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ABSTRACT

Goals: Several smaller or larger drug prevention programmes – based on different theories, approaches and methods, offered to different target groups – have been established in Hungary as an answer to the spread of drug consumption. But no exact descriptions or evaluation have followed the increasing number of drug prevention programmes.

The direct aim of our work was to analyse and evaluate school prevention programmes operating in Budapest, targeted directly at students (5–12th grade). This study contains the results of the survey and the general experience.

Process: When defining the main stages of the research and selecting the appropriate methods we applied the evaluation recommendations for drug prevention programmes issued by the European Monitoring Centre for Drugs and Drug Addiction and took the national experience gained in other non-profit fields into consideration.

Persons involved: We involved the leaders of the interventions, or the representatives of the organisations, the animators, and the target population. In the case of the seven evaluated programmes we worked with all those animators who took part in the programme during the time of the research. We also questioned the entire student population participating in the interventions.

Method: We evaluated the theoretical background of the programmes based on structured information sheets, which mainly contained the objectives of the programme, the theoretical background of them, and the applied methods. The organisational evaluation was based on the interviews with the programme leaders and the analysis of other documents. During the process evaluation we applied different methods such as structured monitoring, short survey of the animators to test subjective indicators, post-questionnaires for the student to follow the reactions. The outcome evaluation was based on the pre- and post-questionnaires of the students which contained questions to the final and specific objectives of the programmes as well. We completed the quantitative results with the qualitative information of the focus-group interviews among the students.

Research was conducted by the Behaviour Research Centre at the Budapest University of Economic Sciences, financed by the Drug Coordination Department of the Youth and Sport Ministry.
We used the SPSS program package for processing the pre- and post-questionnaires.

Results, conclusions: Our research, conducted according to the international standards, is a detailed and systematic description of the school prevention programmes in Budapest. It contains the process and outcome evaluation of a narrow range of the programmes and summarises our experience in connection with the methodology of planning and evaluating prevention interventions. Beyond collecting the programmes for the registry and describing them specifically, our research highlighted that the different evaluation aspects complement each other. If we take them out of context and try to apply them individually we can only receive partial information about the programme. The survey also pointed out that it is of great importance to be familiar with the target population when evaluating the effective intervention – the expected reactions and the impact on the objective-variables.

KEY WORDS: evaluation of drug prevention intervention, theoretical evaluation, organisation-sociology evaluation, process evaluation, outcome evaluation, connection between different testing methods
Introduction – purposes of the research

Several smaller or larger drug prevention programmes – based on different theories, approaches and methods, offered to different target groups – have been established in Hungary as an answer to the spread of drug consumption (e.g. Hibbel et al. 1996, Elekes-Paksi 1999, 2000a,b, Hibbel et al. 2001, Paksi 2001a).

But no exact descriptions or evaluation have followed the increasing number of drug prevention programmes. On the one hand, registration of the programmes is still not complete\(^2\). On the other hand, it is not structured according to the information necessary for decision-making when choosing a programme. We do not know the coverage of the individual programmes – what percentage of the young people is targeted and has been reached so far. We also have only little and mostly indirect information about the impact of the programmes (Hungarian Gallup Institute 1998, Elekes, Paksi 2000a).

The first methods of evaluation concentrate mainly on analysing reactions of the target group (Gábor-Demetrovics, 2000; Demetrovics-Gábor, 2000, 2001, Bácskai-Gerevich 2000), in fact no research has ever measured the real effectiveness of the programmes yet. It means that “it is still unknown where drug prevention and health improving programmes are run, who participate in these and how effective they are” (National Drug Strategy p.55.). Another problem is that “recent Hungarian professional traditions do not appreciate the evaluating, task-reconsidering attitude.” (Bácskai-Gerevich 2000. p.208)

The following survey – conducted in 2001 – could not assume to reveal, analyse or even evaluate the entire Hungarian drug prevention network, but tried to make the first steps.

The direct aim of our work was to analyse and evaluate school prevention programmes operating in Budapest, targeted directly at students (5–12\(^{th}\) grade). This study contains the results of the survey and the general experience.

\(^2\) The most well-known information bulletin called Droginfó (1999-2000) is likely to contain 80 per cent of the operating organisations – as stated by the editor of the bulletin.
Description of the research – the applied evaluation tools and methods

When defining the main stages of the research and selecting the appropriate methods we applied the evaluation recommendations for drug prevention programmes issued by the *European Monitoring Centre for Drugs and Drug Addiction* (EMCDDA 1998, Baker et al. 1998, Neaman et al. 2000) and took the national experience gained in other non-profit fields (e.g. Czakó 1992) into consideration. We use the same range of definitions applied by EMCDDA.

Our survey can be divided into two separate parts according to the main purposes.

- At the first stage we explored the drug prevention programmes directed to the 5–12\textsuperscript{th} grade students in the capital as a final target population and prepared descriptions of the programmes – according to the international standards –, theoretical analysis and evaluation. The main result of the first period is a registry, which contains not only descriptive but also rating information about the theoretical background of the programmes.

- In the second step we carried out the detailed process and outcome evaluation of seven programmes of different types selected from the collected and theoretically analysed registry mentioned above, using mainly objective- and reaction-monitoring elements. We strove for adjustment to the international standards and comparability of the programmes but did not ignore the specialities of the different types either.

The following illustration shows the research design and the connections between the different stages.
**Research design**

- Exploration of school prevention programs
  - REGISTRY

- Analysis of the theoretical backgrounds
  - THEORETICAL EVALUATION

- PROCESS AND OUTCOME EVALUATION OF THE SELECTED PROGRAMS

- OUTSIDE FACTORS – ANALYSING SOCIAL ENVIRONMENT

- ANALYSING ORGANISATIONAL FEATURES OF THE EXECUTING ORGANISATIONS

- PRE-TEST

- MONITORING INTERVENTION

- POST-TEST

- SUMMARISING THE EXPERIENCE OF THE PROCESS AND OUTCOME EVALUATION
When setting up the registry of school prevention programmes operating with a final student population in the capital we found altogether 27 organisations offering 44 different programmes and collected information about their theoretical background, as well.

Analysis of the programmes’ theoretical background

In this phase three physiology experts independently rated the 44 programmes on a 5-grade scale with help of their information sheets based on ten predefined criteria. We calculated the mean values from the points given by the experts reflecting each aspect. Then we used these final ratings when we tested the implementation and outcome of the programmes in the context of the theoretical background and other attributes.

The main aspects of the analysis are as follows:

✓ How clear is the final objective of the programme?
✓ How adequate are the special objectives considering the final objective?
✓ How coherent is the described concept?
✓ Does the concept fit into the special objectives?
✓ Are the described methods adequate in view of the special objectives and the entire concept?
✓ Is the defined length of time reasonable when considering the individual objectives?
✓ Is the defined size of groups reasonable considering the objectives and methods?
✓ Is the programme suitable for the characteristics of the target population?
✓ Are the information sources necessary to run the programme well chosen by the organisation?
✓ Are the qualities of the staff satisfactory considering the objectives and methods (age, qualification etc.)

In the following we outline the generally characteristic tendencies for each aspect.
- **Final objective**

Favourable ratings were given to the programmes where the final objective was clearly and unambiguously defined. The average value of the tested programmes was 4.2. It means that the final objective was mostly well-defined. Grade 4 and 5 turned up frequently, 8 programmes were given less than 4 (2 of them less than 3). Experts could establish that the majority of the organisations is able to define the final goal of their programmes but as we will see much more problems occur when they describe the specific objectives.

- **The specific objectives considering the final goal**

The values given for the description of the specific objectives are significantly lower. The mean was 3.6 but 3.3 points were given the most frequently. We generally experienced that the specific objectives often seemed to be unreasonable in view of the clearly defined final goal.

- **Coherence of the concept and the specific objectives**

Rating the coherence of the entire concept is in accordance with the above-mentioned tendencies. The mean was 3.6. The difference was only a few decimal points when compared to the rating of the specific objectives. When analysing the connection between the concept and the specific objectives we could observe the same tendencies. The mean was 3.7 in this case.

As a conclusion we can establish that the organisations have problems when describing the theoretical concept and harmonising it with the objectives. They often listed bibliography or quotations from handbooks on the information sheet that did not fit into the objectives.

- **The methods**

The ratings given to the methods are practically equal to the coherence of the concept and objectives. The mean is 3.6.

