Sport Creates Future

Impacts of Sport for Development on Employability of Youth in Albania and North Macedonia

IMPRINT

Content

List of Figures and Tables

List of Abbreviations

BMZ	German Federal Ministry for Economic Cooperation and Development
FGD	Focus Group Discussion
GIZ	Gesellschaft für Internationale Zusammenarbeit
GSU	German Sport University Cologne
NEETs	Not in Education, Employment, or Training
NGO	Non-Governmental Organisation
PE	Physical Education
RCT	Randomized Controlled Trial RCT
TAKT	Together Advancing Common Trust
SDG	Sustainable Development Goal
S4D	Sport for Development
S4E	Sport for Employability
VET	Vocational Education and Training

ABSTRACT

Youth unemployment is a significant problem in Albania and North Macedonia, affecting both youth themselves and society as a whole. In both countries, the labour market situation is very challenging and tense, with a youth unemployment rate of 27.8% in Albania and 34.9% in North Macedonia (ILO 2022a).

Since 2017, the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) has been implementing Sport for Development (S4D) in Albania and North Macedonia in order to promote youth development, amongst other employability. To analyse whether S4D is a meaningful tool to foster employability among youth, GIZ and the German Sport University Cologne conducted a quasi-experimental, longitudinal study evaluating the impacts of a S4D intervention in high schools and vocational education and training (VET) schools in Albania and North Macedonia. Specifically, possible effects on communication competences, self-confidence, cooperation competences and goal orientation of youth were assessed in order to examine a possible contribution of S4D to the realization of SDG Target 8.6.

The findings highlight the importance of a S4D program that aims to strengthen the employability skills of youth. The qualitative and quantitative analyses reveal a positive trend – although not always statistically significant results. Analysing effects of S4D on self-confidence, the study finds that S4D increases self-confidence among youth and has a statistically significant, albeit small effect on self-confidence. Additionally, the study shows a statistically significant effect of S4D on goal orientation, indicating that S4D increases goal orientation among youth to a small degree. This effect could be potentially increased by including career counselling activities into the S4D intervention, to add a more practical angle to goal orientation. Quantitative data suggests no significant effect of S4D on the communication competence of youth. However, qualitative data demonstrates that participants know the terminologies, but there is a lack of knowledge transfer from theory into the practice. The study also examines cooperation among youth. While quantitative analyses demonstrate no significant effect of S4D on cooperation among youth, qualitative results suggest that a longer implementation period is needed to enhance cooperation among participants, since cooperation as such and behavioural changes in general are not realized in the short term. In general, the effects of S4D could most likely be increased by a longer intervention period which might not only enhance knowledge among participants, but also impact behavioural changes.

To further assess and delve into the effects and potential impacts of Sport for Employability on youth development, a second study will be conducted in 2023/ 2024. This study will evaluate a similar S4E intervention in Albania over an intervention period of one school year (9 months). The objective is to determine whether an extended intervention period could yield more statistically significant results with larger effect sizes.

BACKGROUND

Youth unemployment is a significant problem in Albania and North Macedonia, affecting both youth themselves and society as a whole. In both countries, the labour market situation is very challenging and tense. Unemployment among youth (ages 15 – 24) in 2022 amounted to 27.8% in Albania and to 34.9% in North Macedonia. However, when young persons are not in employment nor participating in formal education or trainings, they run an increased risk of becoming disconnected from the labour market and facing social exclusion with effects on their whole adult life. This is why many scholars and labour market experts also take into consideration the rate of NEETs: Young persons in an economy aged 15-24 not in education, employment, or training. The share of NEETs amounted in Albania to 25.8% in 20191 and in North Macedonia to 18.4% in 2022 (ILO 2022a).

> **28% youth unemployment rate in Albania and 35% youth unemployment rate in North Macedonia.**

Gender disaggregated data shows slight differences between males and females: In Albania, youth unemployment in 2022 among females amounted to 27.1% and among males to 28.3%. In North Macedonia, youth unemployment in 2022 amounted to 39.5% among females and to 32.3% among males. The share of NEETs in Albania amounted to 25.5% among females and to 26.2% among males in 2019. In North Macedonia, the share of female NEETs in 2022 amounted to 18.8% and the share of male NEETs to 18.1% (ILO 2022a).

Inconsistent quality of education and training, which often does not meet the requirements of the labour market, is frequently mentioned as one of the main causes of the high youth unemployment rate in the region. This high unemployment level in turn is one of the main reasons for the outflow of youth from the region, presenting a growing problem because the young generation in particular has the potential to play a decisive role in social, economic, and cultural cooperation as well as in the reconciliation of the entire Balkan region (GIZ 2022).

Both North Macedonia and Albania have taken measures to improve employment opportunities for youth. For instance, so called Youth Guarantee Schemes were introduced in North Macedonia in 2018 and in Albania in 2021. Inspired by Youth Guarantee Schemes in other European countries, these policies are a commitment to support NEETs. This commitment entitles youth to receive a good quality offer of employment, traineeship, apprenticeship, or continued education within four months of leaving school or becoming unemployed (ILO 2022b, 2022c). But despite some progress achieved in terms of overall employment, young people, still experience high rates of unemployment and inactivity in both countries (European Commission 2020a, 2020b).

Youth in Albania and North Macedonia face many challenges in finding good quality jobs that match their skills and aptitudes. Often, education systems fail to provide students with appropriate skills for the labour market, and career advisory services are underdeveloped and lacking a systematic support for career orientation and soft skills development. If at all, offers on skills development are made by non-governmental organisations (NGOs) or international organizations. Public employment services are ineffective in assisting young people into work and in consequence, a large proportion relies on family or political connections to obtain a job or work in the informal sector. Furthermore, there is a shortage of jobs available, and the COVID-19 crisis has brought new job creation to a halt affecting the job prospects of young people. The prevalence of temporary job contracts among young people is a further source of insecurity (RCC 2021).

SPORT FOR EMPLOYABILITY INTERVENTION LOGIC

Employability "is the combination of all factors which enable [a young person] to progress towards or get into employment, to stay in employment and to progress during a career" (CEDEFOP, 2011: 46). This combination of factors includes the possession of basic educational skills, vocational qualifications, technical or job-specific knowledge plus the individual's personal qualities, attitudes, and attributes, usually called soft – or life skills. The International Labour Organisation (ILO) describes four core competencies for good employability: learning to learn, communication, teamwork and problem-solving (Brewer, 2013). The biggest impact of sport may certainly be expected in relation to the development of life and soft skills.

