their own professional and personal development. Although all had previous engagements and interest in social change and life skills, the method increased their knowledge of topics not included in the university curriculum.

6 CONCLUSION

Although the quantitative results do not show a clear change between the pre- and post-tests of intervention groups, or rather when compared to the control groups, this does not mean there is no positive social impact. Due to security issues related to illegal armed groups in Arauca, the total sample was reduced and could have affected the statistical significance of the data collected. Moreover, the Positive Youth Development (PYD) Questionnaire Long Version (Lerner et al., 2008) Spanish version was chosen by the Colombian universities working group as the quantitative instrument due to its worldwide usage and confirmed validity. However, the congruence of the instrument variables and the specifics of the Sport with Principles method is limited. Thus, a certain adaptation and manipulation of an appropriate methodological and analytical matrix was necessary and consequently made the interpretation process more complex.

Hence, for further quantitative evaluations, we recommend either the creation and the design of an instrument (e.g., questionnaire) aligned with the aims and objectives of the specific S4D method implemented, or a quasi-experimental S4D intervention that corresponds to an existing validated instrument. Moreover, a mixed-methods approach in which the quantitative results orientate the designing of the qualitative instruments is also recommended.

Qualitative results, however, do present a more systemic social impact in the communities intervened. The Principles introduced and/or reinforced during the sports sessions with children and youth had a spill-over effect on their families and communities. As an "educational complement" for integral development, the method Sport with Principles provided a physical arena for deconstructing violent ways of interaction and building new positive social relations among all social actors considered. Coaches instructed in the method have also gained valuable training and knowledge on the aspects and importance of multi-dimensional development.

Taking into consideration the role of the German Sport University as an advisory partner in this collaboration, it is important to make a few notes on the research and collaboration processes themselves. First, the diverse academic backgrounds and expertise of the Colombian universities working group's members are considered positive as deficiencies and advantages were balanced and contributed to valuable discussions. However, it also proved difficult to find a common agreement among all researchers. We recommend taking (the possible effects of) diversity into consideration, as well as the cultural aspects of negotiation and decision-making when establishing time-related expectations of cooperative impact evaluations.

Finally, the decisions regarding the research process are mainly of responsibility of the members of the university working group in Colombia. At times it was not easy for the team of the German Sport University to give advice and to include its views from aborad into this complex research process.

Conway RJ, Heary C and Hogan MJ (2015) An Evaluation of the Measurement Properties of the Five Cs Model of Positive Youth Development. Front. Psychol. 6:1941. doi: 10.3389/fpsyg.2015.01941

Colombia: Desarrollo de la paz y prevención de la violencia a través del deporte. (2017) Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH Domicilios de la Sociedad Bonn y Eschborn, Alemania Proyecto sectorial "Deporte para el desarrollo".

Cooperación Alemana Deutsche Zusammenarbeit. (2017). Colombia: Desarrollo de la paz y prevención de la violencia a través del deporte. https://www.giz.de/en/downloads/2017-11%20Factsheet%20Deporte%20para%20el%20desarrollo%20Colombia.pdf

GIZ (2019) Deporte con principios. Pro-offset Editorial S. A. https://www.sport-for-development.com/imglib/downloads/Manuale/giz2019-es-manual-deporte-con-principios-colombia.pdf

Escartí A, Gutiérrez M and Pascual C (2011) Propiedades psicométricas de la versión española del Cuestionario de Responsabilidad Personal y Social en contextos de educación física. Revista de psicología del deporte 20(1) 119-130. https://www.rpd-online.com/article/view/686/732

Lerner, R. M., Lerner, J. V., Almerigi, J., Theokas, C., Phelps, E., Gestsdór, S. Naudeau, S., Jelicic, H., Alberts, A. E., Ma, L., Smith, L. M., Bobek, D. L., Richman-Raphael, D., Simpson, I., Chrisansen, E. D., & von Eye, A. (2005). Positive youth development, participation in community youth development programs, and community contributions of fifth-grade adolescents: Findings from the first wave of the 4-H Study of Positive Youth Development. Journal of Early Adolescence, 25(1), 17-71. https://doi.org/10.1177/0272431604272461

Phelps, E., Zimmerman, S., Warren, A. A., Jelicic, H., von Eye, A. & Lerner, R. M. (2009). The structure and developmental course of positive youth development (PYD) in early adolescence: Implications for theory and practice. Journal of Applied Developmental Psychology, 30(5), 571-584.

Robinson, A. M. et al. (2012). An Exploratory Study of the Five Cs Model of Positive Youth Development Among Indiana 4-H Youth. Vol 7, Number 1, Journal of Youth Development.

Tavakol, M., & Dennick, R. (2011). Making sense of Cronbach's alpha. International journal of medical education, 2, 53–55. https://doi.org/10.5116/ijme.4dfb.8dfd

ANNEX

Validation and adaptation of the quantitative instrument

To guarantee the congruence of the instrument and the research object, a lengthy validation process of the PYD Questionnaire was conducted.

Peer validation

Researchers from different knowledge areas reviewed and compared each item (question) of the selected instrument with the preliminary categories established. The following tables summarises the correlation between the operation categories with the sub-itens of the PYD Questionnaire.