We must add that the standard deviation of the means is rather high, almost 1 scale-point. The given grades practically cover the whole scale (minimum values are near 1, the maximum of each aspect is 5). It means that the coherence of the different programme dimensions (final and specific objectives, concept, and methods) varies considerably.
- *The time dimension in connection with the objectives*

In the opinion of the experts the time dimension proved to be the best tool of measurement. This aspect showed most clearly how reasonable the structure of the programme is considering the objectives. And this aspect received the lowest ratings compared to all other aspects. The mean value is 3.1. Grade 4 or a better mark was given in the case of seven programmes.

- *The size of groups*

The size of groups seemed to be more adequate considering the objectives and the methods. The mean was 3.8. The majority of the programmes operate with classes that is have an appropriate size for groups in the opinion of the experts. The programmes that involve a smaller number of students than a class were given higher ratings than the average.

- *Evaluation considering the attributes of the target group*

The experts generally gave 3.8 points when analysing the characteristics of the target group and the structure of the programme. The most frequent grade was 4, the final values are between 2.7 and 5.

- *The necessary information sources*

When rating the described information sources needed to create a prevention programme the experts gave grades between 1.3 and 5 (mean is 3.3, modus is 3). These information sources generally contained some handbooks or results of earlier surveys. We rarely met with the direct questioning of the target population.

- *The employed staff*

We faced some difficulty when evaluating the employed staff because the information sheet contained date of birth, qualification and the character of work done. The experts could evaluate only 23 programmes. The mean of the points is 3.8, the given values are between 3 and 5. The highest ratings were given to the programmes that employed young prevention experts.
The main purpose of the research is to establish the evaluation protocol of school prevention programs and its methods in Hungary. The exploration of the programmes, the completion of the methodology of testing and the evaluation process had the same importance. Our work was directed by mostly qualitative and not quantitative factors.

In the second phase of the research we carried out the detailed process and outcome evaluation of seven programmes selected from the registry.

When selecting the programmes we followed the methodological consideration holding that the survey should involve as many types of the prevention interventions and the applied methods as it can.

There are considerable similarities and differences among the seven tested programmes.

Three programmes consist of several interventions and apply different approaches in an integrated way.

Two of the selected programmes are similarly complex, but they offer one, longer intervention. One of them consists of parallel programmes so not every student can participate in all of its elements. The other one provides each part of the programme to each student.

The last two programmes differ from the above-mentioned ones and from each other completely. One of them gives only information. The other programme applies only drama pedagogy.

In the following, we present the methods and results of the organisational, process and outcome evaluation in the case of the seven selected programmes.

**Organisational background of the assessed projects**

There exist no strict standards to the evaluation of organisations in the non-profit sector. While working out our own aspects, evaluation methods of the John Hopkins University Institute for Policy Studies (Baltimore) were applied. The purpose of this evaluation was not supervision. We were examining whether the conditions of the organisations’ stable and reliable operation do exist, whether the economic and organisational background of their activities is provided.
The tested organisations were – with one exception – founded in the second half of the 1990s, so they should be regarded as quite new ones. Nevertheless, they realise an income between HUF 2.1-17.7 million, which is typical to the Hungarian non-profit organisations; the income of three organisations does not reach HUF 3 million, and two other ones have resources at their disposal in the value of HUF 7-8 million. In comparison with the latest national statistics on non-profit organisations from 1999, it is obvious that the overall tendency of “the more recently the organisation has been founded the smaller its income is” is not valid.

The structure of the assessed organisations’ income also significantly differs from the average structure of the Hungarian non-profit organisations because there is hardly any which realises earnings coming from other sources than tenders. (According to the national average, proportion of earnings from tenders reaches 23% of the total income. Considering an organisation that is active exclusively in health-care, the proportion of subsidy can be put around 28.8%.) In respect of financing their operations, the above fact indicates a rather critical situation in case of all seven organisations. Ministerial calls for tenders serve as the only attainable resource. Disregarding a few corporate donations, private donations usually do not contribute to their income. Support coming from municipalities, abroad, enterprises or companies is insignificant. An interesting experience is that managers are unaware of available resources due to the lack of information about alternatives. Profit from fee charged for the basic activity, VAT re-requisition, transactions onto the Social Security Account, etc. are unknown notions, thus the management of such organisations does restrict itself to the settlement of tender money.

Organisations, however, have had a significant share in money called for tender. Health-care foundations and associations that gained money on tenders could realise an average income of HUF 2 million in 1999. From the above table it is clear that the organisations being subject to this survey have already had much more considerable amounts on their accounts. These organisations were quite well-represented on the tender “market”.

From the national statistics we can see that the magnitude of earnings gained on tenders and the number of employees hired by these organisations do show a positive correlation. Such a correlation, however, was not to be found among the organisations assessed by us. A reason for it can be the overwhelming nature of amounts obtained through tenders in the overall earning-structure of an organisation, the inherent instability and the long-term economic stability allowing employment are controversial facts within these organisations.
As for the operation of organisations assessed…

In respect of whether requirements – being also legally binding – are being met by non-profit organisations, three important factors are to be surveyed:

a) Prohibition on profit share

The organisations under assessment have not been taking out any profit-oriented activities, it means they realise no profit on services provided by themselves. As there has been no profit realised, nothing can be shared. It is obvious that organisations being active in the field of drug-prevention are merely interested in the success of the service they provide, not the realisation of financial profit. In case of foundations we have certainly experienced that their non-profit rating and the entailing legal category serves as a good tool for creating the financial background of a professionally well thought-out project, or of an already functioning one. This fact in itself has been the underlying reason for the set-up of quite a few organisations. We have also met one outstanding example of a foundation and a limited company working closely together. Other foundations and associations are usually established not for instrumental reasons, but explicitly for providing alternative services.

b) Private and non-governmental activity

Organisations can be described as either experts in the field of drug-prevention, or they have been brought alive by the initiation of teachers, doctors, psychologists who need to cope with the problems of the education of today’s youth on a day-to-day basis. Both commitments to the tasks of prevention and the intention for introducing foreign, and so far not widespread methods being worth implementing in the treatment of drug-addicts do create a firm base for these civil initiations.

Non-profit (NGO = non-governmental organisations) and the governmental sectors’ co-operation has been witnessed in the surveyed organisations: the government has been financing preventative activities from various funds, which – through a tendering process – then reach the organisations that are likely to accomplish the particular project, or fulfil their objectives on a high professional level. Each scheme and service under the implementation of these specific organisations is infeasible within the frame of the traditional Hungarian healthcare system.
The fact that in one of these health-care organisations the new OEP-financing system (National Healthcare Account) is just under implementation – i.e. the social security and the government jointly finance some of the organisation’s services – seems to contradict the above statement. It is clear from the case study on this implementation process that only part of the services are made possible through the above system, and it is still difficult to raise funds for covering the costs of prevention and health-care, areas that actually make medical activity complete. This case, at the same time, seems to demonstrate that consensus between civil initiations and the government can be established. During the interviews it has generally been stated by experts that the major obstacle of satisfactory communication is the prevalent ignorance in this field both on the side of the administration and teachers. Individuals and professional communities rival each other, and fund-raising can also be blamed for this. From the case studies it is clear, however, that large co-operating conglomerates of organisations can be set up for joint tenders, and temporary subcontractor-networks are created from tender money for the schemes to be implemented. (i.e. joint exposition at the Sziget Festival, or smaller foundations taking part in such networks as “out-workers”)

Should an organisation be of a “private” format, an extremely high level of flexibility is possible to be attained. The purpose of all co-operating partners is the same. In case there is no consensus, they leave the organisation behind. Partly the rules that are predictable from bureaucratic regulations, and partly the internal behavioural standards prevail as far as working order, rules and sanctions are concerned.

c) Voluntarism in work

Within the seven assessed organisations there were only six colleagues who made a living by working for a foundation. All of them started up the “non-profit” self-employment in order to accomplish their own initiatives. In all assessed organisations two further groups of employees can be observed: one of them is made up of experts who work on the basis of a work contract or invoice the employer for the accomplished work; the other group consists of volunteers who – for most of the time – work for either free, or for symbolic amounts, or receive the opportunity to complete their compulsory work placement in drug-prevention schemes as remuneration. There is difference among volunteers, too:

1. peer groups with the intention of helping out the ones in need are usually committed high-school students or undergraduates;
2. “professional” volunteers who hope to seize professional practice through the work for a foundation.

It is important to note that volunteers – as a consequence of the nature of the surveyed services – are not mere amateurs, they receive training, which they voluntarily undertake.