Sport for Employability (S4E) is not a stand-alone concept. It rather represents a specific focus within the broader approach of Sport for Development (S4D). It includes all measures where sport is used in a targeted manner as a tool to promote the different aspects of employability at any stage of career pathways. It is important to note, that employability not only develops through formal education, but also through informal learning and personal development. The individual environment of youth plays a very important role in this regard, sport can help to reach youth who would be hard to reach through other channels. This is due to the fact that sport can draw attention to almost any issue and is considered an attractive activity for the majority of youth. Especially the final years of school and the transition into university, vocational education or work are associated with great challenges and uncertainties for young persons. Disorientation, setbacks, and frustration can be just as much a part of this phase of life as joyful anticipation, big dreams, and important developmental steps. The stronger and more stable youth are in their personalities, the better they succeed in their transition to adult life. Sport can help build trusting relationships with the target group and strengthen their health, wellbeing, confidence, and resilience. Especially youth from vulnerable groups may benefit from such empowerment, as it provides them with a more solid foundation for the specific challenges of this developmental stage (GIZ 2022).

Building on sport's unique ability to reach out to youth and build trusting relationships with them, sport can also be used as the starting point from which youth can be connected to other supporting agencies. In connection with sport-related events or activities, youth can be brought into contact with universities, career counsellors or potential employers in a non-formal, low-barrier environment. However, the most important function of sport in terms of promoting employability lies in its educational potential and the opportunities it offers to teach life skills in a very effective and targeted way (GIZ 2022).

Depending on the specific context, purpose or occupational sector there are long lists of potentially relevant life skills which can be linked to a young person's level of employability: Among many other capabilities, these descriptions often include skills such as adaptability, communication, confidence, conflict resolution, creativity, critical thinking, decision-making, dedication, emotional intelligence, empathy, flexibility, honesty, integrity, leadership, organization, perseverance, politeness, problem-solving, punctuality, reliability, respect for rules, self-discipline, self-motivation, teamwork, tolerance, willingness to learn etc. In addition, many of these skills are inter-related – for example, to be a strong leader one also needs to have good communication and organizational skills. The question of which life skills should actually be developed through an S4E program in order to increase the employability of young people should take several perspectives into account. First, the selection of relevant skills can be based on theoretical considerations derived from research findings and expert knowledge. Second, the skills that are required and expected by potential

employers in the different occupational sectors must be considered and finally, the individual skills deficits identified by trainers, mentors, and the participants themselves should also be taken into account. This means that the choice of life skills to be developed in an S4E program should always consider the specific circumstances (GIZ 2022).

Sport for Development can help youth to equip themselves with a wide range of soft or life skills that match the actual labour market demands. These skills are an indispensable prerequisite for employment. For youth without any previous work experience, they are a key resource to improve their employment prospects, but unfortunately even the best skills portfolio is no guarantee for employment in a tight and competitive labour market as it is characteristic of the Western Balkans. This should not diminish the motivation to develop and implement S4E programs, but it must be taken into account with regard to the expectation management of program developers and youth alike (GIZ 2022).

In the following, the terminology S4D will be used to describe the Sport for Employability intervention in Albania and North Macedonia. While it is strictly speaking a S4E intervention, the broader term S4D is more common and in order to avoid unclarity, will be used in this report as a more general wording.

S4D IMPLEMENTATION IN ALBANIA AND NORTH MACEDONIA

On behalf of the German Federal Ministry for Economic Cooperation and Development (BMZ), the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH has been implementing Sport for Development in the Western Balkans since 2017. GIZ builds capacities of local coaches, teachers and other practitioners to identify and leverage the potential of sport for children's and youth's development. In Albania and North Macedonia, 28,000 children and youth have been reached through 428 trained S4D coaches until 2022.

The S4D implementation targeting the improvement of employability competences among youth in Albania and North Macedonia took place in 12 high schools and vocational education and training schools (VET schools) – seven schools in Albania and five in North Macedonia. 12 PE teachers with a certified S4D qualification were additionally trained in Sport for Employability in a three-days-training. In Albania, social workers, who are integrated into Albanian schools, were paired to the respective PE teacher in their school and trained in S4E as well. Social workers were then responsible for the reflection part of the S4D sessions, creating safe spaces for critical reflection and discussion of the competences and topics targeted in the sessions.

For the implementation, GIZ partnered with the non-governmental organisations Epoka e Re in Albania and TAKT (*Together Advancing Common Trust*) in North Macedonia that conducted the S4E training for PE teachers and social workers and accompanied and monitored the implementation in the schools. The target group consisted of youth in the first and third grade in both countries, in the age group of 15 to 19 years. Participants attended S4D training as after school activities twice per week for a duration of one school semester for four months. In total, 24 sessions were held. The targeted competences of the S4D intervention were communication, self-confidence, cooperation and goal orientation.

RESEARCH OBJECTIVE

To analyse whether GIZ's S4D approach is a meaningful tool to foster employability among youth, GIZ joined forces with the German Sport University Cologne (GSU), and the NGOs Epoka e Re and TAKT. More specifically, the present study evaluated if a four-month long S4D intervention in high schools and VET schools in Albania and North Macedonia impacts the communication competences, self-confidence, cooperation competences and goal orientation of young persons; and thus examines the following question:

Can S4D contribute to the realization of SDG Target 8.6: By 2020 substantially reduce the proportion of youth not in employment, education or training?

RESEARCH DESIGN

A quasi-experimental, longitudinal study design was used to examine possible impacts of Sport for Development (S4D) on youth' employability skills. The evaluation consisted of one intervention group and one comparison group as well as two points of measurement. The baseline was conducted in March 2022 and the endline in June 2022.

While the comparison group did not participate in any type of S4D activities, the intervention group participated in Sport for Development activities twice per week for one school semester (four months). Schools for the S4D intervention were selected based on the following criteria: High school or VET school; PE teachers already qualified in S4D; previous experience in collaborating with the NGOs TAKT and Epoka e Re; availability of an adequate number of students to participate in the intervention and comparison group; permission of municipalities to cooperate with schools.

To participate in the study the following criteria were applied for participants of the intervention and comparison group: (Albanian and North Macedonian) Grade 1 or 3, not having participated in any S4D activity before, and being willing and available to participate in S4D activities twice per week (for intervention group). This is a full survey. All participants in the S4D activities also participated in the study.

The selection of participants in the intervention was carried out using the non-probability sampling technique proportional quota sampling. A non-random selection of a predetermined number or proportion of units, in this case school classes, was made according to the above-mentioned criteria. Proportional quota sampling was also applied for the gender representation in both comparison and intervention group. For the comparison group, youth in the similar age group and fitting the defined criteria for the intervention group were selected based on proportional quota sampling.

The allocation ratio between intervention and comparison group is 1:1. 337 youth were assigned to the intervention group, 301 to the comparison group. In total, 638 youth participated in the study. The gender ratio is 1:1 with a slightly higher representation of females in both groups: 55.8% females, 0,3% diverse and 43.9% males in the intervention group and 54,1% females, 0,7% diverse, and 45,2% males in the comparison group.

