



Justyna Kuztal

<https://orcid.org/0000-0001-9493-7504>
Jagiellonian University in Krakow, Poland
justyna.kuztal@uj.edu.pl

Małgorzata Piasecka

<https://orcid.org/0000-0001-9532-489X>
Jagiellonian University in Krakow, Poland
malgorzata.piasecka@uj.edu.pl

Łukasz Szwejka

<https://orcid.org/0000-0001-5168-3372>
Jagiellonian University in Krakow, Poland
lukasz.szwejka@uj.edu.pl

Evaluation of the Educational and Preventive Programme for Students of the Fourth Year of Primary School and Recommendations for Practice (pp. 191–211)

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Abstract

Research objectives (aims) and problem(s): The aim of the article is to present the results of an evaluation study of an educational and preventive programme implemented in eight year 4 groups in six Krakow primary schools. The programme, entitled KOTWICA, ran from December 2021 to June 2022. The evaluation was external and comprehensive. During the programme, the evaluation of the process and of the outcome were carried out in the pre-test–post-test format. The research question is “what are the results of the evaluation of the KOTWICA educational and preventive programme for students of the fourth year of primary school?”

Research methods: Eight proprietary tools were used to evaluate the process, and two standardised tools were used to evaluate the result. The collected material was subjected to statistical processing, whilst the qualitative data was encoded, categorised and analysed using tools for qualitative data analysis.

Structure of the article: At the beginning, the authors justify the undertaking of the research and introduce the subject of the study on the basis of theoretical findings and the state of research in the field of school prevention. Then the research objectives are described and the research problem is defined. In turn, the research method, the selection criteria for the study group and the principles of data collection and processing are described. The results of the research and the limitations of the research process were also described. Finally, the conclusions of the research and recommendations for the theory and policy of school prevention are described.

Research findings and their impact on the development of educational sciences: The results of the evaluation allow us to conclude that the objective of the educational and preventive programme conducted in year 4 was achieved and that it met the needs of the participants. However, they do not allow us to draw clear conclusions as to the effectiveness of the educational activities, due to the limitations of the collected research material.

Conclusions and/or recommendations: In the light of the results, the authors drew conclusions regarding the methodology of evaluation studies and recommendations for preventive and educational practice.

Keywords: process evaluation, outcome evaluation, primary school, preventive programs, students

Introduction

The subject of the article is the results of an evaluation study of an educational and preventive programme entitled KOTWICA [Anchor], implemented in the 2021/2022 school year in primary schools in Krakow. The programme was planned to directly cover 200 students (eight year

4 groups) and their parents as indirect recipients; it was carried out by 14 teachers and six school specialists. The programme was run by specialist educators and psychologists from the Specialised Psychological and Pedagogical Counselling Centre “Krakowski Ośrodek Terapii”, who are highly qualified and have many years of professional experience in the education system for children and adolescents.

Schools and educational institutions conducting preventive activities is the basic function of the education system in Poland, next to the didactic (educational), upbringing and care functions. “The provisions of the Education Law, by introducing the legal institution of an educational and preventive programme, meet the need for an integrated view of educational and preventive activities at school as an environment for the teaching, upbringing and development of a young person” (Turczyk, 2020, p. 86). Implementing the educational and preventive programme in schools and educational institutions in Poland is a statutory obligation resulting from Article 26 of the Education Law (2016). The educational and preventive programme is a

legally guaranteed tool with which all schools and institutions [...] secure the educational space of students. This programme should include both content and activities addressed to students of an educational nature, as well as those addressed to students, teachers and parents with a preventive function. (Turczyk, 2020, p. 81)

