

# Evaluation Brains4Use

## English Summary

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## Introduction

Brains4Use is an individual behavioural intervention aimed at preventing recidivism by reducing problematic substance use. Problematic substance use is an important risk factor for delinquent behaviour. In March 2010, the behavioural intervention Brains4Use was fully accredited by the Accreditation Panel for Behavioural Interventions. This means that the programme complies with the quality criteria articulated by the Ministry of Security and Justice. The status 'accredited' is valid for a period of five years (until March 2015). By then the effectiveness of the intervention must have been demonstrated. If its effectiveness has been proven, the accreditation can be extended conditionally by a period of three years; after this period the effectiveness of the programme with regard to recidivism prevention must be demonstrated.

Before the effectiveness - and later the effect - can be examined, it must first be determined through process evaluation whether the intervention is implemented as intended (programme integrity check). Commissioned by the Research and Documentation Centre (WODC) of the Ministry of Security and Justice, DSP-groep has carried out a process evaluation of the programme integrity of Brains4Use between April and November 2013.

## Brains4Use

Brains4Use is based on the trans theoretical model of Prochaska & DiClemente (1983), which assumes that with a change in behavioural patterns, a cycle of change is completed. In the intervention, the phases in the cycle of change are turned into steps to be taken by the 'Know What You Are Doing' method and converted into various discussions. Motivational interviewing is used in the intervention to lead youngsters to a next phase in the cycle of change, and cognitive behavioural therapy techniques are deployed to help the youngsters to learn new skills to gain more self-control in relation to their substance use. In addition to motivational interviewing and cognitive behavioural therapy techniques, other significant (mandatory) elements are improvement of the youngsters' environment (assessment and restoration of the social network) and relapse prevention.

Brains4Use has been developed by LSG Rentray. The intervention is available in all Juvenile Justice Institutions (hereinafter referred to as 'JJI's') and Youth Care<sup>Plus</sup> Institutions. The intervention is carried out by drug counsellors who have completed the prescribed training course. In each institution a location coordinator is appointed and there is also a national programme coordinator.

The intervention is designed for youngsters between 12 and 23 years old, with a moderate to high risk of recidivism and serious problems with substance use. Contraindications are an IQ under 50, continued lack of motivation and serious psychiatric problems that affect the individual's learning ability. The intervention consists of twelve consultations between the youngster and a drug counsellor: eleven weekly consultations and a follow-up meeting three weeks after conclusion. An important part is to practise difficult situations. This means that when a youngster does not have leave status, the trajectory is put on hold for a period of time. The manual allows customization, depending on the development and the motivation of the youngster. Customization means that the number of consultations and the duration of the consultations per person can be customized.

According to the manual, programme integrity must be assured by intervision and supervision and the use of video monitoring.

### **Research questions and approach**

The purpose of the study was to examine the following questions:

*Is the behavioural intervention Brains4Use be implemented as intended (programme integrity in a narrow and a broad sense)? What are the underlying causes of any problems in the implementation?*

Six research questions have been formulated based on the definition of the problem:

#### *With respect to the target group*

- 1 What is the inflow and outflow of Brains4Use?
- 2 To what extent and how is the designated target group reached and what are the characteristics of the participants?
- 3 What is the motivation of the participants?

#### *With respect to the programme integrity in a narrow sense*

- 4 To what extent is Brains4Use implemented in accordance with the programme instructions (programme integrity)?

#### *With respect to the context and the preconditions*

- 5 To what extent are the context and preconditions present for the implementation of Brains4Use?

#### *With respect to conditions effectiveness study*

- 6 To what extent have the conditions for the implementation of an effectiveness study and impact evaluation been met?

To answer the research questions, various research methods were applied. All JJI figures on the inflow and outflow were requested from Stichting 180. The process evaluation was further carried out in five JJIs. The JJIs selected were those that have built up sufficient experience with the intervention (sufficient number of treatments implemented and experienced drug counsellors) since 2011. In the five JJIs, the location coordinators (5), drug counsellors (11), behavioural scientists (12) and young people (7) were interviewed. In addition, the national programme coordinator and three trainers were interviewed. A case study (including registration details) was conducted of 60 participants of Brains4Use between 1 January 2012 and 1 July 2013. The case study related to the inclusion criteria and contraindications, the course of the intervention and the results of the instruments used. With a selection of 14 participants, an in-depth case study was conducted of the intervention in practice. Finally, the reliability of the score sheet for video monitoring was examined.