For the study, a standardized questionnaire was developed taking into consideration the specific project intervention and local context. After a pilot, the questionnaire was readjusted to fit the age group and cultural context, was translated into Albanian and Macedonian, and was digitized. The survey was conducted as a self-assessment where participants filled out the questionnaire themselves via tablets or smartphones during class in a time slot specifically dedicated for this task. Before the endline was conducted, three focus group discussions (FGDs) in Albania with the intervention group were held with six participants each and one FGD with the social workers and PE teachers involved.

In total, 638 youth were interviewed: 337 from the intervention group and 301 from the comparison group. However, 125 data sets had to be deleted (in both baseline and endline, both intervention and comparison group). These are questionnaires that were completed in less than 10 minutes. The measured time to complete the questionnaire is minimum 10 minutes. Data sets that were filled out in less than 10 minutes are impossible to be filled out with

the necessary consideration for each question and hint at the fact, that such questionnaires were filled out by only clicking through the questions and randomly selecting answers or by only answering "Don't know" or "Do not want to respond". It was decided that these data sets are not to be included in the analysis. Along with drop-out rates, the number of the baseline interviewees of the intervention group was reduced to 288 and the number of the baseline interviewees of the comparison group to 262. The following table illustrates the participant flow between baseline and endline:

	INTERVENTION GROUP	COMPARISON GROUP
BASELINE	288	262
ENDLINE	251	189

Table 1: Intervention and Comparison Group

The fluctuation between baseline and endline is (besides deleted data sets) likely due to the fact that the survey was conducted as a self-assessment by participants themselves and a possible lack of motivation to fill out the survey. The endline was conducted during the final days of school and various students were missing during the data collection, increasing the drop-out rates. Conducting the endline at an earlier date was not possible as a teachers' strike had delayed the S4D implementation. This will be elaborated in more detail in the chapter on limitations.

The next table illustrates the distribution of the intervention and comparison group in subgroups:

	GENDER			COUNTRY	
	FEMALE	MALE	DIVERSE	ALBANIA	NORTH MACEDONIA
INTERVENTION GROUP	188	148	1	175	162
COMPARISON GROUP	163	136	2	162	139
TOTAL	351	284	3	337	301

Table 2: Supgroups

ETHICAL CONSIDERATIONS

The study was approved by GIZ's data protection unit. The anonymity of the participants is guaranteed by GIZ, and the General Data Protection Regulation by the European Union is applied. As the study's target group are minors, approval for participation was sought by parents/ legal guardians beforehand. Additionally, schools, directors, and staff were informed about the process and the schools' and teachers' approval was obtained to conduct a data collection on their premises.

While we acknowledge that a non-probability sampling technique contributes to some kind of selection bias, both NGOs function as important gate keepers to the schools and target group and without them, the target group would remain inaccessible. Further, probability sampling would have provoked ethical concerns. Making an offer for participation in S4D activities and then randomly selecting participants would at the same time exclude others willing and hoping to participate. Especially in the context of schools, where half of the class would participate, and the other half would not, not only disappointment, but also potential conflict could be created. While a randomization at cluster level (schools) might be possible in theory, in practice the number and access to such schools remains limited.

The following sections outline the results from the baseline and endline survey. Qualitative results are, whenever possible, triangulated with the quantitative results. The analyses compare the intervention group with the comparison group as well as male and female participants within the intervention group. However, differences between male and female participants proved to be statistically not significant and thus cannot be traced back to the S4D intervention. Hence, they are not included in this report.

To analyse S4D's impact on communication, we created a scale with 16 Likert scale items measuring communication competences revolving around four competences: non-verbal communication, verbal communication, subtle communication, and communication in conflict situations. As these competences do not necessarily mutually depend on each other we do not expect Cronbach's Alpha to show internal consistency of the scale. One person can be great in communication verbally but have low non-verbal communication skills. However, we classify all four competences as the construct of communication competences. Cronbach's Alpha in the baseline is 0.493 and in the endline 0. 612 – confirming our expectations.

Reliability Statistics

Cronbach's Alpha	N of Items
,493	16

Figure 1: Cronbach's Alpha, Communication, Baseline

Reliability Statistics

Cronbach's Alpha	N of Items
,612	16

Figure 2: Cronbach's Alpha, Communication, Endline

To compare communication competences between the intervention and comparison group and within each group over time, a mixed between-within ANOVA (also called split-plot ANOVA, between-within ANOVA, or mixed factorial ANOVA) was conducted. It was decided not to conduct a MANOVA (Multivariate Analysis of Variance) as the four dependent variables do not relate to each other: communication; self-confidence; cooperation; goal orientation.

As SPSS automatically calculates a list-wise case exclusion, meaning if a single value is missing from a variable, the entire case will be excluded from the analysis, 197 cases in the intervention group and 143 cases in the comparison group were taken into consideration by SPSS.

Between-Subjects Factors

		Value Label	N
Which group do you belong to?	1,00	Intervention group (I am part of S4D activities)	197
	2,00	Control group (I am not part of S4D activities)	143

Figure 3: Between-Subjects Factors, Communication

Descriptive Statistics

	Which group do you belong to?	Mean	Std. Deviation	N
Communication.1	Intervention group (I am part of S4D activities)	2,7037	,28620	197
	Control group (I am not part of S4D activities)	2,7133	,33443	143
	Total	2,7077	,30697	340
Communication.2	Intervention group (I am part of S4D activities)	2,7508	,33054	197
	Control group (I am not part of S4D activities)	2,7095	,34739	143
	Total	2,7334	,33784	340

Figure 4: Descriptive Statistics, Communication

We fulfil the prerequisite for conducting mixed between-within ANOVAs with the dependent variables being interval-scaled and the independent variable/ between-subjects factor nominal-scaled with two independent groups. The within-subjects factor is time (two measuring points) and is independent and nominal-scaled. Regarding outliers, the questions were programmed as Likert scales with pre-defined answer options in order to prevent outliers. As ANOVA is a quite robust analytical method against violations of the normality assumption, especially with large sample sizes and balanced designs, the normality assumption can be neglected (Tabachnik & Fidell 2007; Salkind 2010): The sample size for communication is equally distributed among both groups and rather large (see Figure 4).

The same applies to variance homogeneity which is tested through Levene's Test of Equality of Error Variances. While variance homogeneity can be neglected with large sample sizes and balanced designs, in our case we still fulfil the assumption of homogeneity. Homogeneity of variances was asserted using Levene's Test based on median which shows that equal variances can be assumed ($p = 0.117$ in the baseline and $p = 0.332$ in the endline). We use Levene's Test based on median as it is more robust then based on mean.