The educational and preventive programme should be based on an annual diagnosis of students’ needs, risk factors and protective factors, and should include content and activities addressed to students, their parents and teachers. The Education Law (2016) does not describe how the programme should be evaluated. The guidelines for preparing an educational and preventive programme recommend that conclusions from the evaluation of the programme from the previous school year should be included in the educational and preventive programme in a given school year (Serwis Rzeczypospolitej Polskiej, n.d.). In the absence of a legal obligation to evaluate the educational and preventive programme in schools,

it can still be assumed that preventive activities should be evaluated, because it is also required to be based on scientific grounds and programmes with proven effectiveness (Barczykowska & Dzierżyńska-Breś, 2013, p. 132). Schools can use recommended prevention programmes, and these programmes – implemented by external groups or specialists – are evaluated in accordance with their assumptions (KCPU, n.d.). Above all, however, the obligation to evaluate the prevention programme is included in the European Quality Standards in Drug Addiction Prevention, according to which evaluation is the “systematic collection, processing and analysis of data needed to assess the degree and ways of achieving the objectives of a given intervention” (Europejskie Centrum Monitorowania Narkotyków i Narkomanii & Krajowe Biuro ds. Przeciwdziałania Narkomanii, 2011, p. 259). Evaluation is important in ensuring the quality of the programme, and “these standards indicate the individual elements that should characterise research in the field of process evaluation and evaluation of the result at the basic and specialist level” (Piasecka, 2022, p. 35). Referring to the highest methodological requirements of evaluation, it is recommended to conduct research in the pre-test–post-test format with a deferred measurement with a control group (Borucka & Kehl, 2021, pp. 37–52; Sharma et al., 2022; Shek et al., 2016).

An analysis of the contemporary literature on the subject of school prevention and the prevention of risky behaviours or addictions, specifically the ways of defining evaluations depending on the goals (Guyadeen & Seasons, 2016, pp. 99–100; Hawkins & Nederhood, 1994, p. 14), it can be stated that

conducting evaluation studies contributes to strengthening preventive and therapeutic services by increasing their effectiveness, as well as adapting them to the needs of their recipients, whilst giving the opportunity to plan and implement activities with respect for their subjectivity, dignity and autonomy. Authentic evaluation also becomes the basis for conscious reflection on one’s own actions, on the basis of which a space for development is created. (Piasecka, 2022, p. 35)

The aim of the research and research issues

The process was evaluated in order to determine the scope of coverage of the target group and the participants' acceptance of the programme (including the appropriateness of the content and materials, the strengths and weaknesses of the programme and the level of satisfaction with it), as well as to assess the compliance of the programme structure with the assumptions. Such goals made it possible to monitor possible disruptive factors resulting from incorrect implementation of the programme that could affect the programme's effectiveness.

The evaluation served to answer the research questions: 1. To what extent did the participants represent the target group? 2. To what extent was the programme carried out in accordance with the plan? 3. What are the opinions of the participants and teachers/specialists about the programme? The following qualitative variables were selected from the research issues for the evaluation: the structure of the programme, the course of the programme implemented by teachers in school classes, the course of training for teachers and pedagogues/school psychologists, the course of meetings between parents and pedagogues/school psychologists, the programme's strengths and weaknesses and the appropriateness of the proposed support to the organisers' expectations. The indicators for the research variables were responses on questionnaires and observation questionnaires addressed to the organisers, trainers and students (i.e. direct addressees) and their parents.

The outcome evaluation addressed the research question about the change caused by the programme: What is the sense of personal competence among the year 4 primary school students, including their skills in understanding, naming and expressing emotions and recognising conflict situations and constructive conflict resolution strategies? In the research plan for evaluating the outcome, the KOTWICA programme was defined as the independent variable. It was assumed that participating in the programme would affect the dependent variable, the personal competence of students, whilst the indicators for the variables were the respondents' answers to the questionnaires.

Criteria and method of recruiting the subjects

The recruitment criterion for the study as part of the evaluation was the addressees' and organisers' prior participation in the programme. The exclusion criterion was a lack of consent to take part in the research. The research covered teachers who conducted classes with year 4 students, psychologists and educators from primary schools (specialists) where the programme was implemented and students – the direct addressees of the programme – who were covered only by the research as part of the evaluation of the result. Sixteen women were qualified for the KOTWICA programme in the recruitment process: 10 teachers and six specialists (three psychologists and three educators).

