



Drug & Alcohol Services South Australia

Technical report

**WHO ASSIST
Phase III**

**Results from the Australian arm of an
International RCT of a Brief Intervention
for illicit drug use linked to the scores on the
Alcohol, Smoking and Substance
Involvement Screening Test (ASSIST)**

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EXECUTIVE SUMMARY

This report presents the findings from the Australian component of the international World Health Organisation ASSIST (Alcohol, Smoking and Substance Involvement Screening Test) Phase III Screening and Brief Intervention study. The ASSIST screens for risky use across all substance groups and has been tested for feasibility, reliability and validity across a number of cultures in earlier investigative phases (Phase I and II). The primary aim of the international WHO ASSIST Phase III Project was to conduct a cross-cultural randomised controlled trial (RCT) evaluating the effectiveness of an ASSIST-linked Brief Intervention (BI) for risky, but non-dependent, illicit drug use (cannabis, cocaine, amphetamine-type stimulants (ATS) & opioids) in participants recruited from primary health care settings. The study was conducted in Australia, Brazil, India and the United States of America, however only the Australian findings are presented here. For information on the international findings please refer to the WHO ASSIST website http://www.who.int/substance_abuse/activities/assist/en/index.html

Screening and brief intervention has been shown to be effective in primary care settings for alcohol, however there is currently a paucity of knowledge concerning the effectiveness of; (a) brief interventions for illicit drug use, (b) linked to screening outcomes, (c) in primary care settings, compared with the number of studies for alcohol or tobacco (Dunn *et al.*, 2001). This area has been slow to develop partially due to the lack of reliable and valid screening instruments for multiple substances, however, the recent availability of the ASSIST allows screening to be employed in primary health care settings and interventions to be developed and tested accordingly.

The study utilised a randomised controlled design in which eligible participants (N=171) were randomly allocated to an Intervention or Waitlist Control group at baseline and followed up three months later (follow-up rate = 95%). The Australian participants for this study were recruited from a free, walk-in, sexually transmitted disease service (Clinic 275) in metropolitan Adelaide, South Australia. Both groups were administered the ASSIST and a demographic profile questionnaire at baseline. Intervention participants received a 5-10 minute brief intervention for the drug for which they scored the highest on the ASSIST (i.e., cannabis, cocaine, ATS or opioids), they also received a self-help skills development booklet (Humeniuk *et al.*, 2003) to take home with them. The ASSIST-linked BI utilised FRAMES and motivational interviewing techniques and focussed on participants' ASSIST scores as a way of providing them with personalised feedback. At the three month follow-up all participants were re-administered the ASSIST. Participants who had received the ASSIST-linked BI at baseline

were asked what they thought about the personalised feedback they had received using a semi-structured questionnaire including: responses to the information received as part of the BI; whether or not the self-help booklet was read, and whether the BI procedure changed their substance use behaviour. Participants also provided feedback on which aspect(s) of the BI they remembered most and which aspects were most influential (if any) in changing substance taking behaviour.

The findings showed that participants who received the ASSIST-linked Brief Intervention had significantly lower Total Substance Involvement ASSIST Scores at follow-up than control subjects ($F(1,160) = 14.68, p < 0.001$). Participants who received an ASSIST-linked Brief Intervention for ATS use had significantly reduced Specific ATS Involvement ASSIST Scores at follow-up compared with control subjects ($F(1,120) = 7.89, p < 0.01$). Participants receiving an ASSIST-linked Brief Intervention for cannabis use demonstrated a trend toward reduced Specific Cannabis Involvement ASSIST Scores, although this was not statistically significant ($F(1,28) = 24.07, p = 0.137$). In addition, participants who received the Brief Intervention did not have significantly increased Specific Alcohol or Tobacco Involvement Scores at follow-up indicating that they had not replaced their illicit drug use with increased alcohol or tobacco use.

The open-ended feedback responses provided by those participants who had received the Brief Intervention were coded using thematic analysis (Braun & Clarke, 2006). Overall, responses to the Brief Intervention were positive and 72% of participants indicated that they did attempt to reduce their substance use after receiving feedback and information at baseline. Moreover, 76.8% reported reading at least some of the self-help booklet and 23.2% reported having read it all. Several broad themes: *'I've cut down'*, *'I've stopped using'* and *'I'm thinking about it'*, were identified from the analysis of the responses from those participants who did attempt to reduce their substance use. The dominant themes that were identified from the analysis of those who positively rated the influence of the ASSIST-linked BI on their health behaviour centred around issues of 'cutting down' and 'identifying and defining the problem'.

In conclusion, the effectiveness of the BI linked to ASSIST screening in primary health care is evidenced by the empirical findings showing a reduction in ASSIST scores, which was supported by participants' comments. Most participants cut down their substance use - some completely - and there were only a few participants who did not change their health behaviour at all. Comments received from participants confirm that positive changes in health behaviour can be achieved through the implementation of the ASSIST-linked BI. Participant resistance and defensiveness to the ASSIST and the BI was low and, overall, participants' health behaviour responses to the BI were positive.