The functions of the tested organisations in drug prevention

Servicing function

In Hungary, drug prevention is not rooted far back in the past. Sprouts and frameworks of it have already been noticed in the national health-care, in the educational sphere and in the social security network. Local experts, however, found these frames much too limited, inflexible and difficult – in one word inadequate – to serve as a basis for proper services. They tried to achieve higher standards by applying different methods and different tools – like alternative therapies or the drama education scheme – based on experience coming from abroad. Higher standards are to be reached by more and more far-reaching work, this process is time-consuming, but the efforts in keeping the level of professional employment low against hiring great numbers of cheap volunteer workers maintains the service’s low price level. (A higher proportion of social workers as employees would certainly cause an increase in the service’s pricing.) Non-profit service-providing is obviously cheaper. The more colleagues attend to patients who are in need of help, the higher the costs go. At the same time, the more specialists are involved in such cases, the more significant achievements are to be expected, consequently the more efficient their work proves to be. (Ratio of expenditures and yield are not only to be counted in terms of money.)

Function of Innovation

Services provided by the surveyed organisations would have not been called upon in the governmental sector. Various individual therapies, training of peer groups, the drama education schemes, the drug bus are all brand-new tools in the field of the Hungarian drug prevention. It would be nonsense just to try and sell these as valuable and marketable services. The foundations in this assessment do operate as part of a quite extensive relationship-network, an attribute that especially goes to those that attend to drug consumers one by one. This relationship-network does include the organisations within the national
health-care system, organisations operating within the social security network, schools, the police and human rights societies: all that a drug consumer might get in touch with. Innovation of their activities also shows itself in the fact that the initiatives of these organisations do affect all partner-organisations. The institutional backgrounds of the social and health-care system are obsolete and not specialised enough. Due to the small number of receiving facilities, patients are not always admitted into the place most appropriate for the state of their health.

*Function of Interest Protection*

From the story of one particular organisation we gathered that in the beginning police constantly harassed them. Not only patients joining the club but also personnel were observed. Later on, this conflict was resolved, but generally speaking we can say that drug-related themes are approached with suspicion and distrust. Human rights activists and solicitors were taking an active part in founding the organisations working in this field. (e.g. close relationship exists between these organisations and TASZ – Society for Democratic Rights)

*Community-building Function*

Prevention, the youth’s education and public health education do have community-building effects. A key point of all organisations’ services is the mobilisation of the resources inherent in a cohesive target community in order to hinder drug-consumption (through making interactive learning and entertainment possible, through training activists, through setting up peer group based “emergency facilities”, through drama education, etc.).

*Managerial Function*

*Management* – in organisations where the co-operation of at least two or three employees must be co-ordinated – adheres to the democratic principles. It is important to note, that in the working-out of schemes needing co-operation of the psychological or medical staff, and in drama-educational works, opinion leaders are ultimately respected. All the other specialists are following him and identifying themselves with his professional instructions. Professional authority, however, doesn’t mean an autocratic situation within the organisation. Professional management of large organisations always settles conflicts and makes decisions through negotiation. Everyone questioned – no matter whether he/she is an opinion leader or not –
held it significant, that the person embodying professional authority always takes part co-operatively in all tasks. There have been and there will be concerns in professional questions, but these can be verbalised and we heard of only one case of a specialist’s dismissal because of giving voice to his opinion. Further causes of conflicts are the administrative burdens, meeting and making the personnel meet all requirements, and the guarantee to keep finances transparent. An important fact is that the management of such organisations is made up of people being present or future opinion-leaders in the special field of drug-prevention or youth protection. This is due to their ability, proven earlier, to build up international relationships. In contrast to the present trend, their carrier can be expected not to go on in higher education or administration, but within the ever-improving civil/non-profit sector which already offers promising perspectives for promotion, as well. Internal peculiarities: as typical to all tiny organisations, we noticed close professional and confidential relationships and friendships in the establishments subject to this survey. Open-mindedness, sincerity, patience, rigor in complying with rules, and last but not least qualification all contribute to the internal organisational spirit. These characteristics are essential for coping with special cases, patients. This is also a must for helpers of peer group members, for volunteers and the scholarship students. As only the most necessary elements of bureaucracy are present in the day-to-day work, rules take the shape of strict norms. (In most organisations there are written Internal Regulations of Operation) For volunteer workforce, perspectives within the organisation are clearly laid out. Let’s not forget the fact that volunteers only take part in the work in order to either gain professional experience, or to be able to present it towards committees in deciding position about foreign scholarships, that is to say they imagine their carrier outside the particular organisation they work for.

Disadvantages of the assessed organisations:

1. Partiality

While assessing different organisations, especially in the non-profit sector suspicion of partiality, beneficiary position, unfair favouring, positive or negative discrimination does arise. We didn’t meet such phenomenon during our surveying activity.

2. Paternalism

Analyses usually start out from the hypothesis that donor-organisations require a major influence for their money, thus the civil organisation loses its autonomy. We noticed a
different type of paternalism. We’ve understood earlier, that earnings in an overwhelming majority come from tenders. The Ministry of Education and Ministry for Youth and Sports are the ones the mainly call for tenders, and due to the non-existence of other available resources there is a great chance of developing financial dependence. The lack of alternative resources forces the organisations to be at the mercy of these ministries whose level of self-restriction and democracy determines the operation of the organisation they support.

3. Organisations being too professional or too amateurish

The staff is monitoring through process controls and assessing methods whether the qualitative requirements of professional work are being met by the norms of each occupation – doctor, psychologist, and teacher. In the civil sector, monitoring and assessment usually belong to the tasks of clients. There was only one organisation in whose work clients participated in an institutional form. In no other organisation occurred anything similar to this. In respect of managing financial matters, full amateurism can be observed. They usually refer to their accountant and he/she is usually the token of competence. The accountant, however, is only registering, it’s not him/her who invents the way business goes.

4. Difficulties in fund-raising

Some of the assessed foundations were established for the purpose of fund-raising. Resources, however, are scarce. The structure of organisational income is quite simple: tender money takes the first place. In connection with one foundation, the disadvantages of helping preventative activities came up: they do not intend to get in contact with drugs, because they think it a bad connotation which entails further disadvantages on the market. From the interviews we gathered the information that the main reason of rivalry among the organisations is the constant run for money.

5. Division of Responsibilities within the Organisation

Managing small organisations based on a bureaucratic order is impossible and does not make any sense at all. Internal relationship-network does build upon trust instead of legal standards. Meeting legal regulations has been the key point in accounting. The accountant’s role is highly overestimated as non-profit managers “suffer from the lack of corporate culture”.
Process Evaluation – examining the implementation of the programme

The aim and methods of evaluation and tested aspects

Process evaluation provides information on the implementation of preventive interventions. Evaluation in this phase shows whether the programme(s) run according to the plan, to what extent they reach the set goals considering reaching and involving students, and attracting their attention. In addition to that, process evaluation reflects the reactions and impressions of the students, whether they like and are satisfied with the programme. The applied indicators, however, do not show its effectiveness. Carrying out the programme according to plans, or being liked by students does not guarantee efficiency. Nevertheless, with useful pieces of information, process-evaluating indicators do contribute to a better understanding of the efficiency of interventions.

Considering the seven programmes examined in detail, the following fields are discussed below:

- efficiency of reaching the target group
- other indicators of involvement of participants
- planned vs. actual intervention – to what extent could goals of implementation be accomplished
- reactions, opinions and satisfaction of participants

Our analysis of process evaluation is based on observation, the questionnaires of the animators (animators of focus groups), the interviews conducted within the focus groups, and quantitative post-test data.

Efficiency of reaching the target group

The seven programmes examined in the period between May and June 2001 aimed at reaching more than 2000 students altogether, could finally reach 1691 youngsters.\(^3\) Reaching efficiency – as a standard term – however, can only be calculated in six cases due to technical

\(^3\) Based on pre-test numbers of students in classes.
The six programmes reached 1545 students from the intended 1722 according to the reports of the animators. The total reaching efficiency of the programmes counts up to 90 percent in which the percentage of the individual programmes ranges from 75 to 99 percent.

Students staying out of the programme are in fact the same students that were absent from school on the day of intervention. Relying on the qualitative information of the focus groups and our colleagues, the differences between the reaching effectiveness of different programmes can be attributed on the one hand to the circumstances of the implementation, and on the other hand to the attitude of teachers towards the prevention programme. An interesting fact is that while a controlled extramural location of the programme accompanied by the teachers positive attitude increases, less controllable conditions such as parallel running, alternative school events and the teachers neutral or negative attitude decreases the willingness of students to participate.