Six primary schools from Krakow took part in the programme, which was implemented in eight year 4 groups, as one of the primary schools had three participating groups. The year 4 groups were not equal in number, ranging from 13 to 28 students, with teachers in the recruitment process indicating classes up to 25 students. This high number of students is related to the influx of students from refugee families.

Data collection and analysis methods

The evaluation study was carried out using the survey method, to collect opinions on the programme in schools, and the qualitative observation method. The tools used in the evaluation process were proprietary and prepared only for the purposes of evaluation: (1) recruitment questionnaire – 16 forms were collected, (2) observation forms for teachers (concerning classes with students) – 45 were collected, (3) observation forms for teachers (concerning meetings with parents) – 5 were collected, (4) observation forms for trainers (concerning training for teachers) – 7 were collected, (5) evaluation surveys concerning the programme addressed to teachers – 0 were collected, (6) evaluation surveys regarding meetings addressed to parents – 15 were collected, (7) a list of teachers and specialists attending the training (analysed together with the

recruitment sheet) – complete research material from 4 meetings was collected and (8) trainer interview questionnaires – 1 questionnaire of the interview with the coordinator was completed after the training for teachers.

The analysis of data collected using observation forms for teachers after meetings with parents included 5 observations, which means that almost all specialists reported on meetings with parents, as it was part of the KOTWICA programme. In total, 115 parents attended school meetings, and it was planned that all parents of participating students would be informed of the programme.

Seven observations were included in the analysis of data collected using observation forms intended for trainers (after training for teachers).

The evaluation surveys from meetings with parents indicate relatively low involvement of parents in the KOTWICA programme, as evidenced by the fact that 15 statements were collected from parents after the end of the programme. Five meetings were planned for parents during the programme (four informational meetings and one summary meeting). These meetings did not take place; in some classes it was possible to organise a final meeting, and in one of the classes it was possible to organise an initial and a final meeting, with some parents present at only one. It was assumed that more observation forms would be returned.

A total of 45 observation sheets from teachers after classes with students were analysed, which was in line with the assumptions.

The following research tools were used to evaluate the result:

1. The Anger Expression Scale (SEG) by Zygryd Juczyński and Nina Ogińska-Bulik (Juczyński, 2001; Ogińska-Bulik & Juczyński, 2012) – “The SEG is a tool for children aged 11 and over and for teenagers. It consists of 20 statements included in two subscales: external anger (10 items), inner anger (10 items)”. Reliability for external anger was $\alpha = 0.78$ and for inner anger $\alpha = 0.72$.
2. Zygryd Juczyński’s Personal Competence Scale (KompOs) (Juczyński, 2001; Juczyński, 2012) – “KompOs measures generalised self-efficacy; it also allows to obtain results in two subscales concerning having the force necessary to initiate action and the perseverance necessary

to continue the action". Reliability for the force factor was $\alpha = 0.74$, for the persistence index $\alpha = 0.62$ and for the overall score $\alpha = 0.72$.

In the methodological assumptions of the outcome evaluation, about 150 observations in the pre-test and 150 in the post-test were planned to be collected. However, due to the low return rate, a clear disproportion was observed between the sample size in the first and second measurements. At the start of the intervention, between 128 and 143 complete observations were collected. On the other hand, in the second measurement, it was only 37 to 51. This factor significantly hindered full conclusions about the effectiveness of the KOTWICA programme.

The analysis of quantitative data included statistical description and statistical inference samples (dependent samples t-test). Calculations were made in IBM SPSS Statistics 28.

Quantitative and qualitative data were collected with the help of programme organisers and trainers. During the recruitment process, the subjects completed a recruitment questionnaire, which included questions about their expectations, and the trainers prepared attendance lists during the training meetings. During the first training session, teachers received observation sheets, which they were to complete after each class with students, as well as after meetings with parents. After each training module, trainers were required to fill in observation sheets. At the end of the whole series of training for teachers, they filled in evaluation questionnaires concerning the training in which they had participated. During meetings between teachers and parents, the parents were asked to complete an evaluation questionnaire regarding their satisfaction with the programme, its strengths and weaknesses and whether it met their expectations. Questionnaires for outcome evaluation were distributed to students before the first classes and after the last classes by the teachers running the programme.