SECTION 1 INTRODUCTION

There is a significant public health burden associated with substance use worldwide. Tobacco, alcohol and illicit drugs (heroin and cocaine) account for 8.8%, 3.2% and 0.4% of all deaths respectively, and 4.1%, 4.0% and 0.8% of Disability Adjusted Life Years respectively. Indeed, according to the 2002 World Health Report substance use is among the top 20 risk factors for death worldwide, (World Health Organization, 2002). There is also evidence that the burden on the public health care system from risky, albeit non-dependent use, may be greater than the burden due to dependent use (Institute of Medicine, 1990; Skinner, 1987).

There is substantial evidence of the benefits of screening and brief intervention for alcohol problems in primary health care (PHC) settings, particularly when linked the brief intervention is linked to the results of screening tests such as the Alcohol Use Disorders Identification Test (AUDIT) (Bien *et al.*, 1993; Cordoba *et al.*, 1998; Heather, 1996; Maisto *et al.*, 2001; Miller & Rollnick, 2002; Senft *et al.*, 1997; WHO Brief Intervention Study Group, 1996). Senft's showed a reduction in frequency of alcohol consumption at 6 and 12 months in hazardous drinkers who had received a 15 minute brief intervention and self-help materials, in a primary care setting (Senft *et al.*, 1997). Furthermore, the WHO Brief Intervention Study Group found that five minutes of simple advice, linked to the results of the AUDIT were as effective as 20 minutes of counselling (1996). Moreover, brief interventions have been shown to be a cost effective way of reducing alcohol consumption and associated problems (Fleming *et al.*, 2000; Wutzke *et al.*, 2001).

Screening and brief intervention might be effective in primary care settings for substance use other than alcohol, if culturally appropriate screening and intervention procedures could be developed. However, there is currently a paucity of empirical information concerning the effectiveness of: (a) brief interventions for illicit drug use; (b) linked to screening outcomes, (c) in primary care settings, compared with the number of studies for alcohol or tobacco (Dunn *et al.*, 2001). Part of the reason for the scarcity of research may be a result of not having access to adequate screening instruments for substances other than alcohol or tobacco.

There is evidence emerging suggesting that brief interventions may work for non-alcohol, non-tobacco drugs such as cannabis (Copeland *et al.*, 2001; Lang *et al.*, 2000; Stephens *et al.*, 2000), benzodiazepines (Bashir *et al.*, 1994), opioids (Saunders *et al.*, 1995) and cocaine (Stotts *et al.*, 2001). For example, (Bashir *et al.*, 1994) gave patients with chronic benzodiazepine problems brief advice lasting a few minutes and a self-help book, as part of a routine visit to a general practitioner. They found that the brief advice group significantly reduced their benzodiazepine use and showed improved general health both 3 and 6 months after the advice was given. In another study, regular amphetamine users – including dependent users, were recruited from a variety of health settings. These participants were assessed using a variety of procedures and were found to reduce their amphetamine use following a brief intervention which comprised two-four sessions of Cognitive Behavioural Therapy and a self-help book (Baker *et al.*, 2001). A randomized controlled trial conducted by (Bernstein *et al.*, 2004) screened clients recruited from walk-in primary health care clinics with a variety of drug and alcohol screening tests. Clients randomised to the brief intervention group were more likely to reduce their cocaine and heroin use than those not receiving the brief intervention. In this US study the brief intervention conducted by peer educators lasted an average of 20 minutes (range 10-45 min) with an adjunct ten minute 'booster' intervention via telephone ten days later. Finally, a pilot study amongst adolescents recruited from primary care settings showed that a 15-20 minute intervention linked to a brief self-report screening questionnaire resulted in attitudinal changes towards substance use and decisions to cut down (Stern *et al.*, 2007). This same study (Project CHAT) found that brief interventions based on motivational interviewing techniques were a viable approach for working with adolescents in primary care settings.

While the above-mentioned studies demonstrate that brief interventions for drugs can be effective, it is worth noting that for the majority of the studies the brief intervention session lasted between 30 and 90 minutes and that the interventions were not necessarily linked to screening outcomes within primary care settings.

In fact, until recently, a culturally-neutral screening questionnaire for all substances, including illicit drugs, has not been available for use in primary care settings.

1.1 The Alcohol Smoking and Substance Involvement Screening Test (ASSIST)

The Alcohol, Smoking and Substance Involvement Screening Test (ASSIST) was developed under the auspices of the World Health Organisation (WHO) by an international group of specialist addiction researchers and clinicians in response to the overwhelming public health burden associated with problematic substance use worldwide. The ASSIST was designed to screen for problem or risky use of tobacco, alcohol, cannabis, cocaine, amphetamine-type stimulants (ATS), sedatives, hallucinogens, inhalants, opioids and 'other drugs'. It is worth noting that methylene dioxymethamphetamine (MDMA), also commonly referred to as ecstasy, was included in the amphetamine-type stimulants category.