Levene's Test of Equality of Error Variances[a]

		Levene Statistic	df1	df2	Sig.
Communication.1	Based on Mean	3,122	1	338	,078
	Based on Median	2,467	1	338	,117
	Based on Median and with adjusted df	2,467	1	323,304	,117
	Based on trimmed mean	2,962	1	338	,086
Communication.2	Based on Mean	,990	1	338	,320
	Based on Median	,943	1	338	,332
	Based on Median and with adjusted df	,943	1	337,999	,332
	Based on trimmed mean	,978	1	338	,323

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design: Intercept + IntorControl
   Within Subjects Design: MeasuringPoints

Figure 5: Levene's Test of Equality of Error Variances, Communication

As we have a mixed design, we also check for homogeneity in covariance by using Box's Test of Equality of Covariance Matrices. Since the power of Box's Test is dependent on the number of cases, the test becomes more significant the larger the sample is. Some authors therefore recommend not testing the Box's Test at a .05 significance level, but at 0.025 or 0.01 (Mertler, 2004) or 0.001 (Verma, 2015; Warner, 2012). In our case, homogeneity in covariance can be assumed with Box's Test of Equality of Covariance Matrices showing p = 0.255.

The assumption of sphericity can be neglected, as it only applies for procedures with measurement repetition that have more than two stages. In the present case there are only two measurement points of time.

Box's Test of Equality of Covariance Matrices[a]

Box's M	4,090
F	1,354
df1	3
df2	8787382,008
Sig.	,255

Figure 6: Box's Test of Equality of Covariance Matrices, Communication

The mixed between-within ANOVA conducted to assess the impact of Sport for Development on communication competences across two time periods (pre-intervention, post-intervention) shows that there is no statistically significant interaction between group affiliation and time, Greenhouse-Geisser $F(1.00, 338.00) = 2.035$, $p = 0.155$, partial $\eta^2 = 0.006$.

It also shows that there is no significant main effect for time, Greenhouse-Geisser $F(1.00, 338.00) = 1.479$, $p = 0.225$, partial $\eta^2 = 0.004$ – meaning that there are no differences that could be attributed to time alone, regardless of the group membership (intervention or comparison group) of the participants.

Tests of Within-Subjects Effects

Measure: MEASURE_1

Source		Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
MeasuringPoints	Sphericity Assumed	,078	1	,078	1,479	,225	,004
	Greenhouse-Geisser	,078	1,000	,078	1,479	,225	,004
	Huynh-Feldt	,078	1,000	,078	1,479	,225	,004
	Lower-bound	,078	1,000	,078	1,479	,225	,004
MeasuringPoints * IntorControl	Sphericity Assumed	,107	1	,107	2,035	,155	,006
	Greenhouse-Geisser	,107	1,000	,107	2,035	,155	,006
	Huynh-Feldt	,107	1,000	,107	2,035	,155	,006
	Lower-bound	,107	1,000	,107	2,035	,155	,006
Error(MeasuringPoints)	Sphericity Assumed	17,750	338	,053			
	Greenhouse-Geisser	17,750	338,000	,053			
	Huynh-Feldt	17,750	338,000	,053			
	Lower-bound	17,750	338,000	,053			

Figure 7: Tests of Within-Subjects Effects, Communication

Figure 8 shows us that there are also no differences between the intervention and comparison group that are independent of the factor time. There is no significant main effect for group, meaning that intervention group and comparison group do not differ significantly, $F(1.00, 338.00) = 0.267$, $p = 0.606$, $\eta^2 = 0.001$.

Tests of Between-Subjects Effects

Measure: MEASURE_1

Transformed Variable: Average

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Intercept	4901,521	1	4901,521	31414,924	,000	,989
IntorControl	,042	1	,042	,267	,606	,001
Error	52,737	338	,156			

Figure 8: Tests of Between-Subjects Effects, Communication

In conclusion, quantitative data suggests no statistically significant effect of S4D on the communication competence of youth. However, FGD demonstrate that participants know the terminologies, but do not use the learned competences and do not reflect their own communication style. Thus, the lack of a significant quantitative result might be due to a lacking transferal of knowledge from theory into the practice – and a lack of time for teachers and social workers to address this. A longer intervention period might not only increase knowledge among participants, as the FGD results hint to, but also impact behavioural changes regarding communication.

> **To transfer communication competences form theory to practice, a longer intervention period is needed!**

IMPACT ON SELF-CONFIDENCE

To analyse S4D's impact on self-confidence, we created a scale with 17 Likert scale items. Cronbach's Alpha shows good internal consistency of the scale for both baseline and endline with values of 0.685 (baseline) and 0.730 (endline).

Reliability Statistics

Cronbach's Alpha	N of Items
,685	17

Figure 9: Cronbach's Alpha, Self-Confidence, Baseline

Reliability Statistics

Cronbach's Alpha	N of Items
,722	17

Figure 10: Cronbach's Alpha, Self-Confidence, Endline

To compare self-confidence between the intervention and comparison group and within each group over time, a mixed between-within ANOVA was conducted. The normality assumption is neglected as the sample size is large and it is a balanced design.

Between-Subjects Factors

		Value Label	N
Which group do you belong to?	1,00	Intervention group (I am part of S4D activities)	192
	2,00	Control group (I am not part of S4D activities)	142

Figure 11: Between-Subjects Factors, Self-Confidence

Descriptive Statistics

	Which group do you belong to?	Mean	Std. Deviation	N
SelfConfidence.1	Intervention group (I am part of S4D activities)	2,7730	,39333	192
	Control group (I am not part of S4D activities)	2,7661	,46715	142
	Total	2,7701	,42562	334
SelfConfidence.2	Intervention group (I am part of S4D activities)	2,8706	,37374	192
	Control group (I am not part of S4D activities)	2,7763	,45827	142
	Total	2,8305	,41379	334

Figure 12: Descriptive Statistics, Self-Confidence

Homogeneity of variances was asserted using Levene's Test based on median which shows that equal variances can be assumed in the baseline (p = 0.065) as well as in the endline (p = 0.065).

Levene's Test of Equality of Error Variances[a]

		Levene Statistic	df1	df2	Sig.
SelfConfidence.1	Based on Mean	3,480	1	332	,063
	Based on Median	3,417	1	332	,065
	Based on Median and with adjusted df	3,417	1	321,172	,065
	Based on trimmed mean	3,490	1	332	,063
SelfConfidence.2	Based on Mean	3,461	1	332	,064
	Based on Median	3,427	1	332	,065
	Based on Median and with adjusted df	3,427	1	309,588	,065
	Based on trimmed mean	3,524	1	332	,061

Figure 13: Levene's Test of Equality of Error Variances, Self-Confidence

Box's Test of Equality of Covariance Matrices[a]

Box's M	11,022
F	3,649
df1	3
df2	10155411,716
Sig.	,012

Checking for homogeneity in covariance in the case of a large sample, as recommended by Mertler (2004), Verma (2015) and Warner (2012), the Box's Test is tested at a 0.001 significance level. The assumption of homogeneity of covariance is violated as p = 0.012. However, with a large sample size and a balanced design, this assumption can also be neglected.

The assumption of sphericity can be neglected, as this only applies for procedures with measurement repetition with more than two stages. In the present case there are only two measurement points of time.