**Other indicators of involvement of participants**

When examining the effectiveness of prevention programmes interactivity always plays an important role in the special literature of the field. International experience shows that non-interactive programmes are actually ineffective, while interactive interventions have great influence on their target groups, and their cost/benefit ratio is better too. Interactivity in this case means that students are not just the audience of a lecture but take active part in the prevention programme. The animator draws the students into situations, practises skills and discusses emerging questions with the group. According to the literature of the field effective and ineffective programmes are distinguished by the extent of how much they are able to activate students, regard them as partners and involve opinion leaders of the same age group. (Tobler 1997)

Drawing on this experience we applied different indicators for measuring the programmes. On the one hand we measured the interactivity of students by formal indicators showing the

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4 Some problems with negotiating the schedule of the programme with one of the schools after the pre-test, predicted that the programme would not run in the examined period of time, but the next term. After time-consuming talks, in the end we could realise the programme in a reduced form, in six groups, as a parallel event with the school sport day, in the week before the last of the term. The deputy headmaster recruited volunteers for the programme therefore neither the target group, nor the participation rate can be defined and interpreted.
number of involved pupils and the rate of involvement. On the other hand dealing with interactivity as a content based factor we applied subjective indicators to show how much students felt they were involved and actively taking part of the prevention programme.

- **Rate of students in interaction during the programme – objective, formal indicators**

On the one hand observers registered the number of interactions per minute and per five minutes, and then summarised it considering the whole programme. On the other hand the animators were asked to fill in a questionnaire on the rate of involved students afterwards. On the average, animators succeeded in drawing the half or two-thirds of the students into interaction.\(^5\)

As for the animators’ opinion 65%, according to reports 57% of students were involved in some kind of programme. In this aspect there are significant differences between the programmes. The formal indicators of involvement range between the extremes of 97–100% and 3–5%.

- **Subjective indicators of interactivity – opinions on how much participants could influence the programme and the topics discussed**

In measuring this aspect of interactivity, the applied subjective indicators are partly quantitative, and partly qualitative. Quantitative indicators are the opinion-scales from the post-tests\(^6\), while qualitative information comes from the focus groups.

The rate of interactivity perceived by the target group can be measured by the rate of agreement\(^7\) with the following statements:

1. statement: ”The animator took our interests into consideration.”
2. statement: ”I think we could influence the course of the programme.”

\(^5\) The summarised average was calculated from the revealing figures \((i_j/n_j)\) of the individual programmes where all programmes had the same weight \(((i_1/n_1)+i_2/n_2+…+i_7/n_7)/7\). To get the average of a programme, the rate of involved students during each programme \((i_k/n_k\), where \(i_k\) is the number of involved students in the programme number \(k\) of the programme number \(j\), and where \(n_k\) is the number of participants in the same programme) had been averaged.

\(^6\) The post-questionnaire was filled in by 1402 students altogether, from which 1295 said that he/she participated in the programmes. We rely on the information of these post-questionnaires.
The programmes in general received rather “favourable” classifications. The seven programmes got the average of 5.65 for the first and 5.32 for the second statement. Half of the students (45.4%) could totally agree with the first statement, and further almost one-third of them gave better than 4, which means they rather agree. The second statement, which “asks” to what extent the participants were treated as partners in the programme, got lower results. Altogether 37% of the students agreed totally and further one-third (31.6%) gave “rather agreeing” answers. That means that two-thirds of the students felt that they played a really active role, and were treated as partners in the programmes, and further 6 to 7% thought their opinions were also taken into consideration.

Regarding the two indicators the statuses of the programmes are quite similar, but they differ from the objective indicators to some extent. According to the differences between the tendencies of interactivity-indicators, both objective and subjective, the conclusion can be drawn that students do not regard every interaction (taking part in the programme actively) as a sign of partnership and that factors other than interactions also have an influence on it. Qualitative information from the focus groups shows that these factors are the style and age of the animator. These factors enhance involvement and reduce formal activities. When evaluating the interactivity of programmes we have to mention that some programmes with high interaction rates were criticised by students, being overdriven, or boring and sometimes compelling, where interactive elements are emphasised too much, and the must of acting out situations is rather repelling.

**Planned vs. actual intervention**

Basic question of process evaluation regarding the content of the programme is to what extent could goals – set beforehand – be accomplished during the programme, and how well did the actual course of intervention match the plans. To get the answers, we examined the reports of animators and the registry of observers, on the one hand. On the other hand we confronted the post-test quantitative and focus group qualitative information on perceived goals with the goals defined on the Information Sheet.

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7 The rate of agreement could be indicated on a 7-grade scale, where 1 stood for “I do not agree with the statement at all”, and 7 for “I absolutely agree with the statement”.

8 Examined programmes showed significant differences along both dimensions. (p<0.001)
– Animators’ opinion on reaching the set goals of programme

Animators rated the achievement of pre-set goals on a 7-grade scale. There were no prevention programmes where the animator would report a total failure or a “rather unsuccessful” outcome. More than ninety percent of animators rated the programmes with a 5 or higher (successful), and one-third of this ninety percent regarded the programme as absolutely successful, with all the goals achieved. Examined programmes altogether got an average of 5.61 for reaching goals, which is 80% on a 100-grade scale.

The individual programmes rated by animators got an average of 5 to 6.38 points, that is 74 to 91 in percentage, which is quite a large interval and difference between the programmes.

– Observers’ opinion on reaching the set goals of programme

Observers also rated the programmes on a seven-grade scale comparing plans with the actual programme. According to observers the summarised average on reaching the goals is 4.95 points, which is up to 10% lower than the figures of the animators. That means that only slightly more than 70% of the goals defined in the Programme Information Sheet could be realised.

For carrying out the programmes according to plan, the average of points, given by the observers for the individual programmes, ranges from 4.25 to 5.8 points. That is 61 to 83 in percentage. The order of examined programmes according to observers is slightly different from the one of animators.

– Planned and perceived goals

Quantitative information gained from the post-questionnaires and qualitative information based on the focus groups showed what goals and purpose students saw in the preventive

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9 Considering the achieving of the goal(s) of the programme 1 stood for “not at all” and 7 for “yes, absolutely”
programmes. Below, we present and compare these results with the goals and purpose defined by the animators and with those stated in the Information Sheet.

Comparing the post-questionnaires and intended goals of programmes, we noticed a definite hierarchy of effectiveness in making students aware of goals, where awareness of implicit goals was lower.

- Propagating knowledge and making aware of the risks of drug consumption was among the goals of each examined programme. These goals could be achieved the most effectively. Two-thirds (73%\textsuperscript{11}) of participants were aware of these goals of the programme.

- One-third or one-fourth of participants became aware of most set goals such as better understanding of our interpersonal relations, how to say no, how to help others or taking responsibility for our decisions.

- The least well-communicated goals were the ones related to self-recognition and presenting alternatives. Programmes with such goals (5 and 3) could only make an insignificant part of participants aware of their goals (12 and 6.5%).

Here we have to mention that in some cases there was an inconsistency between the definitions of goals according to the ideas of leaders or animators of a programme. The idea of specific goals of the programme was not always coherent among animators and their ideas sometimes did not match the definitions given in the Information Sheet. This uncertainty is hard to express in figures, but it certainly influences the effectiveness of a programme. While the half (45%) of participants became aware of consistent represented goals, only around 20% of them perceived the inexact and uncertain defined goals.

\textbf{Satisfaction of participants}

The reaction of participants has been summarised partly based on the quantitative indicators of approval and partly based on the focus groups. Satisfaction with the programme and its

\textsuperscript{10} Similarly to the scale of animators, 1 here also meant “not at all”, and 7 “yes, absolutely”, considering the reaching of the planned and set goals.
certain aspects was measured on a 7-grade scale. The evaluation concerned the animator, the credibility of the programme, the content and the atmosphere of it.

– Acceptance of the animator

In the three inspected dimensions animators got rather “favourable” marks from the participants. Students usually were of the opinion that animators were nice and well-prepared and could attract their attention.

The highest rated dimension was the competence of animators. The seven examined programmes got the average of 5.58 on a 7-grade scale. 46.9% of students were the opinion that animators were absolutely well prepared and further 30% gave a favourable mark concerning the knowledge and competence. That means that three-fourth of the students appreciated the competence of the animators.