The ASSIST has undergone significant testing (see below) to ensure that it is feasible, reliable, valid, flexible, comprehensive and cross-culturally relevant. Phase I of the ASSIST project investigated test-retest reliability at the item level and scale level, as well as the collection of qualitative data on feasibility and acceptability. Two-hundred and thirty-six sets of test-retest interviews were completed by ten international sites in 9 different countries. Data were examined according to question stem, substance class and data collection setting in order to provide recommendations for improving the instrument. The ASSIST proved to be a reliable and feasible screening tool and the detailed results of Phase I can be found in (WHO ASSIST Working Group, 2002).

Phase II of the ASSIST project investigated the validity of the ASSIST for use in primary health care settings. The validity study conducted with 1047 subjects from seven different countries, demonstrated that the ASSIST had good concurrent, construct, predictive and discriminative validity. A brief intervention linked to ASSIST scores also was piloted as part of Phase II and demonstrated that a brief intervention for alcohol was an effective way of significantly reducing alcohol ASSIST scores when compared with primary health care subjects who did not receive an intervention (Humeniuk, 2006;

Newcombe *et al.*, 2005). Similarly, the brief intervention was also shown to be effective for drugs other than alcohol (cannabis, opioids & cocaine) and ASSIST scores for these substances significantly reduced by 23% from baseline to follow-up three months later.

The ASSIST V3.0 questionnaire (see Appendix 1) commences with a general screening question that asks about lifetime use; if the respondent reports no psychoactive substance use, the interview can be terminated. If the respondent admits to lifetime use of one or more substances, the remaining questions need only to be asked with regard to those substances used. Question 2 asks about frequency of use in the past three months. If none of the substances have been used in the past three months, the interviewer can skip to the last three questions, which enquire about lifetime and frequency of usage patterns. Question 3 is a measure of psychological dependence and asks about frequency of strong compulsion to use substances in past three months. Question 4 is a measure of harmful substance use, and asks how frequently the respondents' drug use had led to health, social, legal or financial problems. Question 5 asks whether respondents have failed to meet role obligations because of their use of substances (except tobacco). Questions 6 to 8 ask about lifetime and recent problems, including whether friends or relatives have expressed concern, prior attempts at controlling drug use and prior injection of drugs during the past three months and in their lifetime.

1.2 Phase III of the WHO ASSIST project

The international WHO ASSIST Phase III project is based on the model used by the WHO to advance alcohol screening and brief intervention through the development of the Alcohol Use Disorders Identification Test (AUDIT) (Babor *et al.*, 1989; Babor & Higgins-Biddle, 2001; Babor *et al.*, 2001; WHO Brief Intervention Study Group, 1996). The primary aim of the Phase III Project was to conduct a cross-cultural randomised controlled trial (RCT) evaluating the effectiveness of a Brief Intervention (BI) for illicit drugs (cannabis, cocaine, ATS & opioids) as linked to the Alcohol, Smoking and Substance Involvement Screening Test (ASSIST). It is worth noting that participants recruited to this study scored within the moderate risk range of the ASSIST only (i.e. between 4 and 26) and were not high risk, dependent users. Participants in this group were at moderate risk of health and other problems because of their drug use

and may have been experiencing problems both currently and in the future including the risk of dependence.

The primary aim of the Phase III WHO study was to undertake an international multi-site collaborative project to evaluate the effectiveness of a Brief Intervention for illicit drugs (cannabis, cocaine, ATS & opioids) as linked to the ASSIST, in a variety of primary health care settings and in a number of different cultural contexts. A secondary aim involved the development of client and clinician resources incorporating: instructions for administering the ASSIST and Brief Intervention; self-help materials on specific drug information and generic self-help strategies to reduce drug use; information on injecting risk, and a feedback report card on current drug use.

Overall, the Phase III international study intended to provide answers to the following research questions:

1. Does the ASSIST BI significantly reduce Total Illicit Substance Involvement¹?
2. Does the ASSIST BI reduce the Specific Substance Involvement Score¹ (cannabis, cocaine, ATS, opioids) for which subjects received a Brief Intervention?
3. Does the ASSIST BI perform better for some illicit substances than others?
4. Does the ASSIST BI, delivered to target one particular substance, also reduce other illicit substance use in the same individual?
5. Does reducing illicit substance use as a result of receiving a BI result in substitution with other substances such as alcohol and tobacco (ie. increase the Specific Substance Involvement Score² for alcohol and tobacco consumption)?

¹ See Table 1 on page 15 for a description of these scores

² See Table 1 on page 15 for a description of these scores

6. Are the testimonies (feedback) of participants who received the brief intervention commensurate with the results of the quantitative analysis (Q1 – 5 above)?