Figure 14: Box's Test of Equality of Covariance Matrices, Self-Confidence

The mixed between-within ANOVA conducted to assess the impact of Sport for Development on self-confidence across two time periods (pre-intervention, post-intervention) shows a significant interaction between S4D and time (p = 0.042):

Tests of Within-Subjects Effects

Measure: MEASURE_1

Source		Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
MeasuringPoints	Sphericity Assumed	,474	1	,474	6,352	,012	,019
	Greenhouse-Geisser	,474	1,000	,474	6,352	,012	,019
	Huynh-Feldt	,474	1,000	,474	6,352	,012	,019
	Lower-bound	,474	1,000	,474	6,352	,012	,019
MeasuringPoints * IntorControl	Sphericity Assumed	,312	1	,312	4,176	,042	,012
	Greenhouse-Geisser	,312	1,000	,312	4,176	,042	,012
	Huynh-Feldt	,312	1,000	,312	4,176	,042	,012
	Lower-bound	,312	1,000	,312	4,176	,042	,012
Error(MeasuringPoints)	Sphericity Assumed	24,798	332	,075			
	Greenhouse-Geisser	24,798	332,000	,075			
	Huynh-Feldt	24,798	332,000	,075			
	Lower-bound	24,798	332,000	,075			

Figure 15: Tests of Within-Subjects Effects, Self-Confidence

Figure 16 shows a scale from one to four, one representing low self-confidence and four depicting high self-confidence. We observe a positive development within the intervention group over time and only a slight increase within the comparison group. The effect size is small with partial eta squared = 0.012 and Cohen's F = 0.11.
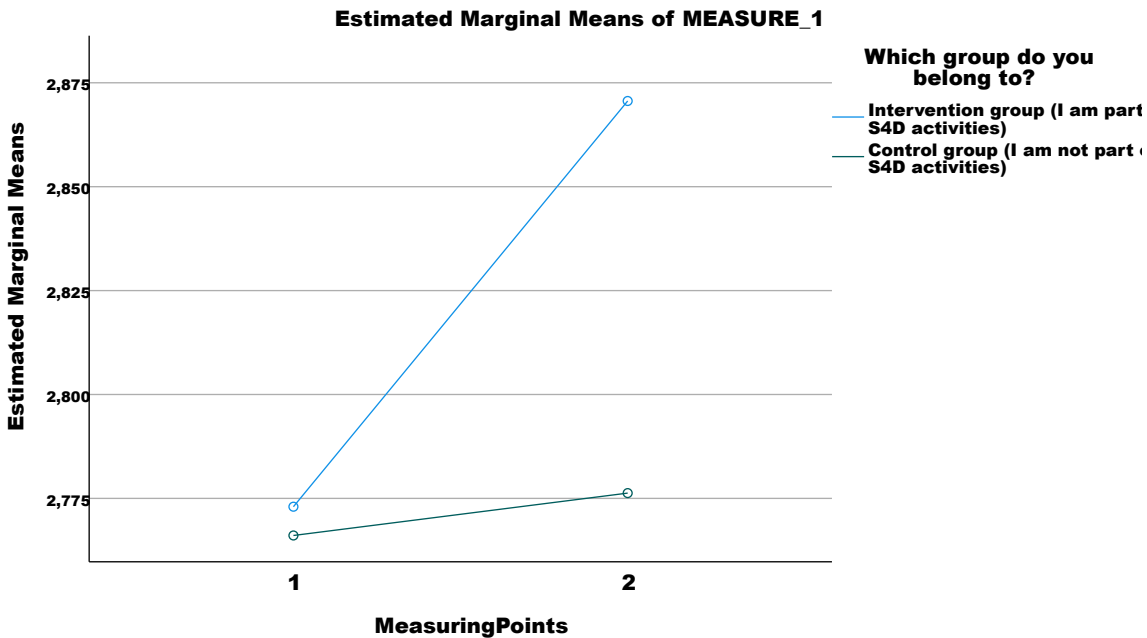
Figure 16: Estimated Marginal Means, Self-Confidence

In conclusion, there is a significant interaction between S4D participation and time, with S4D increasing self-confidence, Greenhouse-Geisser $F(1.00, 332.00) = 4.176$, $p = 0.042$, with a small effect size (Cohen's F = 0.11, partial η^2 = 0.012). This demonstrates that S4D increases self-confidence among youth and has a statistically significant, albeit small effect on self-confidence. This quantitative result is also confirmed by the FGDs, where living scales were used to assess the self-confidence of participants. Most likely, a stronger effect on self-confidence could be achieved through a longer S4D intervention period.

S4D fosters self-confidence among youth to a small degree!

IMPACT ON COOPERATION

We measure cooperation competences among youth by creating a scale of 12 variables since cooperation is a latent construct. Cronbach's Alpha shows good and very good internal consistency of the scale for baseline and endline with values of 0.732 (baseline) and 0.817 (endline).

Reliability Statistics

Cronbach's Alpha	N of Items
,732	12

Figure 17: Cronbach's Alpha, Self-Confidence, Baseline

Reliability Statistics

Cronbach's Alpha	N of Items
,817	12

Figure 18: Cronbach's Alpha, Self-Confidence, Endline

To analyse cooperation competences and cooperative behaviour between the intervention and comparison group and within each group over time, a mixed between-within ANOVA was conducted. The normality assumption is neglected as the sample size is large and it is a balanced design.

Between-Subjects Factors

		Value Label	N
Which group do you belong to?	1,00	Intervention group (I am part of S4D activities)	184
	2,00	Control group (I am not part of S4D activities)	134

Figure 19: Between-Subjects Factors, Cooperation

Descriptive Statistics

	Which group do you belong to?	Mean	Std. Deviation	N
Cooperation.1	Intervention group (I am part of S4D activities)	2,4935	,47867	184
	Control group (I am not part of S4D activities)	2,4366	,44783	134
	Total	2,4695	,46605	318
Cooperation.2	Intervention group (I am part of S4D activities)	2,5744	,51262	184
	Control group (I am not part of S4D activities)	2,4365	,52341	134
	Total	2,5163	,52086	318

Figure 20: Descriptive Statistics, Cooperation

Homogeneity of variances was asserted using Levene's Test based on median which shows that equal variances can be assumed in the baseline (p = 0.561) and in the endline (p = 0.828).