In the course of the research, it was not possible to obtain a complete set of data from all planned sources.

Results

The results illustrate the answers to the research questions: (1) To what extent did the participants represent the target group? (2) To what extent was the programme carried out as planned? and (3) What are the opinions of the participants/organisers about the programme?

The implementation of the programme among year 4 pupils (the target group) proceeded in accordance with the plan, maintaining the structure of the scenarios and the exercises provided for within them. Meetings with parents, an integral element of the programme, were not carried out in accordance with the initial assumptions. Thus, irregularities in this respect should be considered a disruptive factor and may have impacted the effectiveness of the programme.

The teachers positively assessed the programme in terms of both content and didactic materials. The weakness of the programme – according to the teachers – was the amount of content to be completed in a predetermined time. The strength of the programme was its narrative layer and methodological attractiveness being adapted to the age of the addressees. The teachers indicated that the students were involved and interested.

Due to deficiencies in the collected data, it is impossible to determine the parents' level of acceptability of the programme. Parental involvement in the programme was relatively low, and not all scheduled meetings were carried out.

An integral part of the programme was the training system for the teachers. However, due to the fact that the trainers did not conduct the training in line with a single, universal training plan, it is difficult to determine whether it was conducted in accordance with the assumptions.

The outcome evaluation illustrates the answer to the research question: What is the sense of personal competence among the year 4 primary school students, including the skills in understanding, naming and expressing emotions and recognising conflict situations and constructive conflict resolution strategies?

Statistical description of the sample

Due to the large data gaps, the sample size should be understood as the number of complete observations allowing for the calculation of individual parameters. This means that the sample size changed depending on the scale in question.

Table 1 presents basic statistics describing the results from the KompOs and the SEG before the intervention. These parameters do not indicate any major issues. Although the empirical distribution differs in shape from the normal distribution, its skewness and kurtosis do not indicate significant deviations of the empirical distribution from the theoretical.

Table 1. KompOs descriptive statistics for the pre-test

Scale name	n	m	me	sd	skewness	kurtosis	min	max	p ^a
Force factor	139	16.58	17	3.61	-0.490	-0.278	7	24	<0.001
Perseverance factor	136	17.89	18	3.54	-0.387	-0.347	9.00	24.00	0.005
Overall score	128	34.45	35	5.80	-0.414	-0.164	19.00	47.00	0.013

^a Significance is given for the Kolmogorov–Smirnov test.

Table 2. Descriptive statistics of the SEG scale for the pre-test

Scale name	n	m	me	sd	skewness	kurtosis	min	max	p ^a
External anger	143	21.86	21	7.61	0.793	0.391	10	49	<0.001
Inner anger	135	32.93	35	7.73	-0.495	-0.163	10	46	0.001

^a Significance is given for the Kolmogorov–Smirnov test.

Similar parameters were generated for the second measurement (post-test). In this case, for the force factor, excessive “slenderness” of the distribution (leptokurtic distribution) was observed, with simultaneous left-skewness. On the other hand, the persistence factor is characterised

by a shape close to normal. Similarly, the results for the SEG test do not deviate from the normal distribution either.

Table 3. KompOs descriptive statistics for the post-test

Scale name	n	m	me	sd	skewness	kurtosis	min	max	p ^a
Force factor	51	17.96	19	3.87	-1.421	2.450	6	24	<0.001
Perseverance factor	51	18.04	18	3.10	-0.181	-0.254	10	24	0.431
Overall score	47	36.11	37	5.85	-0.747	0.447	22	46	0.015

^a Significance for the Shapiro–Wilk test is reported.