It was intended that this study be as 'real world' as possible and hence it was expected that only a very brief intervention would be feasible in primary care settings. This was due to time constraints and a general reluctance by health care workers to deal with substance users. Consequently, the length of the brief intervention was expected to vary from country to country depending on the time available to the clinician, but aimed to be between 5 and 15 minutes in duration.

1.3 The Australian component of the Phase III study

This report presents the quantitative and qualitative results from the Australian component of the WHO ASSIST Screening and Brief Intervention for psychoactive substance in primary health care settings. In particular, it examines how primary health care clients, who screen positive (moderate risk) on the ASSIST for illicit drugs (cannabis, cocaine, ATS or opioids), respond to a single short brief intervention suitable for use in primary health care settings as well as to self-help information, in comparison with control participants who do not receive a brief intervention. Due to constraints of sample size, it was not feasible for the Australian component of the study to answer all the outlined research questions and focussed predominantly on research questions 1, 2, 5 and 6 only.

1.3.1 *The ASSIST-linked Brief Intervention*

The aim of the ASSIST-linked Brief Intervention is to move participants through the stages of change using the technique of FRAMES and Motivational Interviewing (Bien *et al.*, 1993; Miller & Rollnick, 2002). The stages of change model proposes that individuals pass through recognised stages of change as they modify their own behaviour (Prochaska & Di Clemente, 1982). Each stage of the cycle of change reflects both a period of time and a set of tasks or processes of change required for movement to the next stage. The specific stages of change include Pre-contemplation (not thinking about changing), Contemplation (thinking about change, weighing up the pros and cons and information/resource gathering) and Action (actually cutting down or stopping).

While it is clear that brief interventions are effective, particularly for alcohol, it appears that implementation and uptake within health settings may be hindered by a variety of barriers (Roche & Freeman, 2004). The three main reasons perceived by clinical staff as barriers to taking up screening of alcohol screening and BI within PHC settings were; (1) a lack of time, (2) concern that patients will be defensive and, (3) a lack of staff knowledge and skills to conduct the screening and intervention. (Barry *et al.*, 2004)

To combat the identified limitations, the ASSIST-linked BI was designed to be very short and easily linked to the score from the ASSIST screening questionnaire via the use of the ASSIST Feedback Report Card (See Appendix 2), which records the participants' ASSIST scores and presents the risks associated with the participants' current pattern of substance use. Furthermore, the ASSIST-linked BI incorporates motivational interviewing techniques that have been found to reduce client resistance while still facilitating change. Finally, the BI within the Australian context followed 9 simple steps which could easily be utilised by health workers who were not accustomed to working with substance users on a regular basis. The 9 steps of the Brief Intervention are outlined below and an example is shown in is shown in the Appendix 3.

1. FEEDBACK – ask participant if they are interested in seeing how they scored on the questionnaire and use feedback report card to give feedback on scores and on the specific substance risks associated with their scores
2. ADVICE – provide advice to participant that the best way they can reduce their risk is to cut down or stop using the substance
3. RESPONSIBILITY – let participant know that what they do with the information you are providing is their responsibility and that you are just letting them know about the relationship between their current patterns of use and the kinds of harms they might be experiencing
4. CONCERN about score – ask participant open ended question regarding how concerned they are by their ASSIST score

5. GOOD THINGS ABOUT USING – creating ambivalence by weighing up the good things against the less good aspects of using the substance
6. LESS GOOD THINGS ABOUT USING – creating ambivalence by weighing up the good things against the less good aspects of using the substance
7. SUMMARISE – providing a summary of what the participant has just said using reflective listening with an emphasis on the less good aspects of their drug use that they have identified
8. CONCERN about less good things - ask participant open ended question regarding how concerned they are by the less good things they have nominated about using the substance
9. TAKE-HOME INFORMATION AND BOOKLET – provide participant with substance information and the self-help guide for cutting down.

2.1 Overview

The study employed a randomised controlled design in which eligible participants were randomly allocated to an intervention or waitlist control group at baseline and followed up three months later. Both groups were administered the ASSIST and a demographic profile questionnaire at baseline. Intervention participants received a brief intervention for the drug for which they scored the highest on the ASSIST (either; cannabis, cocaine, ATS or opioids), they also received self-help materials relating to that drug. If participants scored within the moderate risk range for two or more of the target drugs, they were asked which substance was of the most concern to them, and the Brief Intervention was aimed at this substance. Details about the Brief Intervention were recorded on a BI checklist (Appendix 4 “Part 7 – Brief Intervention Record”). Both groups were re-interviewed three months later with the ASSIST. After being administered the ASSIST, the brief intervention participants were administered a semi-structured interview which asked for their views on the information and feedback they had received at the last interview three months ago (Appendix 5 “Part 9 – Brief Intervention Process Rating Form – Follow up”). For ethical reasons, control participants were placed on a waitlist for treatment, and were given a brief intervention at the follow-up stage (after they had been administered the ASSIST). Details of the follow-up intervention were recorded on a “Part 7 – Brief Intervention Record” but are not included in the results of this study. Participants were compensated for their time in the study and for travel relating to returning to the clinic for the second interview three months later.