Levene's Test of Equality of Error Variances[a]

		Levene Statistic	df1	df2	Sig.
Cooperation.1	Based on Mean	,330	1	316	,566
	Based on Median	,339	1	316	,561
	Based on Median and with adjusted df	,339	1	313,306	,561
	Based on trimmed mean	,329	1	316	,566
Cooperation.2	Based on Mean	,037	1	316	,847
	Based on Median	,047	1	316	,828
	Based on Median and with adjusted df	,047	1	313,484	,828
	Based on trimmed mean	,036	1	316	,849

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design: Intercept + IntorControl
   Within Subjects Design: MeasuringPoints

Figure 21: Levene's Test of Equality of Error Variances, Cooperation

Box's Test of Equality of Covariance Matrices[a]

Box's M	,856
F	,283
df1	3
df2	7905817,361
Sig.	,838

Figure 22: Box's Test of Equality of Covariance Matrices, Cooperation

Checking for homogeneity in covariance in the case of a large sample, as recom¬mended by Mertler (2004), Verma (2015) and Warner (2012), the Box's Test is tested at a 0.001 significance level. With p = 0.838 homogeneity in covariance is asserted.

The assumption of sphericity can be neglected, as this only applies for procedures with measurement repetition that have more than two stages. In the present case there are only two measurement points of time.

The mixed between-within ANOVA conducted to assess the impact of Sport for Development on cooperation com-petences across two time periods (pre-intervention, post-intervention) shows in figure 23 that there is no statistically significant interaction between group affiliation and time, Greenhouse-Geisser $F(1.00, 316.00) = 1.745$, $p = 0.188$, partial $\eta^2 = 0.005$.

It also shows that there is no significant main effect for time, Greenhouse-Geisser $F(1.00, 316.00) = 1.734$, $p = 0.189$, partial $\eta^2 = 0.005$ – meaning that there are no differences that could be attributed to time alone, regardless of the group membership (intervention or comparison group) of the participants.

Tests of Within-Subjects Effects

Measure: MEASURE_1

Source		Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
MeasuringPoints	Sphericity Assumed	,253	1	,253	1,734	,189	,005
	Greenhouse-Geisser	,253	1,000	,253	1,734	,189	,005
	Huynh-Feldt	,253	1,000	,253	1,734	,189	,005
	Lower-bound	,253	1,000	,253	1,734	,189	,005
MeasuringPoints * IntorControl	Sphericity Assumed	,254	1	,254	1,745	,188	,005
	Greenhouse-Geisser	,254	1,000	,254	1,745	,188	,005
	Huynh-Feldt	,254	1,000	,254	1,745	,188	,005
	Lower-bound	,254	1,000	,254	1,745	,188	,005
Error(MeasuringPoints)	Sphericity Assumed	46,064	316	,146			
	Greenhouse-Geisser	46,064	316,000	,146			
	Huynh-Feldt	46,064	316,000	,146			
	Lower-bound	46,064	316,000	,146			

Figure 23: Tests of Within-Subjects Effects, Cooperation

Figure 24 shows us that there are however differences between the intervention and comparison group that are independent of the factor time.

There is a significant main effect for group, meaning that intervention group and comparison group differed significantly, $F(1.00, 316.00) = 4.347$, $p = 0.038$, $\eta^2 = 0.014$. This signifies that the differences observed between the two groups cannot be attributed to the S4D intervention but for example might have been existent even before the intervention.

Tests of Between-Subjects Effects

Measure: MEASURE_1

Transformed Variable: Average

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Intercept	3831,139	1	3831,139	11307,587	<,001	,973
IntorControl	1,473	1	1,473	4,347	,038	,014
Error	107,064	316	,339			

Figure 24: Tests of Between-Subjects Effects, Cooperation

In conclusion, quantitative data demonstrates no statistically significant effect of S4D on cooperation among youth.

Increasing cooperation among youth takes time!

However, qualitative results of the FGDs suggest that more S4D sessions and a longer implementation period is needed to increase cooperation among participants, since cooperation as such and behavioural changes in general are not realized in the short term.

IMPACT ON GOAL ORIENTATION

We measure goal orientation by creating a scale of five variables since goal orientation is a latent construct. Cronbach's Alpha shows good internal consistency of the scale for both baseline and endline with values of 0.684 (baseline) and 0.723 (endline).

Reliability Statistics

Cronbach's Alpha	N of Items
,684	19

Figure 25: Cronbach's Alpha, Goal Orientation, Baseline

Reliability Statistics

Cronbach's Alpha	N of Items
,723	19

Figure 26: Cronbach's Alpha, Goal Orientation, Endline

To analyse goal orientation between the intervention and comparison group and within each group over time, a mixed between-within ANOVA was conducted. The normality assumption is neglected as the sample size is large and it has a balanced design.

Between-Subjects Factors

		Value Label	N
Which group do you belong to?	1,00	Intervention group (I am part of S4D activities)	184
	2,00	Control group (I am not part of S4D activities)	132

Figure 27: Between-Subjects Factors, Goal Orientation

Descriptive Statistics

	Which group do you belong to?	Mean	Std. Deviation	N
GoalOrientation.1	Intervention group (I am part of S4D activities)	2,8100	,35476	184
	Control group (I am not part of S4D activities)	2,8443	,32768	132
	Total	2,8243	,34359	316
GoalOrientation.2	Intervention group (I am part of S4D activities)	2,8657	,34773	184
	Control group (I am not part of S4D activities)	2,7793	,38443	132
	Total	2,8296	,36541	316

Figure 28: Between-Subjects Factors, Goal Orientation

Homogeneity of variances was asserted using Levene's Test based on median which shows that equal variances can be assumed in the baseline (p = 0.366) and in the endline (p = 4.18).

Levene's Test of Equality of Error Variances[a]

		Levene Statistic	df1	df2	Sig.
GoalOrientation.1	Based on Mean	,831	1	314	,363
	Based on Median	,819	1	314	,366
	Based on Median and with adjusted df	,819	1	311,906	,366
	Based on trimmed mean	,809	1	314	,369
GoalOrientation.2	Based on Mean	,788	1	314	,375
	Based on Median	,657	1	314	,418
	Based on Median and with adjusted df	,657	1	306,658	,418
	Based on trimmed mean	,748	1	314	,388

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design: Intercept + IntorControl
   Within Subjects Design: MeasuringPoints

Figure 29: Levene's Test of Equality of Error Variances, Goal Orientation

Box's Test of Equality of Covariance Matrices[a]

Box's M	6,228
F	2,061
df1	3
df2	6824204,133
Sig.	,103

Checking for homogeneity in covariance in the case of a large sample, as recommended by Mertler (2004), Verma (2015) and Warner (2012), the Box's Test is tested at a 0.001 significance level. The assumption of homogeneity of covariance is asserted with as p = 0.103.

The assumption of sphericity can be neglected, as this only applies for procedures with measurement repetition that have more than two stages. In the present case there are only two measurement points of time.