Table 4. Descriptive statistics of the SEG scale for the post-test

Scale name	n	m	me	sd	skewness	kurtosis	min	max	pa
External anger	41	25.32	25	7.40	0.045	-.680	11	41	0.701
Inner anger	37	33.19	33	5.80	0.250	-.869	24	45	0.255

^a Significance for the Shapiro–Wilk test is reported.

As part of the statistical description, a Pearson’s r correlation matrix was also generated for all scales.

Table 5. Correlation coefficients

Scale name	1	2	3	4	5
1. Force factor (KompOs)	1	0.305*	0.812*	-0.304*	0.428*
2. Persistence factor (KompOs)		1	0.803*	-0.309*	0.335*
3. Overall score (KompOs)			1	-0.382*	0.489*
4. External anger (SEG)				1	-0.587*
5. Inner anger (SEG)					1

* p < 0.01

As a result of the correlations presented above, negative relationships can be observed between the KompOs test scales and external anger, with the strength of these relationships as moderate. An inverse relationship was observed in the case of positive associations between the KompOs test scales and inner anger. The higher the sense of competence was, the higher the inner anger was.

Comparison of pre-test and post-test results

Although in some cases the shape of the distribution differed from the normal one, it was decided to use Student's parametric t-test. This decision was dictated by the robustness of this test in breaking the assumption of normal distribution in the case of larger samples ($n > 30$). This property makes the result unbiased.

Table 6. Dependent t-test for the KompOs scale

Scale name	Pre-test		Post-test		t	df	p
	m	sd	m	sd			
Force factor	17.03	3.92	17.83	3.92	-1.156	35	NS
Perseverance factor	18.33	3.74	18.39	3.40	-0.096	35	NS
Overall score	35.38	6.50	36.26	6.29	-0.838	33	NS

As a result of the analysis, it was concluded that the level of personal competence did not change as a result of participating in the programme. Both the overall result for the test and the results for individual scales (strength factor and perseverance factor) turned out to be statistically insignificant. It should be noted, however, that the analysis was conducted on a small sample of 34 to 36 observations, taking into account the huge loss of observations compared to the initial sample (during the pre-test period, the KompOs questionnaire was completely filled in by 128 to 139 people).

Student's t-test was also performed to compare the significance of differences between measurements for the SEG scale. The results are presented in Table 7.

Table 7. Dependent t-test for the SEG scale

Scale name	Pre-test		Post-test		t	df	p
	m	sd	m	sd			
External anger	21.14	5.85	25.27	6.96	-3.526	36	<0.001
Inner anger	32.94	7.59	32.64	5.49	0.268	32	NS

In light of these results, it can be concluded that there was an increase in external anger among the students participating in the programme. Compared to the pre-test (m = 21.14; sd = 5.85), in the post-test period (m = 25.27; sd = 6.96) this feature increased on average by 4.13 points. However, the explanation of this relationship is difficult due to the large loss of observations. However, in the case of inner anger, the average difference turned out to be statistically insignificant.

Limitations of the research plan

In terms of the quantitative empirical material, the greatest barrier to drawing conclusions was the significant lack of data, which is presented in Table 8.

**Table 8. Number of observations in individual measurements
for the KompOs test**

Scale name	n pre-test	n post-test	n analysis
Force factor	139	51	36
Perseverance factor	136	51	36
Overall score	128	47	34

The greatest data loss was observed between the pre-test and the post-test. For the strength factor, the loss was 63.3%, which means that only 36.7% of students took the second measurement. In the case of the persistence factor, 37.5% of students took part in the post-test. On the other hand, for the general result, meaning the level of self-efficacy, 36.7% took the measurement made after the end of the intervention. Further data loss was observed at the stage of statistical inference. Student's t-test was used for repeated measurements, which required pairing of individual observations between the first and second measurements. In this case, the loss was also significant, which to some extent resulted from incorrectly conducting the research in one of the class divisions (providing students with the KompOs test only in the post-test).

A similar loss of data was observed in the case of the SEG test, which is presented in Table 9.