Ethical approval for this study was obtained from the Royal Adelaide Hospital Research Ethics Committee (Protocol no. 980803b) and all relevant ethical safeguards were met in relation to protection of participants.

2.1.1 *Primary Health Care Setting*

The study was conducted at a free, walk-in sexually transmitted disease service (Clinic 275) in metropolitan Adelaide, South Australia. This clinic is linked to the Royal Adelaide Hospital and is the primary clinic for sexual health

in South Australia. Participants were recruited over two periods: September – October 2003 and April 2004 – May 2005.

2.2 Participants

Participants were aged between 18 and 50 and were clinic attendees.

Participants who scored low: between 0 and 3 for cannabis, cocaine, ATS and opioids, and between 0 and 31 for tobacco, and between 0 and 26 for alcohol, hallucinogens, sedatives, inhalants or other drugs, were excluded from enrolment into the study, but received information on drugs if relevant.

Participants who scored between 4 and 26 (moderate risk) for cannabis, cocaine, ATS or opioids were enrolled in the study and randomised to either the Control or Intervention group.

Participants who scored in the high risk category (27 or higher for any of the substances), or who had frequently injected drugs in the last three months (more than 4 times per month on average) were excluded from enrolment into the study and were referred to treatment services via contact with the South Australian Alcohol and Drug Information Service (ADIS).

The following were the primary inclusion/exclusion criteria for recruitment to the study. Participants in the study were:

1. between the ages of 18 and 50 years;
2. a member of the main ethnic group(s) in the population;
3. able to communicate in English;
4. willing to participate in a 3 month follow-up where they return to the treatment agency for interview;
5. able to be followed up three months later and give contact details of at least 2-3 other people;
6. of fixed address and able to provide contact details of their home;
7. not pending incarceration within the next three months;
8. not severely cognitively impaired or have severe behaviour;
10. not tended to violent or aggressive behaviour;
11. physically well enough to participate in a 30 minute interview and intervention session;
12. not intoxicated or going through withdrawal from alcohol or other drugs;

13. not currently in drug (excluding nicotine) or alcohol treatment (within the last month),
14. not incarcerated or in an environment where they were not able to come and go as they please in the last three months.

2.3

Procedure

The clinical interviewers were trained by the International Study Coordinator to administer the test battery, ASSIST and Brief Intervention. For the purposes of this study, clinical interviewers were recognised as being 'defacto' staff of the STD clinic, to ensure that the screening and intervention were as 'real world' as possible.

All clients of the STD clinic who presented during the above-mentioned period were given a self-completion version of the ASSIST as an initial pre-study screen. Participants who appeared to score within the desirable moderate risk range met the inclusion/exclusion criteria were approached by the clinical interviewers and asked to be involved in the study under the proviso that they were eligible to participate. Participants were then re-administered the ASSIST questionnaire and demographic profile by the interviewer to ensure that they were eligible for study participation. Participants enrolled into the study were randomised to either the waitlist Control or Intervention group and were assigned a unique identification number. Depending on their gender and the score received for a particular substance at baseline, participants in each group also were matched to a high or low use substance group. All participants gave their informed consent and were asked for contact information to arrange a follow up interview.

Intervention participants received the ASIST linked Brief Intervention including the associated self-help materials. The Brief Intervention was timed and expected duration was around 6 to 8 minutes, but no more than 15 minutes. Details of the Brief Intervention were recorded on a checklist (Appendix 4 "Part 7 – Brief Intervention Record"). Control participants did not receive an intervention, but were told that they would be contacted again in three months, and to contact the clinical interviewer if they had concerns about the study or their substance use during this time. Both Control and Intervention participants had an appointment made by the researcher for the three month follow-up at

the completion of the baseline session. It is worth noting that baseline assessments were kept to a minimum because of the potential for bias and disruption to the flow of routine medical consultation at the primary health care setting.

At the three month follow-up, both groups (Control & Intervention) were re-administered the ASSIST and the Intervention participants were administered a brief intervention feedback questionnaire to ascertain how they perceived the information and feedback they received at baseline had affected their drug use (Appendix 5 “Part 9 – Brief Intervention Process Rating Form – Follow up”). Control participants received a brief intervention at this time.