## Results

### *Target group*

Based on the information of Stichting 180, we note that in all JJIs between 1 January 2012 and 1 April 2013, 60 youngsters started with Brains4Use. One third of the treatments has been completed, one third is still ongoing and one third has been discontinued prematurely. In the five JJIs inspected 37 treatments were started, over a quarter has been completed (10 treatments) and two-fifths have been discontinued (15 treatments). The most important reasons for premature discontinuation were transfer or relocation and, to a lesser extent, a continued lack of motivation among the young people.

With respect to the target group, we conclude that the right individuals were selected for Brains4Use. At least 70% meet the inclusion criteria described. The inclusion criteria of 25 to 30% of the participants are not properly recorded. Excluding individuals based on contraindications is done through multidisciplinary consultation. The participants studied in the five JJIs inspected were predominantly male. 8% of the participants, based on the case study, are known to have a mild intellectual disability.

Working on the motivation of the youngsters is central to the practice of Brains4Use. The motivation of the participants is analysed at the beginning of each treatment, using the motivation thermometer. The progress in motivation varies during the treatment. Getting stuck at the first level of motivation or a clear decline in motivation is stated as a reason for the premature discontinuation of a treatment (in accordance with the contraindication of continued lack of motivation) or to put a treatment temporarily on hold. In the latter case, in principle, consultations are held to maintain contact with the participants until motivation increases. This does not always succeed.

### *Programme integrity in a narrow sense*

Brains4Use is partly implemented as intended. The significant elements (as mentioned previously) - with the exception of relapse prevention - are used in the majority of the treatments. There are differences between the theoretical and programme instructions in terms of the description of significant elements of the intervention, and the interpretation thereof by the implementers and the trainers of the intervention. We note differences in the number of consultations, the frequency of the consultations, the duration of the treatment and the order of the subjects to be studied in the treatment. The majority of the treatments implemented consists of five consultations or less. None of the treatments completed consists of the prescribed twelve consultations. As a rule, consultations do not take place weekly, but on average every two to three weeks. That is why the duration of most of the treatments is relatively long.

The option to customize described in the manual is interpreted more broadly by the drug counsellors than was intended. The prescribed order of the components of the intervention is not maintained. A problem encountered in the implementation of Brains4Use is that if youngsters do not have a leave status, difficult realistic situations cannot really be practised. The JJIs handle this differently.

A treatment will often be put on hold. This does not happen in all JJIs. In these cases, they practise with imaginary situations and situations within the JJI.

Assurance of the programme integrity is not carried out according to the manual. Location coordinators monitor the preconditions (for example practical implementation) more than the quality of the intervention and the programme integrity. In none of the JJIs do intervision and supervision take place in accordance with the prescribed method in the manual. The main reason is that the method is not suitable for the present (small) number of drug counsellors in each JJI. The national programme coordinator is also primarily concerned with the aspects of Brains4Use in terms of preconditions and does not check the quality of the treatments implemented. There is no standard video monitoring (as yet) and meeting reports are not 'checked' by default by location coordinators.

#### *Context and preconditions*

Most of the requirements set with respect to the context and the preconditions are met in the JJIs. All JJIs have a drug policy that is based on the national policy. There is sufficient support for the intervention in the JJIs inspected. The practical preconditions (availability of space and equipment) have recently been met in all JJIs. In the implementation of Brains4Use, there are organisational bottlenecks present with respect to the time available of the drug counsellors and the location coordinators, whether or not in combination with their other activities. As a result - according to the implementers - assurance of the programme integrity in particular is not achieved (for instance reporting, supervision and intervision).

A problem that has been encountered is the fact that the drug counsellors experience tension between the zero tolerance policy inside the JJIs and the harm-reduction principles of Brains4Use in which 'reduction of drug use' is an acceptable goal. The intervention demands a non-judgemental attitude from the counsellors while in other cases outside the treatments they are expected to punish drug use. This is especially the case with drug counsellors who also work as group leaders.