Table 9. Number of observations in individual measurements for the SEG test

Scale name	n pre-test	n post-test	n analysis
External anger	143	41	37
Inner anger	135	37	33

For the external anger scale, only 28.7% of the respondents took part in the second measurement, and for the inner anger scale it was 27.4%. In the case of the first scale, 90.2% of respondents were included in the analysis, whilst for the second scale it was 89.2%. With such significant data losses, statistical inference was burdened with a huge margin of error. For this reason, it would be necessary to determine what factors were decisive for the lack of a second measurement (post-test). Was this related to a significant part of the students opting out of the programme? Or was the intervention carried out, but for some reason the students did not complete the questionnaires? In addition, in future, teachers should be obliged to check the completeness of the questionnaires.

Conclusions and recommendations for practice

After analysing the data collected in the course of the evaluation using evaluation questionnaires addressed to teachers, trainers and parents of students involved in the programme, it can be concluded that the programme participants fully represented the target group of the programme. As a rule, the KOTWICA programme was implemented in schools according to the programme's design. In one of the schools, the programme was launched in December 2021; in other schools it was implemented from the second semester of the 2021/2022 school year.

The structure and content of the programme were not disturbed in any of the schools, although sometimes due to a lack of time, not all exercises were carried out according to plan. Another area of non-compliance with the assumptions of the programme was classes aimed at maintaining the effect of the programme, i.e. those involving children and parents, and the parents themselves. The organisers likely did not oversee these elements of the programme, which can be concluded from the parents' statements and the interview with the trainer.

The programme implementation plan included recruiting implementers, training them for three modules and (after each module) implementing it. Teams consisting of year 4 teachers (tutors) and a school specialist (at least one) took part in the recruitment process. The evaluation failed to identify whether and what activities the school specialists performed during the implementation of the programme.

An integral part of the programme was its evaluation, and although its course was planned in accordance with quality standards, both in relation to the evaluation of the process and the evaluation of the result, the evaluation study was not carried out as planned. Irregularities can be identified even at the stage of training with trainers, and as a consequence, the feedback of evaluation surveys, documentation of cooperation with parents and limited feedback of tests for evaluating the outcomes (SEG and KompOs) resulted in the practical impossibility of drawing conclusions about the effectiveness of the programme.

The opinions of the organisers about the programme were definitely positive, as were the few opinions of parents (the indirect recipients). In terms of raising the students' knowledge, the programme responded to the expectations of parents and the organisers themselves, i.e. teachers and school specialists.

After analysing the answers on the questionnaires for teachers, it can undoubtedly be concluded that the support offered by the KOTWICA programme met their expectations. An in-depth analysis of the recruitment form, forms for trainers and questionnaires for teachers indicated the need to support teachers in their educational and preventive work in year 4. Positive evaluations of the programme, both at the stage of its presentation during training and at the stage of its implementation and evaluation, clearly indicated the adequacy of the support provided to them in this respect.

The results from the two research tools, the SEG and KompOs, in principle answer the research question regarding the sense of personal competence of year 4 primary school students, including the ability to understand, name and express emotions and recognise conflict situations and constructive conflict resolution strategies.

The results of the quantitative research did not clearly determine the effectiveness of the KOTWICA educational and preventive programme, which was largely due to the missing data. However, in order to understand the results, ranges were prepared taking into account the intensity of personal competences and ranges for the subscales of the strength factor and the perseverance factor. The overwhelming majority of the children in the study had a moderate or high score. This property may partly explain the lack of change in personal competences as a result of participating in the programme, as the initial level of self-efficacy was relatively high. Detailed data are presented in Table 10.