Two-thirds of students participating in the programmes thought that the animator was nice and altogether almost quite as many students said that their attention had been attracted. Concerning the individual programmes, opinions of the animator showed significant differences. Most liked and accepted animators were the ones from the same age group.

“Students liked that they could participate in an informal programme. The animator could understand them, as he/she had similar problems. They could talk about and discuss experiences.” (Excerpt from a focus group report.)

“I liked the animators being as young as we are.” (Excerpt from another focus group report.)

The opinions of the focus groups show that an ideal animator is a boy or girl of their age group, because their problems and experiences are very similar.

However we have to mention here that the opinions of the animator are not homogenous within the programmes.

– Credibility of the programme

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11 Average of the frequencies of the individual programmes.
The credibility of activities is in close relation with the subjective indicators of the interactivity and the acceptance and opinions about the animator. This is based on the correlation between the qualitative experience of the focus groups and different approval indexes. Satisfaction rate is similar to the satisfaction related to the animator. Participants rated the credibility of the programme on a 7-grade scale with an average of 5.2. Almost three-fourth, the majority, of the participants thought that the things said during the programme are absolutely (40%) or “rather” believable.

According to the asked population “the age of animators, the objective presentation of drug consumption (positive and negative aspects were equally demonstrated), comprehensible expressions and that they did not emphasise the “Don’t take drugs.” – attitude contributed to credibility to a great extent.” (Excerpt from a focus group report.)

“The age of the animators, the way they treated us like partners, that they have their own experience, and answer any question contribute to credibility and the acceptance of information a lot.” (Excerpt from another focus group report.)

According to relations between approval indicators, the acceptance of some programmes are influenced by the above-mentioned tendencies.

– Content of the programme

The content and the useful information in it divide the participants’ opinion more than the question mentioned before. Only less than one-fifth of students agree totally with statements like “I learned much from the programme” or “I got answers to many questions I had on my mind”, and only one-third of students said that they “rather agree”. That means that only up to half of the participants think positively about the content and information.

However, even the most positively judged programme let some questions go unanswered.

Concerning content and information the best programme could not answer the question “what to do how to help someone in trouble”, “what can and what should be done when somebody becomes unconscious under the influence of drugs”. Besides these questions they would have appreciated “more information on the legal
aspects of drug consumption and the prices of illegal drugs. They suggested to “lay more emphasis on light drugs, which is more commonly consumed among them”.

In another case, participants said they learnt about the consequences, the “by-effects” and the “legal aspects” of taking drugs, but in their opinion these “were superficial pieces of information on the topic, so they did not get too much in the end.”

In other cases participants “missed the facts and would welcome a former drug-addict, who could tell what happened to him/her, what detoxification was like, what sensations different drugs cause and why he/she started taking drugs”. They pointed out that “legal drugs should be discussed as well as illegal ones”.

– Evaluating other aspects of the programme

Students evaluated the preventive interventions along global dimensions such as the meaning of programme, perceived effects and the atmosphere.

They had to indicate their point of view considering the following statements:

1. statement: “I did not care about the things they said, but at least some courses were cancelled.”
2. statement: “The programme was boring, I did not pay attention.”
3. statement: “Due to the programme my opinion has changed on many things.”
4. statement: ”I would welcome and participate in such activities in the future.”
5. statement: ”There is no point in activities like this.”

Along these statements programmes got only slightly positive marks. Considering the third statement, programmes got marks worse than 4. Half (47%) of students did not or did not entirely think their opinion changed as a result of the programme. Only one-third of them indicated some form of agreement.
Altogether almost half of the students (46%) is willing to take part in such programmes, and among them slightly more than one-fifth (22.8%) agreed totally with the statement: "I would welcome and participate in such activities in the future". Nevertheless 36% expressed that he/she would not like to attend activities like this, and 15% among them indicated absolute rejection. Attendance at similar programmes on weekends would be much lower, only 9.5%, and 40% would surely be absent mainly because they “would not spend their spare time on things like that”.

- *Summary of participants’ opinions and reactions in different dimensions – programme approval index*

The individual opinion dimensions detailed above show a strong interconnectedness.  

Thus we are going to examine the opinions formulated by participants along different dimensions – examined separately so far –, and the factors influencing them in a combined fashion.

We have done a main component analysis of the opinion dimensions in order to provide a multi-view, complex demonstration of participant opinions of prevention programmes, which has resulted in three factors. The first of these factors – the actual approval factor – was dominated by nine positive statements in connection with the programmes. (In the following, we have omitted from our analysis statements formulated in a negative-question form, as well as the subjective estimation of opinion change resulting from the programme because their variance was accounted for by the background factor in less than 25% of the cases). The nine dimensions remaining in the model express the same background content, and the answers received in these dimensions can be well expressed with a background factor (it accounts for 43-70.8% of their variance.). The background factor created through a main component analysis based on nine dimensions was expressed with a so-called combined approval index.

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12 The strong link between opinions expressed in different dimensions and their extensive overlap is underscored by the Kaiser-Meyer-Olkin index. In regard to the 13 opinion questions the KMO value is 0.906, which shows that these opinions demonstrate different dimensions of virtually the same background content, the reaction to programmes.

13 The KMO value of the 9 items finally left in the model is 0.922.
The resulting 0-mean and 1-standard deviation index accounts for 58.9% of the total variance of variants included in the model. The value of the index varies according to participant opinions expressed in different evaluation dimensions: a greater index value stands for greater approval. The + or – sign of the index value shows the examined individual’s or group’s approval in relation to the average, i.e. a negative index value shows a relative, not an absolute non-approval, that is a less preferential evaluation than the average opinion of participants of all programmes.

In the following, we will try to find the reasons for the opinions through analyses along the different characteristics of the programmes and students participating in the programmes.

During the analysis of the role of programme characteristics, we have examined the correlation between evaluation aspects used during theoretical evaluation and the scores resulting from these and the overall attained results among programme participants. From among ten examined aspects four showed significant, while one showed tendency-like correlation to the complex approval-index. The variants showing significant relation are firstly connected to the stating of intermediary – operative – goals, secondly to the coherent nature of the concept, thirdly to two factors of implementation, group size and the goal-adequacy of team composition. We have to note, however, that in the case of the characteristics showing a significant relation to the approval index, we have received very low correlation. (The value of the greatest correlation was 0.150.)

Furthermore, among the programme characteristics we have examined – as quantitative control of the approval of the target group – the age of the animator. During qualitative examinations, the participants emphasised the importance of age among the characteristics of an ideal animator, and expressed their approval of an animator close to the age-range of the target population. We have divided the programmes into two groups depending on whether they required a peer-animator or not. The results clearly show that regardless of other programme characteristics, programmes using peer-animators produce a more favourable reaction among participants than the ones using older animators.

Mean of approval-index according to the use of peer-animators in the programme
In regard to participants’ reactions and opinion-formation, other characteristics of the programme implementation, like the duration of the programme, the invitation of a previously addicted person, the interactivity between participating students, discipline, prevalence of disorderly conduct, seem less dominant. On the contrary, in some cases an unexpected reversed correlation is observable.

The number and type of programme characteristics under examination can be increased, which might result in the discovery of new and important dimensions through further analyses. Based on analyses up to date, correlation resulting from different programme characteristics underscore the fact that some general concept characteristics, like coherence of theory – regardless of its concrete content – influence participants’ reactions on the one hand, and the previously described importance of the programme’s stable goal-setting and the animator’s personality on the other hand. The results show that the programmes producing favourable reactions among participants are the ones with a clear concept and goal orientation employing a goal-adequate peer staff and a number of group members appropriate for the goal setting.

Participants’ reactions and the programme approval-index show a connection not only to the characteristics of the programmes themselves, but also to the composition of participants.

The post-questionnaires contained a relatively small number of background variants\(^\text{14}\), but each of those emphasises the role of composition effect. The approval index shows significant differences according to the participants’ age, gender and family background.

\(^{14}\) The majority of background variants was taken in the pre-questionnaire, but the pairing of questionnaires produces a great loss of samples, which decreases the reliability of approval data. For this reason, we only examine the role of participant composition based on variants available in post-questionnaires.
The participants’ socio-demographic composition shows a particular correlation to the approval index according to the examined variants. The examined background variants indicate that according to epidemiological data (Elekes and Paksi, 1999, 2000a) the acceptance level of programmes is lower among youth facing a greater or potential exposure to drugs.