2.4 Scores derived from the ASSIST questionnaire

A number of scores derived from participant’s results on the ASSIST were used for analysis. The following scores were calculated from data collected:

1. *Total Illicit Substance Involvement Score* (calculated by the addition of all responses to Questions 1-7 excluding alcohol and tobacco),
2. *Specific Substance Involvement Score* for each Substance (calculated by the addition of responses to Questions 2-7 within each substance class). This score indicates extent of involvement with specific substances (tobacco, alcohol, cannabis, cocaine, ATS, inhalants, sedatives/sleeping pills, hallucinogens, opioids, and ‘other drugs’).

Table 1 Scores derived from ASSIST V3.0 questionnaire

Domain	ASSIST Formula
Total Illicit Substance Involvement (Baseline & Follow-up)	$\sum Q_{1c-j} + 2_{c-j} + 3_{c-j} + 4_{c-j} + 5_{c-j} + 6_{c-j} + 7_{c-j} + 8$ (Max Score: 336)
Specific Substance Involvement Score – tobacco	$\sum Q_{2a} + 3_a + 4_a + 6_a + 7_a$ (Max Score: 31)
Specific Substance Involvement Score – for each substance, except tobacco	$\sum Q_2 + 3 + 4 + 5 + 6 + 7$ [addition of response to each question for each substance] (Max Score: 39)

2.5

Data Analysis

2.5.1

Quantitative Analysis

In order to assess the effectiveness of the Brief Intervention, comparisons of ASSIST scores at baseline and follow-up for both groups of participants (Control and BI) were conducted on several ASSIST substance scores (see Table 1 for calculation of scores). Control participants (who did not receive the brief intervention at baseline) were included in the analysis to control for the effects of time. A two-way repeated-measures ANOVA (General Linear Model) was conducted to determine the interaction effect on the following scores:

- ASSIST Total Illicit Substance Involvement Scores at baseline and follow-up for all participants.
- ASSIST Specific Substance Involvement Scores for participants receiving a specific BI for cannabis or ATS (tests could not be conducted on scores from participants who received a BI for opioids, or cocaine because the number of participants in these groups was too small).

In order to investigate whether any reduction in illicit drug use as a result of receiving the brief intervention resulted in substitution with increased alcohol or tobacco use at follow-up, paired t-tests were conducted on Alcohol and Tobacco Specific Substance Involvement Scores. In this analysis participants comprised only those receiving a BI at baseline, and each participant served as their own control between baseline and follow-up.

Paired t-tests were conducted on:

- ASSIST Specific Substance Involvement scores for alcohol and tobacco for BI participants only.

The Control Group and the Brief Intervention Group also were compared at baseline to assess any differences between the two groups with regards to the number and type of illicit substances ever used and demographic profile.

2.5.2

Thematic Analysis on Participant Feedback at follow-up

A significant and innovative aspect of the resulting scores from ASSIST screening, is that they allowed personalised feedback to participants regarding their scores and the provision of information around their current patterns of use and the risks associated with those scores. The scores also allow the clinician to engage the client in a non-confrontational way using client-centred

techniques. This is the essence of a good brief intervention. This personalised feedback was specifically incorporated into the design of the ASSIST BI via the use of the ASSIST Feedback Report Card (See Appendix 2) to increase participants' understanding of the relationship between their substance taking behaviour and their health outcomes.

An integral aspect of this research project was to investigate the how participants perceived the feedback and information they had received and whether they had modified their attitude and substance use as a result. In order to achieve this, feedback from participants receiving the brief intervention was incorporated to determine the effectiveness of the ASSIST BI. The ASSIST Brief Intervention Process Rating Form (see Appendix 5) was administered at follow-up three months after baseline. This gave participants, who received a brief intervention at baseline, the opportunity to provide feedback on the process of the ASSIST-linked BI via a series of open-ended questions and/or rating scales. It is worth noting that participants were re-administered the ASSIST questionnaire prior to the Brief Intervention Process Rating Form. The ASSIST Brief Intervention Process Rating Form focussed on three broad areas:

1. General Information about participants' perceptions of feedback and information provided as part of the process of the BI;
2. Specific questions concerning the information and feedback received during the session with the interviewer, and
3. Specific questions concerning the written take-home information provided in the Substance Users Guide.

Descriptive statistics describing participants' self-report rating scale outcomes ascertained from the Brief Intervention Process Rating are presented using descriptive statistics.

Responses to each open-ended question (data set) were analysed using thematic analysis (Braun & Clarke, 2006). Responses in each data set were examined to identify similarities and/or differences and were manually coded into key themes. Themes were considered 'key' when there was a repeated occurrence of terms and/or phrases within the corpus of responses. More

specifically, the patterned responses identified as key themes within each data set capture something important in relation to the research questions about the effectiveness of the BI. Where applicable, these themes were discussed in conjunction with results from participants' rating scales that formed part of the question. Implications arising from these results are also discussed.