Table 10. Ranges for the KompOs scale

Scale name	Low level		Moderate level		High level	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Force factor	14	10	80	57.6	45	32.4
Perseverance factor	6	4.4	69	50.7	61	44.9
Overall score	6	4.7	70	54.7	52	40.6

Similarly, ranges were prepared taking into account the intensity of anger. In the case of external anger, most of the respondents obtained low or moderate results. Only 5.6% of the respondents obtained a high score. From this perspective, one can understand why the score for external anger was higher in the second measurement (post-test). The so-called “floor effect” may have played a role here, as there is a risk that if low values predominate, subsequent measurements may yield higher results, i.e. results closer to the population average. In contrast, for inner anger, the scores were more evenly distributed. Detailed data are presented in Table 11.

Table 11. Ranges for the SEG scale

Scale name	Low level		Moderate level		High level	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
External anger	89	62,2	46	32,2	8	5,6
Inner anger	14	10,4	71	52,6	50	37

The intensity of the individual variables in the first measurement and the large loss of data in the second made it much more difficult to demonstrate the degree of effectiveness of the KOTWICA programme. In this context, the sample size was estimated based on the parameters obtained from children who took part in both measurements. For the standard significance level ($\alpha = 0.05$) and a test power of 0.8, the sample should consist

of 217 pairs of observations (for the force factor), i.e. people completing the questionnaires in both measurements. For the persistence factor, the sample should contain 26,038 pairs, and for the overall score, 389 pairs. Of course, these figures, especially with regard to the persistence factor, are difficult to achieve in practice. They only show that collecting a sample from the range of about 200–400 observations could give more satisfactory results on the effectiveness of this intervention.

The results allow us to assume that external anger increased significantly among the students participating in the programme. Compared to the pre-test ($m = 21.14$; $sd = 5.85$), this feature increased on average by 4.13 points in the post-test ($m = 25.27$; $sd = 6.96$). This relationship is difficult to explain unequivocally due to the large loss of data. In the case of inner anger, the average difference turned out to be statistically insignificant. Similar assumptions were made for the estimation of the sample size for the SEG test. In this case, only the value for a statistically insignificant scale, i.e. inner anger, was estimated. The differences between the means for the pre-test and post-test were so small that obtaining a statistically significant result would have required the inclusion of 4,530 pairs of observations.

Based on the collected data and their interpretation, the following recommendations can be made:

- Develop a coherent and repeatable training system for programme organisers, including materials and a manual for trainers, which will help unify the competences transferred to run the programme in each session of the training.
- During training sessions for organisers, emphasise the role of activities addressed to parents, motivate future organisers to encourage parents to actively participate in the programme and clearly define the tasks of the specialists involved in the programme and the scope of cooperation between them and the teachers.
- During training sessions, add an element related to the need to carry out an evaluation study and emphasise its usefulness for improving practice.

- Before the next implementation of the programme, refine the elements indicated in these recommendations. The justification for this recommendation is the fact that during the evaluation, incomplete implementation of the programme in accordance with its course was noted (deviations in the implementation of scenarios for students and marginal implementation of activities addressed to parents), which means that it is not possible to fully identify the reasons for the failure to achieve the objectives.
- Re-test in order to determine the effectiveness of the programme.
- Incorporate recommendations from previous programmes into subsequent programmes, conducting research in the experimental scheme (experimental group/control group with measurement before the start of the programme, immediately after its completion and 3 months after the end of the programme).