	CATEGORY	OPERATIONAL CATEGORIES	PYD QUESTIONNAIRE
#1	Social Sport	a) Community b) Human Development c) Inclusion d) Sports e) Family f) Community	a) Connected to neighbourhood b) Conduct Behaviour & Positive Identification c) Social Conscience d) Physical Competence e) Connected to family f) Connected to neighbourhood
#2	Values	a) Discipline b) Tolerance c) Respect d) Empathy e) Fair Play & Justice f) Trust g) Social Skills h) Formation of values i) Understanding of values j) Implementation of values	a) Social Competence b) Values Diversity & Personal Values c) Personal Values d) Caring e) Values Diversity f) Self-worth g) Connected to peer h) Social Conscience, Social Competence, Caring, Connected to peer, Self-worth i) Social Conscience, Social Competence, Caring, Connected to peer, Self-worth j) Values Diversity, Personal Values, Positive Identification
#3	Social change	a) Sports environment b) Family environment c) Community environment d) Educational environment e) Social Impact f) Methodological efficiency g) Social interaction	a) Physical Competence b) Connected to family c) Connected to neighbourhood d) Academic Competence and Connected to School e) Social Competence f) Social Competence g) Social Conscience & Connected to peers

Piloting

The selected instrument was applied in the year of 2020 with samples of the three departments. The samples were chosen by convenience, nevertheless, shared similar sociodemographic characteristics as the intended intervention groups. It consisted of two phases:

- **Phase 1:** The original Spanish version of the instrument was applied. Due to the SARS-COV-19 pandemic and the laws limiting circulation in the country, the questionnaire was shared with parents and caretakers via digital tools (e.g., e-mail and WhatsApp). A total of 34 children and youth aged between 10 and 17 years participated (Norte de Santander = 10, La Guajira =

20, Arauca = 4). Results indicated the need to adapt the Spanish translation to the social context investigated, including language, rating scales, and adjustment to the Colombian educational grading system.

- **Phase 2:** After first adaptation, the instrument was once again applied via digital means (e.g., e-mail and WhatsApp). A total of 36 children and youth aged between 10 and 17 years participated (Norte de Santander = 22, La Guajira = 10, Arauca = 4).

- **Follow-up Questions:** participating individuals were asked to answer open follow-up questions about their perception of the instrument and - if any – their difficulties in filling out the questionnaire. Answers were transcribed and analysed with ATLAS.ti Web (Version 3.15.0-2022-03-09), to understand the relationship between the analysed variables.

    - The following categories emerged: Sport for Development, Positive Youth Development, Impact, Sport with Principles, and Instrument Validation, followed by the underlying concepts: integral tool, intervention strategy, inspiration and motivation for the improvement of conditions, sport for mental and physical health, public policies, social inclusion, peace, personal development, and civic culture.

- **Internal consistency and reliability:** Cronbach's Alpha[1] for the 83 items was $\alpha =. 993$, which suggests an excellent internal consistency (Cronbach, 1951).

- **Structural Validation:** to confirm the validity of the 5Cs model and its factorial structure for this study's population, Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA) models were applied. Results confirmed the factorial structure of the 5Cs as an appropriate framework for this population.

---

[1] "Internal consistency describes the extent to which all the items in a test measure the same concept or construct and hence it is connected to the inter-relatedness of the items within the test. Internal consistency should be determined before a test can be employed for research or examination purposes to ensure validity. In addition, reliability estimates show the amount of measurement error in a test. As the estimate of reliability increases, the fraction of a test score that is attributable to error will decrease." (Tavakol, M., & Dennick, R., 2011).

Quantitative Results: SPSS Outputs

29

Reliability Statistics – 5C's of PYD

Cronbach's Alpha	N
,994	83

Reliability Statistics - CHA-RACTER

Cronbach's Alpha	N
,904	21

Reliability Statistics - COM-PETENCE

Cronbach's Alpha	N
,996	19

Reliability Statistics - CA-RING

Cronbach's Alpha	N
,987	9

Reliability Statistics - CON-FIDENCE

Cronbach's Alpha	N
,981	12

GENDER AND AGE

		Gender	Birth date
N	Valid	231	231
Average		1,38	05/18/2009
Median		1,00	11/06/2009
Std. Deviation		,487	902 09:23:51,168
Variance		,238	6078795575725744,000
Minimum		1	06/07/2001
Maximum		2	03/06/2021
Percentils	10	1,00	09/07/2005
	20	1,00	08/25/2007
	25	1,00	02/15/2008
	30	1,00	06/24/2008
	40	1,00	02/17/2009
	50	1,00	11/06/2009
	60	1,00	04/07/2010
	70	2,00	08/03/2010

	75	2,00	11/17/2010
	80	2,00	04/28/2011
	90	2,00	12/10/2011

Gender

		Frequency	Percentage	Valid Percentage	Cumulative percentage
Valid	Male	141	61,0	61,0	61,0
	Female	91	39,0	39,0	100,0
Total		231	100,0		

AGE

N	Valid	231
Average		13,6550
Median		14,0000
Std. Deviation		1,76931
Variance		3,130
Minimum		6,00
Maximum		19,00
Percentiles	10	11,0000
	20	12,0000
	25	13,0000
	30	13,0000
	40	14,0000
	50	14,0000
	60	14,0000
	70	14,0000
	75	14,0000
	80	14,0000
	90	15,0000