Figure 30: Box's Test of Equality of Covariance Matrices, Goal Orientation

The mixed between-within ANOVA conducted to assess the impact of S4D on goal orientation across two time periods (pre-intervention, post-intervention) shows a significant interaction between S4D and time (p =0.005):

Tests of Within-Subjects Effects

Measure: MEASURE_1

Source		Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
MeasuringPoints	Sphericity Assumed	,003	1	,003	,049	,825	,000
	Greenhouse-Geisser	,003	1,000	,003	,049	,825	,000
	Huynh-Feldt	,003	1,000	,003	,049	,825	,000
	Lower-bound	,003	1,000	,003	,049	,825	,000
MeasuringPoints * IntorControl	Sphericity Assumed	,559	1	,559	8,118	,005	,025
	Greenhouse-Geisser	,559	1,000	,559	8,118	,005	,025
	Huynh-Feldt	,559	1,000	,559	8,118	,005	,025
	Lower-bound	,559	1,000	,559	8,118	,005	,025
Error(MeasuringPoints)	Sphericity Assumed	21,639	314	,069			
	Greenhouse-Geisser	21,639	314,000	,069			
	Huynh-Feldt	21,639	314,000	,069			
	Lower-bound	21,639	314,000	,069			

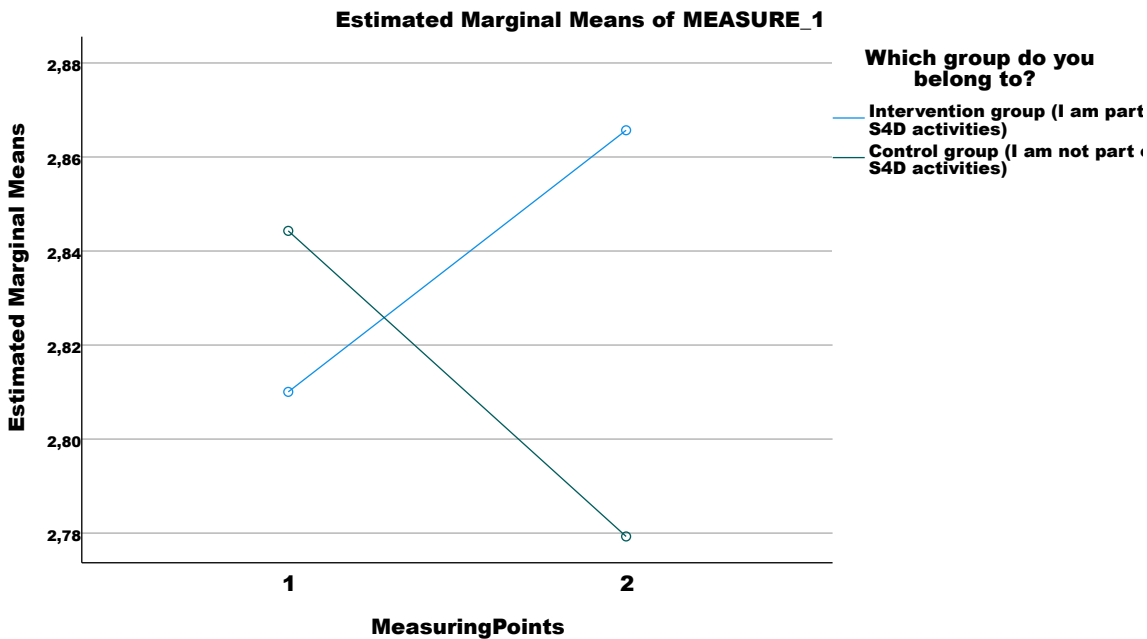**Figure 31: Tests of Within-Subjects Effects, Goal Orientation**

Figure 32: Estimated Marginal Means, Goal Orientation

Figure 32 depicts goal orientation on a scale from one to four, one depicting low goal orientation and four representing high goal orientation. We observe a positive development within the intervention group over time and a decrease within the comparison group. The effect size is small with partial eta squared = 0.025 and Cohen's F = 0.16.

> **S4D increases goal orientation among youth to a small degree!**

In conclusion, there is a statistically significant interaction between S4D participation and time, with S4D improving goal orientation, Greenhouse-Geisser $F(1.00, 314.00) = 8.118$, $p = 0.005$, with a small effect size (Cohen's F = 0.16, partial $\eta^2 = 0.025$). This demonstrates that S4D increases goal orientation among youth, albeit it is a small effect. This effect could be potentially increased by including career counselling activities into the S4D intervention, to add a more practical angle to goal orientation.

LIMITATIONS OF THE STUDY

With the choice of a quasi-experimental, longitudinal study design instead of a Randomized Controlled Trial (RCT) we cannot exclude the possibility of a selection effect and cannot control for all disruptive factors distorting an unbiased assessment. However, working with such a vulnerable group as youth, probability sampling would have provoked ethical concerns. We acknowledge this limitation to our study design and tried to control for it by choosing two points of measurement and ensuring consistency in the S4D implementation. By doing so, Stockmann, R. (2007) argues that there are hardly any differences to a RCT in terms of design quality.

Conducting questionnaires with youth always raises the issue of social desirability. We noticed a tendency towards "better answers", high approval rates and higher values in the response behaviour of the participants. This is a well-known phenomenon in social sciences and psychology. Due to social desirability, respondents and especially young persons try to give a predominantly positive description of one's own person and to correspond to what the interviewer or other persons involved supposedly expect from them. This can be done by means of an exaggerated mention of desirable behaviour or by means of an understated mention of undesirable behaviour. Orientation is provided by social norms (Kreuter, F. et al. 2008). Additionally, youth often reflect their response behaviour differently after an intervention, knowing more about the different topics which sometimes even leads to supposedly negative results. While this is not the case in the present study, we do find the phenomenon of social desirability. We control for it by having a comparison group and by using quantitative analysis methods that are able to still identify significant results and sufficient effect sizes.

By using self-assessment instead of surveys conducted by interviewers, there is the risk of participants being subject to insincerity – which was the case for 125 surveys that were not included in the analysis, as previously outlined. This impacted data quality and considerately reduced the size of the data set. Experience from other impact evaluations in the S4D context confirms the recommendation to use interviewers when conducting surveys among children and youth (GIZ 2023).

A three-weeks teachers' strike in North Macedonia delayed the S4D implementation and not all S4D modules could be implemented in the schools. The delayed implementation also impacted the endline which was thus conducted on the last days of school, with various students not being present. In Albania as well, many students were not present to the final days of school and had to be reached individually in order to conduct the survey. This further reduced the number of participants in the endline.

RECOMMENDATIONS

Based on the final conclusions of this evaluation study, future directions for research and S4D interventions are suggested to further support the described positive developments, to fully assess the impact as well as to foster sustainable results of S4E. In order to achieve and ensure quality education and sustainable results of S4E, the methodology as such should be maintained, tailored to the cultural and social context of the participants, in order to make sure that the references and examples are clear and easy to understand. However, it is recommended to revise the content of the training sessions to include more age-appropriate content and to add more activities, so that variations are possible. Furthermore, the duration of the session should be extended, and the duration of the entire training cycle should be increased.