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References

- Barczykowska A. & Dzierżyńska-Breś S. (2013). Profilaktyka oparta na wynikach badań naukowych (evidence based practice). [Research-based prevention]. *Resocjalizacja Polska (Polish Journal of Social Rehabilitation)*, 4, 131–152.
- Borucka, A. & Kehl, B. (2021). *Ewaluacja programów profilaktycznych i promocji zdrowia psychicznego adresowanych do dzieci i młodzieży – wybrane zagadnienia*. [Evaluation of mental health prevention and promotion programmes addressed to children and youth – selected issues] *Dziecko Krzywdzone Teoria, badania, praktyka* 20(3), 37–52.
- Europejskie Centrum Monitorowania Narkotyków i Narkomanii & Krajowe Biuro ds. Przeciwdziałania Narkomanii (2011). Europejskie standardy jakości w profilaktyce uzależnień od narkotyków. Podręcznik dla specjalistów profilaktyki uzależnień [European drug prevention quality standards a manual for prevention professionals].
- Guyadeen, D. & Seasons, M.L. (2016). Evaluating theory and practice: Comparing program evaluation and evaluation in planning. *Journal of Planning Education and Research*, 38(1), 99–100. <https://doi.org/10.1177/0739456X16675930>
- Hawkins, J.D. & Netherhood, B. (1994). *Podręcznik ewaluacji programów profilaktycznych. Nadużywanie substancji uzależniających i inne problemy społeczne* [Manual for the evaluation of preventive programmes. Substance abuse and other social problems], (K. Okulicz-Kozaryn, K. Ostaszewski, A. Pisarska, Trans.). Instytut Psychiatrii i Neurologii.
- Juczyński, Z. (2001). *Narzędzia pomiaru w promocji i psychologii zdrowia* [Measurement tools in health promotion and psychology], Pracownia Testów Psychologicznych Polskiego Towarzystwa Psychologicznego.
- Juczyński, Z. (2012). *KompOs. Skala Kompetencji Osobistej* [KompOs. Personal Competence Scale]. Retrieved March 06, 2023 from <https://www.practest.com.pl/sklep/test/KompOs>
- Krajowe Centrum Przeciwdziałania Uzależnieniom (KCPU) (n. d.). *Programy rekomendowane* [Recommended programmes]. Retrieved February 27, 2023 from <https://www.programyrekomendowane.pl>
- Ogińska-Bulik, N. & Juczyński, Z. (2012). *SEG Skala Ekspresji Gniewu* [SEG Anger Expression Scale]. Retrieved March 06, 2023 from <https://www.practest.com.pl/sklep/test/SEG>

- Piasecka, M. (2022). Ewaluacja – jej użyteczność, definiowanie oraz obszary zastosowania [Evaluation – its usefulness, definition and areas of application], In Piasecka M., Kusztal J. & Piątek K., *Ewaluacja w profilaktyce i terapii zaburzeń behawioralnych* [Evaluation in the prevention and treatment of behavioural disorders], (pp. 34–35). Oficyna Wydawnicza Impuls.
- Serwis Rzeczypospolitej Polskiej. (n.d.). *Ramowy schemat programu wychowawczo-profilaktycznego*, [A framework scheme of the educational and preventive programme]. Retrieved 15 February, 2022 from <https://www.gov.pl/web/cea/ramowy-schemat-programu-wychowawczo-profilaktycznego>
- Sharma M.K., Anand N., Tadpatrikar A., Marimuthu P. & Narayanan G. (2022). Effectiveness of multimodal psychotherapeutic intervention for Internet gaming disorder. *Psychiatry Research*, 314, 1–10. <https://doi.org/10.1016/j.psychres.2022.114619>
- Shek D.T.L., Yu L., Leung H., Wu F.K.Y. & Law M.Y.M. (2016). Development, implementation, and evaluation of a multi-addiction prevention program for primary school students in Hong Kong: the B.E.S.T. Teen Program. *Asian Journal of Gambling Issues and Public Health*, 6(1),1–17. DOI 10.1186/s40405-016-0014-z
- Turczyk, M. (2020). Podstawy prawne działalności profilaktycznej szkół i instytucji edukacyjnych [Legal basis of preventive activity of schools and educational institutions], In Borkowska-Żebrowska M., Czaczur K., Kusztal J., Piasecka M. & Turczyk M., *Bezpieczny uczeń w Krakowie. Analiza zasobów środowiskowych w zakresie profilaktyki w szkole* [A safe student in Krakow. Analysis of environmental resources in the field of prevention at school], (pp. 79–84). Oficyna Wydawnicza Impuls.
- Ustawa z dnia 14 grudnia 2016 Prawo oświatowe, tj. Dz.U. 2021, poz. 1082 [Act of 14 December 2016 – Education Law (Journal of Laws of 2021, item 1082)]. (2016).