#### *Conditions for an effectiveness study*

The conditions for conducting an effectiveness study have not been sufficiently met. There is insufficient guarantee that Brains4Use is implemented in all JJIs in accordance with the programme instructions. Not all the instruments from the evaluation manual are used as standard in all JJIs before and after the treatment. There are questions about the usability of the instruments selected for mapping the effectiveness of Brains4Use. Furthermore, instruments for all sub-targets have not been included in the manual.

#### **Conclusion**

We may conclude that there is insufficient guarantee that Brains4Use is implemented uniformly as intended and that the programme integrity will be guaranteed in a uniform manner. The requirements for proper programme integrity are met in part. The reasons the requirements are not fully met are based mainly on two of the four problem areas that often occur which have been established by Nas, Van Ooyen-Hoeben and Wieman (2011)<sup>1</sup> in a meta-study into the implementation of interventions:

- problems relating to personnel: change of personnel, insufficient time available for planning and holding consultations,

**Foot 1** Nas, C.N., Ooyen-Hoeben, M.M.J. van and Wieman, J. (2011). *Interventions in implementation. What can go wrong in the implementation of judicial (behavioural) interventions and what are the causes.* The Hague: WODC.

- problems relating to the manual/method: customization is interpreted more broadly and as a result the prescribed order is not followed and the prescribed number of consultations and subjects is not reached.

### **Strengths and limitations of the study**

A strong point of this study is that the JJIs have fully cooperated with the study and have given the researchers the opportunity to find the available information at a case study level.

The intervention is implemented in all (nine) JJIs. It was decided to conduct this study in five JJIs that have been selected because they have a minimum number of trainers and participants. The implementation of the intervention in the other JJIs has not been examined. In addition, only in a limited number of completed treatments was an analysis of the meeting reports of the entire treatment possible. Furthermore, in this study we could only use the information the drug counsellors themselves reported on the treatments. For the time being, a valid standard for programme integrity is still lacking.

Nevertheless, we believe that we can properly justify our conclusions. It is possible that in the JJIs that have not been studied, programme integrity in a narrow sense is better; but based on the results of this study we can at least state that nationally, Brains4Use is not implemented uniformly.

### **Follow-up (study)**

Based on the process evaluation we must conclude that conducting an effectiveness study is not recommended at this point. Before this study can be conducted we believe it is necessary that a number of issues are clarified.

With respect to *the (further development of the) intervention*, 100% programme integrity is not necessary and possibly not feasible but the significant elements at least must be used, clearly described and recorded. The scope of customization (deviating from the manual when practice requires it) (responsiveness) must be described more clearly. To be able to study the effectiveness, it is necessary to know when a treatment is considered completed. In the further development of the intervention, a distinction can be made between a version with and a version without an 'on hold' option. For more (national) control and assurance of the programme integrity, another interpretation of the prescribed method can be considered because the present method is not in line with the possibilities in practice. To monitor the programme integrity, it is important to *better record* the significant elements in particular and conduct video monitoring.

To conduct an *effectiveness study* it is sufficient to conduct a change study without a control group. We mention the conditions to conduct such a study (validated and reliable instruments that measure all sub-targets and the required number of participants) and the options for an alternative design based more on individual progress.



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DSP-groep, opgericht in 1984, is een onafhankelijk landelijk bureau voor onderzoek, advies en management, met zestig medewerkers. We werken in opdracht van de overheid (ministeries, provincies en gemeenten), maar ook van maatschappelijke organisaties op landelijk, regionaal en lokaal niveau.

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#### **Dienstverlening**

We ondersteunen onze opdrachtgevers bij complexe vraagstukken. We kunnen onderzoek doen, een registratiesysteem of monitor ontwikkelen, een advies uitbrengen, een beleidsvisie voorbereiden, een plan toetsen of tijdelijk het management voeren. DSP-groep geeft ook trainingen, workshops en lezingen.

#### **Meer weten?**

Neem vrijblijvend contact met ons op voor meer informatie of om een afspraak te maken. Bezoek onze website [www.dsp-groep.nl](http://www.dsp-groep.nl) voor onze projecten, publicaties en opdrachtgevers.