3.1 Demographics

A total of 106 male and 65 female (N = 171) participants were recruited for the Australian study. The mean age of participants was 26 years and 1 month (sd = 6 yrs, median 24 years, range 17 - 45 yrs). The majority of participants identified themselves as White/Caucasian (162, 94.7%). One hundred and fifty six (91.2%) participants had never been married and ten (5.8%) reported they were currently living with a partner. Participants had an average of 13.4 years education (sd = 2.3 yrs, range 9 - 20 yrs), and 132 (77.2%) categorised themselves as employed and 39 (22.8%) as unemployed. Fifty-one participants (29.8%) indicated they were studying and of those 39 were employed and 12 were unemployed. The majority of participants (96.5%) indicated that they lived in their own home (either family home or rented accommodation) and only one participant lived in public housing (0.6%). The majority of participants reported having no particular religious preference or affiliation (n=120, 70.2%).

3.2 Treatment at baseline

All participants were randomised into two groups at baseline. The eighty-six participants who were randomly allocated to the BI group (50.3%) received a drug-specific BI at baseline and the 85 (49.7%) randomised to the wait list Control Group received a BI at follow up (approximately three months later). There were no significant differences between the Control Group and the BI group with regards to demographic profile, lifetime substance use, or ASSIST scores at baseline (i.e. Total Illicit Substance Involvement; Specific Substance Involvement).

Participants in each group also were randomised to a 'high' or 'low' use substance group depending on their gender and the score received for a particular substance at baseline. That is, participants scoring between 4 and 16 were allocated to the 'low score' category and those scoring 17-26 were allocated to the 'high score' category. However, it is worth noting that all these participants still were considered to be at "moderate risk" from their substance use. Table 2 below summarises the distribution of male and female participants across the high/low substance use in both the Brief Intervention and Control

Groups. This information will be utilized in the larger international study to determine if gender or severity of score impacts on the outcome of the BI.

Table 2 Substance Group Randomisation n (%)

Randomised group	High or low substance use group by gender n (%)					Total
	Male High (32.7%)	Male Low (29.2%)	Female High (21.1%)	Female Low (17.0%)	Sub Total	
Substance group Brief Intervention (BI) or Control						
Cannabis - BI	8	4	4	1	17	31 (18.1%)
Cannabis - Control	6	4	3	1	14	
Cocaine - BI	1	4	0	0	5	9 (5.3%)
Cocaine - Control	1	2	0	1	4	
ATS - BI	20	16	15	12	63	129 (75.4%)
ATS - Control	20	19	13	14	66	
Opioid - BI	0	0	1	0	1	2 (1.2%)
Opioid - Control	0	1	0	0	1	
Total	106 (62%)		65 (38%)		171	171 (100%)

Low score: 4 - 16; High score: 17 – 27.

3.2.1 *Average number of days between baseline and follow up*

Table 3 below shows that the average period of time between the baseline and follow-up interview was just over three months (101.7 days). The time between the two interviews ranged from approximately two and a half months (80 days) to just over five months (158 days). The median (97 days) shows that the majority of follow-ups occurred close to the three month period.

Table 3 Number of days between baseline and follow-up interview

Number of days between baseline interview and follow-up interview N = 162	
Range (days)	80 - 158
Mean (SD)	101.71 (14.74)
Median	97.00

3.2.2 *Previous treatment for substance use (N = 169)*

A total of 15 (8.9%) participants indicated that they had received previous treatment for drug or alcohol problems (excluding nicotine). Fourteen of those provided further information: nine (60%) reporting having received treatment for ATS use; two (13.3%) for alcohol use; two (13.3%) for cannabis use, and one (6.7%) for opioid use. One person (6.7%) reported having treatment for both ATS and alcohol use. The main treatment received was counselling (53.7%) and one overdose episode (ATS) was reported. All treatment occurred more than three months prior to the commencement of the study and none of these participants were excluded from the study. The average period of time that had passed since receiving treatment was 2.53 years (median = 0.92 years, SD = 2.97).

3.2.3 *Substance Involvement at Baseline*

A summary of ASSIST scores obtained by the sample are shown in Table 4 below. These scores were calculated only for participants who scored positive (i.e. at least one) for the specific substance concerned. With regard to individual substances, the highest average score was for tobacco followed by ATS then cannabis and alcohol. The mean Total Illicit Substance Score at baseline was 45.26 (SD = 18.82, n = 171). Independent t-tests conducted to compare the BI Group and the Control Group mean scores revealed no significant differences in scores at baseline with regards to the number of substances ever used or Total Illicit Substance Involvement.