Recommendations for Sport for Employability interventions:

1) **Minimum intervention period of six months**
2) **Qualified teachers, ongoing support structure and monitoring**
3) **Inclusion of career counselling activities**

There was a strong claim by participants (both youth and teachers) for more sessions or a longer duration of the intervention in order to receive and process the content comprehensively. This is also reflected in the data which hints that larger effect sizes and more statistically significant results could be achieved through a longer intervention period. In general, an intervention period of at least six months to achieve behavioural and attitudinal changes is strongly recommended, as another impact study confirms as well (GIZ 2023).

A key success factor were the qualified PE teachers and social workers, who received intensive training and ongoing support. Being accompanied during the whole implementation through a designated S4D instructor and following a specific training schedule proved to be key in obtaining effects. Training and continued education of PE teachers and social workers in S4D and S4E methodologies is essential to transfer the competences and skills to the target groups. Projects and implementors of S4D need to focus on this and provide appropriate resources (money, time, teaching material) to guarantee high quality capacity development.

Incorporating career counselling activities into Sport for Employability interventions, such as mentoring programs or internship programs, could support the transfer of knowledge and competences into the daily context. S4D programs could team up with youth employment/ employability programs from GIZ, national agencies, or other implementing agencies and integrate the S4D approach into other programs – cooperations that have already been successfully implemented in other cases by GIZ's S4D programs.

In general, longitudinal evaluations are necessary in order to assess the long-term outcomes and impacts of Sport for Employability interventions. Tracer studies that trace the participants and their career pathways

could contribute to a better understanding of the situation of youth in Albania and North Macedonia. It is also recommended to work with interviewers instead of conducting surveys as self-assessments among youth. This could prevent high drop-out rates and provide a better database for analysis. Finally, on a more holistic level, there is a need to better understand the Albanian and North Macedonian workforce and needs in the (sport) employment market. In that sense, knowledge of the particular sectors remains scarce and thus limits the development of tailored, relevant employability programs.

CONCLUSION

The findings show the importance of a S4D program that aims to strengthen the employability skills of youth. The qualitative and quantitative analyses show a positive trend – but not always statistically significant results. On the one hand, this is most likely due to the short duration of the intervention and, on the other hand, to the drop-out rates of students participating in the survey and thus a methodological weakness in the study design. Quantitative data suggests no statistically significant effect of S4D on the communication competence of youth. However, FGD demonstrate that participants know the terminologies, but do not use the learned competences and do not reflect their own communication style. Thus, the lack of a significant quantitative result might be due to a lacking transferal of the knowledge from theory into the practice – and a lack of time for teachers and social workers to address this. A longer intervention period might not only enhance knowledge among participants, as the FGD results hint to, but also impact behavioural changes regarding communication.

However, the study demonstrates that S4D increases self-confidence among youth and has a statistically significant, albeit small effect on self-confidence. This quantitative result is also confirmed by the FGDs, where living scales were used to assess the self-confidence of participants. Most likely, a stronger effect on self-confidence could be achieved through a longer S4D intervention period.

While the quantitative analyses indicate no statically significant effect of S4D on cooperation among youth, qualitative results of the FGDs suggest that more S4D sessions and a longer implementation period is needed to increase cooperation among participants. This is because cooperation as such and behavioural changes in general are not realized in the short term.

The study also reveals a statistically significant effect of S4D on goal orientation, demonstrating that S4D increases goal orientation among youth, albeit to a small degree. This effect could be potentially increased by including career counselling activities into the S4D intervention, to add a more practical angle into the concept of goal orientation.

Considering the short intervention period of four months, these results are quite noteworthy. Achieving behavioral changes and a transfer of knowledge from theory into practice demands both time and continuous stimuli. In order to further evaluate and explore the effects and possible impacts of Sport for Employability on youth development, a second study will be conducted in 2023/ 2024. This forthcoming study will evaluate a similar S4E intervention in Albania over an intervention period of one school year (9 months). This extended duration aims to assess whether more statistically significant results with larger effect sizes may be obtained with a longer intervention period – as this study hints.

LITERATURE

Brewer, Laura. (2013). *Enhancing Youth Employability: What? Why? and How? – Guide to Core Work Skills.* Geneva: ILO Skills and Employability Department.

CEDEFOP (2011). *Empowering the young of Europe to meet labour market Challenges.* Findings from study visits 2009/10. Luxembourg: Publications Office of the European Union.

European Commission (2020a). *North Macedonia 2020 Report.* Retrieved on 28.06.2023 from north_macedonia_report_2020.pdf (europa.eu).

European Commission (2020b). *Albania 2020 Report.* Retrieved on 28.06.2023 from albania_report_2020.pdf (europa.eu).

GIZ (2022). *Sport For Employability Manual for Project Developers in the Western Balkan Region.* Retrieved on 03.07.2023 from https://www.sport-for-development.com/imglib/downloads/Manuale/Western%20Balkan/Publikacija%20SPORT%20FOR%20EMPLOYABILITY_12.2022%20final.pdf.

GIZ (2023). *Sport Creates Change. Impacts of Sport for Development on Gender Equality, Psychosocial Wellbeing and Social Cohesion in the Kurdistan Region of Iraq.* Retrieved on 22.08.2023 from Sport creates change_Final Report KRI (1).pdf.

ILO (2022a). *ILO Modelled Estimates and Projections database (ILOEST) ILOSTAT.* Retrieved on 19.07.2023 from ILO Data Explorer.

ILO (2022b). *Decent Work Country Programme 2023–26 Albania.* Retrieved on 03.07.2023 from wcms_865259.pdf (ilo.org).

ILO (2022c). *Decent Work Country Programme 2023–2025 North Macedonia.* Retrieved on 03.07.2023 from wcms_887216.pdf (ilo.org).

Kreuter, F., Presser, S, & Tourangeau, R. (2008). *Social desirability bias in CATI, IVR, and web surveys.* Public Opinion Quarterly, 72(5), 847-865.

Mertler, C. A. (2004). *Advanced and Multivariate Statistical Methods: Practical Application and Interpretation (3rd ed.).* Pyrczak Publishing.

RCC (2021). *Study on Youth Employment in the Western Balkans.* Retrieved on 28.06.2023 from Regional Cooperation Council | Study on Youth Employment in the Western Balkans (rcc.int).

Salkind, N. J. (2010). *Encyclopedia of Research Design (Vol. 2).* Los Angeles: Sage.

Stockmann, R. (2007). *Handbuch zur Evaluation. Eine praktische Handlungsanleitung.*
Münster: Waxmann Verlag GmbH.

Tabachnik, B.G. & Fidell, L.S. (2007). *Using Multivariate Statistics (5th ed.).* Boston: Pearson Education.
Verma, J. P. (2015). Repeated Measures Design for Empirical Researchers (1st ed.). Wiley.

Warner, R. M. (2012). *Applied Statistics: From Bivariate Through Multivariate Techniques (2nd ed.).*
Sage Publications Ltd.