On one hand, based on earlier surveys, the probability of drug abuse increases with age and parallel to this the current survey indicates a significant negative correlation between the participants’ age and the approval index. (correlation: -0.086, p=0.004)

On the other hand, national and international surveys show that boys’ exposure to drugs is far greater than that of girls. In the current survey, programme satisfaction among boys is significantly lower. (p<0.001).

A similar correlation is observable along the parents’ social status. Drug-epidemiological examinations indicate above-average drug exposure among youths in an extreme social status, like the ones with parents with low education, or those with a college degree. We received a significantly lower approval index among participating students whose parents had a lower than elementary school education, or whose parents had a college or university degree. (p<0.001).

The correlation based on background variants indicates that students with potential or real drug-exposure are more responsive to the examined programmes, and furthermore, that students with greater exposure or expected exposure are more likely to demonstrate refusal toward drug prevention programmes.

**Outcome evaluation -- objective attainment of programmes**

In the course of outcome evaluation we examine the actual changes in the reached population. We are trying to see if the programme had achieved its set goals. Just like goals can be final or intermediary – in other words transitional or specific – results can be direct effects or final -mostly more distant – results and effects.

Due to the short interval of the survey, we did not have the opportunity to measure the effectiveness of the examined drug-prevention programmes based on the final goal-variants
within the scope of this present research. In the population receiving intervention, the
decrease in the frequency of drug-abuse or any quality change can be measured only in the
long term. In the current survey, the outcome evaluation is targeted at measuring direct, short-
term effects attained by the drug-prevention programmes.

Two separate groups of target variants were measured during the research:

A. Based on general effectiveness-indicators that best represent the common final
programme goal of drug-abuse prevention in the short term, yet show an indirect,
theoretical and strong connection to the end goal.

B. Based on indicators indirectly representing the individual programmes’ specific –
intermediary – goals.

Quantitative measures were used in outcome evaluation with the comparative analysis of
responses given in questionnaires taken before and after the programmes.

Pre- and post-questionnaires were filled out by every programme participant. The
results are valid only for them and not in general. Consequently, our data do not
contain the “standard error” or sample error originating from the sample-taking
process and the extension of results to the general public. At the same time, the
validity of the data included in the result-evaluation is diminished by the fact that pre-
and post-variants were paired per individual using personal codes, which resulted in
significant item loss: only three fifths of the participants could be evaluated. The
paired database contained 958 cases. We examined the correlation of pre-data intake
and the paired samples based on background variants in order to estimate the
distortion effect of item loss. The only significant discrepancy between the population
included in prevention and the paired population included in outcome evaluation was
found in gender and in the frequency of absence. There are significantly less boys and
absentees in the paired sample. The direction of the difference along these two variants
– based on drug-epidemiological surveys conducted among high-school students
(Elekes-Paksi 1999, 2000a) – lets us conclude that the population lost after sample-
pairing – in other words, those who used different codes – is potentially more affected
when compared with the general public, furthermore, that endangered groups are
underrepresented in the survey. We did not correct the composition of the paired
sample because during data analysis we were more interested in following changes
and examining correlation than we were in frequency. Weighing decreases the
usability of statistical tests because it makes the relation between variants appear
greater than they really are. During result analysis it is necessary to take the different
composition of the analysed multitude from that of the general public into
consideration.

Two outcome evaluation blocs were found in the pre- and post-questionnaires according to
the types of the target variants (common final goals and specific objectives).

1. Each questionnaire contained a general body that included short-term effectiveness
indicators of final programme goals, like:
   • Subjective indicator of youth’s knowledge of drugs
   • Question bloc in connection with self-efficiency
   • Questions relating to the health belief model

2. The questionnaires contained a special question bloc relating to specific goals of
programmes based on indicators differing from programme to programme

In the following, we will first discuss the changes effected by the programmes based on
general-final goal indicators, then the results based on specific goals. For the significance
measurement of changes effected by programmes the \textit{Paired-Samples T Test} and in the case
of dichotomy variants the McNemar significance test was used.

\textbf{Outcome evaluation based on general goals}

- \textit{Change in youths’ knowledge about drugs – changes along the subjective knowledge
  indicator}

In the scientific literature on prevention programme implementation the variants dealing with
participants’, in this case students’, characteristics, like subject knowledge play a
distinguished role. It is more the case when the programmes themselves name the
dissemination of knowledge, as an attainable goal (see previous chapter). In the general body
of the present survey, we examined the change of drug-related knowledge based on the
individuals’ own beliefs and opinions about that change. This way we received data before
and after the programmes relating to the subjective evaluation of students’ own drug awareness and not the actual information passed on during different programmes.\footnote{Real change in awareness, objective effectiveness of passing on information specific to individual programmes is examined in the chapter dealing with specific goals}

On the whole, nearly one quarter of students who participated in the seven programmes examined (23.1\%) perceived an increased awareness of drugs after the prevention programmes. Significant differences exist between individual programmes in this respect. (p=0.034). On the mass scale, the number of those who claim that “they know everything about drugs that they want to know” increased from 36.9\% to 45.6\%. At the same time, there was practically no change in the number of those who put themselves in the category of “I know a lot, but I am interested in knowing more,” which while showing a favourable tendency of increasing awareness could also indicate the unwanted phenomenon of a decrease of openness toward drug-prevention programmes.

- \textit{Changes in regard to self-efficiency}

The importance of beliefs in connection with self-efficiency has been emphasised by different surveys. (Bukoski, 1997) Young people with better problem-solving skills and a sense of self-efficiency are less likely to be exposed to drug-abuse.

In our survey, self-efficiency change was measured in the general bloc using a shortened, three-item scale of the original ten-item one. (Kopp-Schwarzer-Jerusalem 1995).

An increase in self-efficiency was expected in five programmes (two programmes did not state any expectations in this regard). Based on the results, however, none of the programmes showed a change in regard to self-efficiency. It must be noted at the same time that the self-efficiency base value was high in each programme to start out with (an above-3 value on a four-level scale), so the missed effect could be explained by that fact. The tendency of significant relation between the base values and the measured change underscore this explanation.

The programmes did not achieve significant change in the target variants on the whole, but in 25\% of students where the value of the target variant was in the unfavourable zone (1-2 on the scale) changes in the expected direction were registered. This means that the programmes
achieved the expected preventive effect in the most endangered population acknowledging the relation between self-efficiency and drug abuse described in the scientific literature.

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**Extent of self-efficiency change depending on base values**

<table>
<thead>
<tr>
<th>BASE VALUE OF SELF-EFFICIENCY</th>
<th>MEASURED CHANGES</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 (N=20)</td>
<td>0.482</td>
</tr>
<tr>
<td>2 (N=215)</td>
<td>0.219</td>
</tr>
<tr>
<td>3 (N=574)</td>
<td>-0.075</td>
</tr>
<tr>
<td>4 (N=104)</td>
<td>-0.231</td>
</tr>
<tr>
<td>TOTAL (N=916)</td>
<td>-0.012</td>
</tr>
</tbody>
</table>

\[ p<0.0001 \]

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*Changes in questions based on the individual dimensions of the health belief model*

The general bloc questions of each programme are based on different dimensions of the health-belief model. The health-belief model has been in use since the 1950s. It was first developed to explain the failures in the prevention of non-somatic diseases, but it has been tried in different areas of health behaviours. The model is an approach supported by research, which describes the factors influencing the developing of preventive behaviour (Rácz-Kabos, 2001, also Becker 1974 and Hochbaum 1970).
Hungarian research demonstrated that (Rácz-Kabos 2001) according to lifetime prevalence (i.e. those who have tried it at least once) – considering the variants chosen with the tree-graphs and overalls method – users are easily distinguishable from non-users. Certain variants of the health-belief model (based on questions dealing with exposure, obstacles to preventive behaviours, peer pressure and gravity of drug use) can easily distinguish between users and non-users. These variants play an important role in the assessment of real or assumed drug use and in the development of endangerment.

The variants included in the general bloc are in the following dimensions: perceived exposure, perceived gravity, and perceived obstacles to the prevention process.

I. Perceived exposure was measured by the assumed probability of drug use by the respondent in the near future or during their lifetime. On the whole, an unexpected significant reverse shift took place in regard to the perceived risk of trying an illegal drug between two data intakes in the seven programmes examined. In other words, there was an overall increase among programme participants in the perceived probability of trying an illegal drug in the near future or in their lifetime. An unfavourable shift took place in two thirds of responses (half is only a tendency) concerning the near future, in 80% concerning a long period according to a response analysis of all responses by participants based on drug sorts and frequency of use (trial, occasional and regular).

Differences in achieved effects by individual programmes can be described only on the scale of a significantly negative effect or negative in tendency, or non-significant effect.

II. The gravity of the risk of drug-abuse as perceived by respondents was examined based on two groups of questions: the appearance of certain concrete problems and the assessment of the danger of certain abuser behaviours.

Evaluating different aspects of risk-perception as a whole, Hungarian research indicates (Rácz-Kabos 2001) that opinions in connection with the danger, and, to a lesser extent the opinions along the ”I could easily give up drugs”-question, play a role in the issue of drug-influence.

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16 Only general data is available from Hungary from earlier research dealing with exposure to some kind of drug. The results indicate that of the dimensions examined, opinions about exposure to risk of drug-abuse have a relatively great significance. (Rácz-Kabos 2001) In the course of this current research we examined the subjective indicators of exposure to drug-abuse in more detail, according to relevant drugs and frequency of use

17 The combined indicator was received by taking into account the answer with the biggest probability to the questions based on drug sort and frequency of use
When examining the changes between pre- and post-data intake, a reverse significant shift is observable in the combined value of perceived gravity (see last row of following table).

More favourable phenomena are detectable in the risk assessment of user behaviours. Even though, on the whole, more unexpected changes took place in the programmes examined (in two fifths of examined drugs the direction of change was unintended, while in only one-fifth was the change according to set goals – see first row of following table), the awareness of danger developed in the case of epidemiologically more relevant – relatively more widespread – behaviours. The sense of danger increased among students who participated in the programmes in connection with the risk of the trial of amphetamines, ecstasy and inhalants – relatively frequent in the target population affecting an average of 5% of young people depending on the drug (Elekes-Paksi, 1999) – along with the abuse of prescription drugs, traditionally frequent in Hungary\(^{18}\). The change in the latter area is especially important since the abuse of prescription drugs in Hungarian society is significant when compared internationally, also since adults and young people are still not fully aware of its dangers.

We find similar tendencies when examining the changes in the assessment of drug-user behaviours from programme to programme. The changes achieved by different programmes move on a broader scale than previously, and in some cases – mainly in the case of party drugs and legal drugs – are significant in the intended direction.

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\(^{18}\) According to the ESPAD’99 survey, nearly 20% of 9-10\(^{th}\) grade high school students in the capital city have abused some kind of prescription drug in their lives without a doctor’s prescription. (Elekes-Paksi 1999)
III. In respect of the health-belief model, variants taken about changes in obstacles hindering the execution of prevention schemes do refer to serious difficulties in preventative behaviour, each item, however, is valid both in itself and as an element of other models. Surveys state, importance of the questions “should I be a drug consumer, would it be painful to ask for help from my friends?” and “should I be with my friend smoking dope, would I join them?” (Rácz-Kabos 2001) must be underlined. These questions can also be regarded as indicators of the peer-group model.

All in all, on the basis of scores of questionnaires from before and after the schemes, no significant change in the common indicator showing obstacles of prevention surveyed among students who took part in the seven schemes could be observed.

At the same time, among changes along each item, the rate of changes in expected direction is the most favourable in this dimension – from the different dimensions of the health-belief model. This rate of items showing intentional direction of changes is three times higher than those in the unintentional direction of changes.

- **The social context of changes along general result variables**

In order to properly evaluate the above shifts in these most unfavourable directions, they are necessary to be put in societal environment, with respect to the fact that participants in this scheme are not exposed only to the effects of the surveyed interference, but also to further various environmental effects. On the level of multitude, environmental and societal effects are representing the societal trends on the one hand, and current environmental effects on the other hand.

Unfavourable direction of changes are possibly not the consequence of a scheme, but of the appearance of a societal trend among scheme-participants, which trend is irreversible but may be curbed. Comparing pre-data of this survey – following applicable mathematical transformations – to the outcome of a data collection from 2000 (Elekes-Paksi 2000b), we could see that the indicators of perceived exposure have considerably shifted into an unfavourable direction between the two surveys. That is to say, the likelihood of intentional
Drug consumption has increased in respect of both the near future and the entire lifetime. On the level of multitude, trend effects and composition effects can not be distinguished in the shifts of the two surveys’ outcomes.\textsuperscript{19} Analyses carried out along societal background variants do indicate that there exists a particular composition effect, which shifts the database of 2001 to a higher exposure level – see details the second part of chapter dealing with societal environment – but the joint presence of the two effects can also serve as a rational alternative for explanation.

When sorting out the best explanation from alternatives, a comparison of data coming from the current surveys and those from 2001 conducted in the same schools can be of assistance. Two schools were found which were included in both samples. While comparing the data related to students of the same schools, the role of composition effect is negligible, thus trend effects are clearly to be observed.

Between the outcomes of pre- and post data collection, a smaller increase in lifetime exposure could be perceived when compared to that of the preceding year. However, it must be taken into account that there was only a two-month interval between the pre- and post data collection.

In order to clearly see that the changes are of a significant extent and unfavourable direction presented earlier is not the aftermath of preventative intervention, but part of the independently rising trend in the society, it is necessary that the magnitude of the shift between the pre- and post data collection should not exceed the trend proportioned to the same two months. Should the schemes be of favourable effect, this shift must be smaller. The trend effect proportioned to the short period of time between the pre and post data collection, however, does not exceed the discrepancies between the answers before and after the interventions, hence the unfavourable effect of taking a most unintended direction will not be turned, it only can be neutralised. While assessing the changes in exposure rate in respect of the near future, a negligible trend effect is to be perceived, which means the effect in the pre and post questionnaires cannot even be neutralised.

\textsuperscript{19} This follows – as indicated earlier – from the fact that this present examination has not been done using a representative sample, but contains only data relevant to students participating in the examined programmes. This – as earlier indicated – is not to be derived from the fact that the current survey’s is not a representative sample, but only includes data about scheme participants.
Beyond the trend effect, reproduction of current effects being independent of different trends was tried. This – in an ideal case – is carried out by using control groups, which was infeasible partly due to financial reasons, partly due to the data collection method\textsuperscript{20}. Part of the students questioned during pre and post surveys did not take part in any of the prevention schemes, a fact that offers us some opportunities for analysis. The extent and direction of changes in target variants among the above-mentioned group of students are assessed.

\textit{Mean change of combined values of perceived exposure and perceived obstacles among students participating and not participating in the programme\textsuperscript{21}}

<table>
<thead>
<tr>
<th></th>
<th>Prevention Programme Participants</th>
<th>Prevention Programme Non-Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pre-data intake</td>
<td>Post-data intake</td>
</tr>
<tr>
<td>Combined average values of exposure perceived in near-future (N=46)</td>
<td>1.655</td>
<td>1.851</td>
</tr>
<tr>
<td>Lifetime exposure combined average values (N=46)</td>
<td>1.821</td>
<td>2.005</td>
</tr>
<tr>
<td>Combined average values of perceived obstacles (N=35)</td>
<td>3.489</td>
<td>3.453</td>
</tr>
</tbody>
</table>

An increase in the perceived exposure among non-participating students was observable in the period between the pre- and post-data intake. This increase in exposure exceeds not only the extent coming from the trend effect, but also the extent of changes observed with students participating in prevention projects. In the surveyed time span, the increase in exposure

\textsuperscript{20} The programmes affected almost all students of the examined schools, thus the control sample is possible only in schools without intervention. In our estimation, due to the class-based data intake the control sample cannot guarantee the elimination of the composition effect. The intervention group and the control group would have only been corresponding based on imprecise factors – like school type, school year – when compared to the complex predictor-system of drug-abuse exposure.

\textsuperscript{21} In regard to perceived effects, the answers by prevention programme non-participants cannot be considered as a control group because the number of respondents to relevant questions is very low. We found only 19 students who did not participate in the programmes and responded to questions in connection with perceived gravity. At least 30–40 items are needed for the reliable use of the paired-samples t-test.
among these participating students amounted to an average value of 0.196 and 0.173 scale points; corresponding changes among non-participating students exceeded twice these values: the corresponding values are 0.4338 and 0.3913 scale points. Discrepancies in changes mean either that the rise of exposure during the surveyed period of time was larger indeed than what we think would arise from the trends – the social environment of the schemes was not exempt to changes and certain actions increased the exposure rate –, or reflects the fact that prevention schemes accepted by schools did unfavourably affect non-participating students. In case social effects induce such increase in exposure that we observed in the answers given by the non-participating students, these effects managed to be partly curbed by the assessed prevention schemes.

Interpretation of perceived obstacles and outcomes of prevention can be positively affected through comparing the data of students participating in the prevention schemes and those of non-participating students who were questioned during the pre and post surveys. There was no significant change among participating and non-participating students, while the aggregated value of perceived obstacles among participants stagnated or decreased to a small degree, and it actually increased among non-participants. This means, that the presumable increase must have been compensated for by these schemes. Compared to the changes in the control group, as a result of the schemes, a larger change into the intended direction happened than what came out from the pre and post questionnaires, meaning that the schemes probably managed to tear down a few obstacles before the preventative efforts.

Based on the analyses on multitudes – data of the two schools – that were exempt from composition effects, and the comparison of students participating and non-participating in the scheme, we cannot reach unambiguous consequences in respect of the prevention schemes’ effects due to changes along target variants. The presence of the trend effect and the change of non-participating students’ larger exposure did have a moderating effect on the changes just mentioned, taking an unintended direction among students participating in prevention schemes.
Assessing the relationship between changes in “me-efficiency” and the health-belief model along the surveyed dimensions and the participants’ socio-demographic and cultural background variants, only the change in perceived exposure for the following year showed any significant correlation with the number of nights out. Changes in any other outcome variant did not show correlation with any background variants.

During the analysis of the role of scheme characteristics, we examined the connection between the scores – received through the assessment criteria applied during the theoretic evaluation process – and the specific process characteristics with the effects of the general outcome variants. The theoretic assessment criteria show quite little connection with the changes in the outcome variants. Should any correlation be observed, it can only be of a tendency nature, thus cannot be regarded as an unambiguously significant relationship.

Different dimensions of process evaluation usually did not indicate any significant relationship with changes in assessed outcome variants either. The only tendency-natured relationship we perceived was between the decrease of prevention obstacles and the proportion of students who took everything seriously that they heard. The greater the number of these students was, the better the decrease of perceived obstacles could be observed. There was no correlation between the achieved results, the time span of the scheme, and the particular characteristics of the animator, previously stated by focus groups to be important – like age, the status of being “clean” again.

Of the various project characteristics, especially the approval-index indicating participants’ reactions showed some correlation with the target variants. Along with the increase in the approval index, a significant rise in perception of drug consumption’s dangers (p=0.031) and a decrease in perception of exposure in respect of the near future (p=0.03) were observed, in estimating the outcome, however, the index’ power of prediction is quite negligible.\(^2\)

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\(^2\) The low level of correlation is due to the fact that the examined programmes effected a significant change in target variants only in a few cases.
The analysis of the general outcome variants calls our attention to a partly methodological consideration, and one partly relating to the planning of prevention schemes. The extent of change in specific result variants represents close, significant relationship with the initial value of the particular variant.

<table>
<thead>
<tr>
<th>BASE VALUE OF TARGET VARIANTS</th>
<th>EFFECTED CHANGE IN INDIVIDUAL TARGET VARIANTS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PERCEIVED EXPOSURE</td>
</tr>
<tr>
<td></td>
<td>MEAN</td>
</tr>
<tr>
<td>1</td>
<td>0.3003</td>
</tr>
<tr>
<td>2</td>
<td>0.4832</td>
</tr>
<tr>
<td>3</td>
<td>0.0702</td>
</tr>
<tr>
<td>4</td>
<td>-0.0250</td>
</tr>
<tr>
<td>5</td>
<td><strong>-0.2857</strong></td>
</tr>
<tr>
<td>6</td>
<td><strong>-1.5000</strong></td>
</tr>
<tr>
<td>7</td>
<td><strong>-1.6905</strong></td>
</tr>
</tbody>
</table>

Changes in the desired direction are highlighted

The direction of the correlations between initial values of result variants and the achieved change, and average changes calculated on the basis of initial values of result variants made us attentive to an important phenomenon. In the totality of the schemes – both in the cases of “me-efficiency” and of the different dimensions of the health-belief model – along general result variants, either counter-effects of the intended ones were caused, or no significant shift in result variants were accomplished. Analyses carried out along the initial values of result variants, however, do modify this picture. In the case of students with values of the initial result variants in an unfavourable zone – low level of “me efficiency”, high level of exposure perception, low level of perceived seriousness, and high level of obstacle perception – the

$^{23}$ In the case of perceived gravity and perceived obstacles the base value represents a mean value, where 1-1.99=1, 2-2.99=2 etc.

$^{24}$ In the case of perceived gravity the proportion of absences is 50.9%
schemes turned the shift into the intended direction. This proves correlation – detected in an earlier assessment (Rácz-Kabos 2001) – between “me efficiency”, health-belief model and drug consumption, in the case of students who are the most at risk of drug consumption prevention schemes were successful, and they worked efficiently in respect of result variants.

Besides, when jointly analysing the initial values of result variants and the accomplished changes, we must also notice that shifts into unintended directions, i.e., an increase in the perceived exposure and obstacles of prevention, plus the decrease of perceived obstacles, mainly occurred in the extreme zones of rejection, a fact representing the initial value of the overwhelming majority. These shifts into the definitely unintended direction can also be explained as shifts towards the real evaluation of the current situation. It is a sort of sensitisation, the formation of an attitude described as “it can happen to me, too”. All this is not alien to the aims of prevention, however, it was never put in a concrete shape in the system of the assessed schemes’ targets.

**Effects measured in special result variants**

As mentioned earlier, beyond the general result variants, the questionnaires of individual programmes contained a programme-specific special question bloc with indicators specific to individual programme goals. These question blocs included different psychological scales, opinion/attitude questions and received information indicators. The programme animators answered the questions related to information, expected knowledge and wished attitudes, too. A shift towards received or expected items in student responses is considered to be an intended effect.

On the whole, a change was expected in 181 items in the special question blocs of the seven programmes examined. In one quarter of these (24%) a change according to expectations was achieved. More specifically, 18% of items showed a significant, and 6% showed a tendency shift. (At the same time unfavourable significant or tendency change was at 8%). Great differences were observable in different programmes, however: the proportion of items with a significant or tendency change in a favourable direction was between 6 and 58%.

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25 The different specific goals presumably do not have the same weight within the individual programmes. The importance and role of goals are difficult to express numerically, especially through indicators; we are not going to attempt to do that. As a result, the summary of effects attained along the examined indicators is possible only with some reservations. In spite of this – bearing in mind the reservations – we believe that such a summary can be helpful in the perception of specific programme goal-attainment.
Without embarking on a detailed analysis of the combined indicator, it has to be stated that the inconsistencies in the animators’ expectations had an unfavourable effect on the realisation of specific goals.

**The main results of the research in connection with the methodology of evaluation and planning of prevention intervention**

Our research, conducted according to the international standards, is a detailed and systematic description of the school prevention programmes in Budapest. It contains the process and outcome evaluation of a narrow range of the programmes and summarises our experience in connection with the methodology of planning and evaluating prevention interventions.

The low level of coherence between the different analysed aspects – such as outcome variables, theoretical and process characteristics – indicates that the outcome evaluation process cannot be replaced with theoretical descriptions, an analysis based on these, nor with monitoring of the intervention. Failing this, we must change our range of criteria.

On the one hand theoretical descriptions compatible with the EMCDDA recommendations, well-defined concepts and consistent programmes do not guarantee effectiveness. On the other hand the programmes which seem to operate effectively, as judged by the animators and the observers, and according to the examined aspects, may cause a rather low level of changes in the outcome variables.

The relation between the starting objective-variables and the impact-variables shows that during the outcome evaluation we should not ignore those original characteristics of the target population that are in connection with the dimensions intended to influence. It is very important to know the target population along the objective-variables in order to estimate the intended impact.

Besides the estimates coming from the programme characteristics we must count with the socio-cultural features of the participants, as well, when monitoring their reactions and analysing their opinions.

Beyond collecting the programmes for the registry and describing them specifically, our research highlighted that the different evaluation aspects complement each other. If we take them out of context and try to apply them individually we can only receive partial information
about the programme. The survey also pointed out that it is of great importance to be familiar with the target population when evaluating the effective intervention – the expected reactions and the impact on the objective-variables.
References


NEMZETI STRATÉGIA A KÁBÍTÓSZER-PROBLÉMA VISSZASZORÍTÁSÁRA. A kormány kábítószer-ellenes stratégiájának koncepcionális alapjai. ISM 2000