Table 4 Summary of ASSIST scores obtained

Specific Substance	Q1. Ever Used Lifetime N (%)	n (%) scoring positive for specific substance	ASSIST SSI mean score (SD)
Tobacco	168 (98.2)	142 (83.0)	18.68 (8.65)
Alcohol	171 (100.0)	169 (98.8)	12.61 (7.81)
Cannabis	169 (98.8)	143 (83.6)	12.75 (8.58)
Cocaine	118 (69.0)	61 (35.7)	4.66 (3.49)
ATS	166 (97.1)	152 (88.9)	14.95 (7.49)
Inhalants	81 (47.4)	31 (18.1)	3.42 (1.71)
Sedatives	87 (50.9)	44 (25.7)	5.45 (3.49)
Hallucinogens	134 (78.4)	56 (32.7)	3.86 (2.29)
Opioids	47 (27.5)	17 (9.9)	4.59 (1.84)
Other	30 (17.5)	6 (3.5)	3.17 (1.17)

3.2.4 Current Frequency of Substance Involvement

The substances most frequently used by participants in the last three months were alcohol, followed by ATS, then cannabis and tobacco (Table 5 below).

Table 5 Frequency of Substance Involvement Scores over last 3 months (Q.2).

Specific Substance	Used in past 3 months n (%)	Frequency of use in past 3 months n (%)			
		Once or twice	Monthly	Weekly	Daily or almost daily
Tobacco	132 (100.0)	12 (9.1)	3 (2.3)	19 (14.4)	98 (74.2)
Alcohol	169 (100.0)	9 (5.3)	22 (13.0)	106 (62.7)	32 (19.0)
Cannabis	134 (100.0)	31 (23.1)	27 (20.2)	34 (25.4)	42 (31.3)
Cocaine	55 (100.0)	35 (63.7)	18 (32.7)	2 (3.6)	-
ATS	150 (100.0)	31 (20.7)	70 (46.7)	48 (32.0)	1 (0.6)
Inhalants	24 (100.0)	18 (75.0)	4 (16.7)	2 (8.3)	-
Sedatives	39 (100.0)	19 (48.8)	10 (25.6)	10 (25.6)	-
Hallucinogens	39 (100.0)	28 (71.8)	9 (23.1)	2 (5.1)	-
Opioids	10 (100.0)	5 (50.0)	3 (30.0)	1 (10.0)	1 (10.0)
'Other drugs'	3 (100.0)	2 (66.7)	1 (33.3)	-	-

3.2.5 *Time taken to administer ASSIST Questionnaire*

Table 6 below shows the average time taken to administer the ASSIST at baseline and at follow-up. One (17 minute) interview at baseline, and one (21 minute) interview at follow-up were considered outliers and were removed from the calculations shown in the table below.

Table 6 *Time (minutes) to administer ASSIST Questionnaire at Baseline and Follow-up*

	Mean	Median	SD	Min	Max
Time taken to administer ASSIST					
Baseline (N = 170)	8.25	8.00	2.28	4.00	14.00
Follow-up (N = 161)	6.99	6.00	2.15	3.00	14.00

3.2.6 *ASSIST Brief Intervention administered at baseline (N = 86)*

Eighty six participants received a BI at baseline, the remaining 85 were randomised to the Control Group to receive a BI at follow-up. Of those receiving BI at baseline 63 (36.8%) were allocated to receive a BI for the use of ATS, 17 (9.9%) for cannabis, 5 (2.9%) for cocaine, and 1 (0.6 %) for opioids. The time taken to administer the BI at baseline ranged between 3 minutes (minimum) and 15 minutes (max), the average time was 7.66 minutes (SD 2.06 minutes).

3.2.7 *Injecting behaviour at baseline (N = 170)*

The majority (81.8%) of participants had never injected any substance. Of the 31 participants who had injected, ten (5.9%) reported injecting within the past three months. For these participants the pattern of injecting was less than four times per month (on average). The remaining 21 (12.4%) reported having injected substances, but not in the past three months.

3.3 **Follow-up**

One hundred and sixty two participants took part in the follow-up study, representing a 95% follow-up rate. For ethical reasons, all participants randomised to the Control Group (n = 85) received a BI at follow-up after they had been re-administered the ASSIST. The follow-up Brief Intervention was administered for the substance for which participants recorded the highest score. Substances for which participants received the Brief Intervention followed the same pattern as those recorded at baseline (ATS, followed by cannabis, cocaine and opioids).

3.4 Inferential Statistical Analysis

3.4.1 Effect of the ASSIST BI on Total Illicit Substance Involvement Score

All participants were included in the analysis, regardless of the substance targeted in the intervention (n = 162). Assumptions of normality, homogeneity of variance and sphericity were met. Two-way repeated measures ANOVA results (Table 7) showed that the group receiving the Brief Intervention at baseline had significantly lower mean Total Illicit Substance Involvement scores at follow-up compared with the Control group ($F(1,160) = 14.68$, $p < 0.001$, observed power 97%, $\alpha = 0.05$). Results are shown graphically in Figure 1 below.

Table 7 Total Illicit Substance Involvement Scores – BI and Control at Baseline and Follow-up

	Baseline Score (SD)	Follow-up Score (SD)
Control Group (n=80)	43.4 (18.7)	42.3 (20.3)
Brief Intervention (n=82)	47.2 (19.4)	39.0 (17.8)

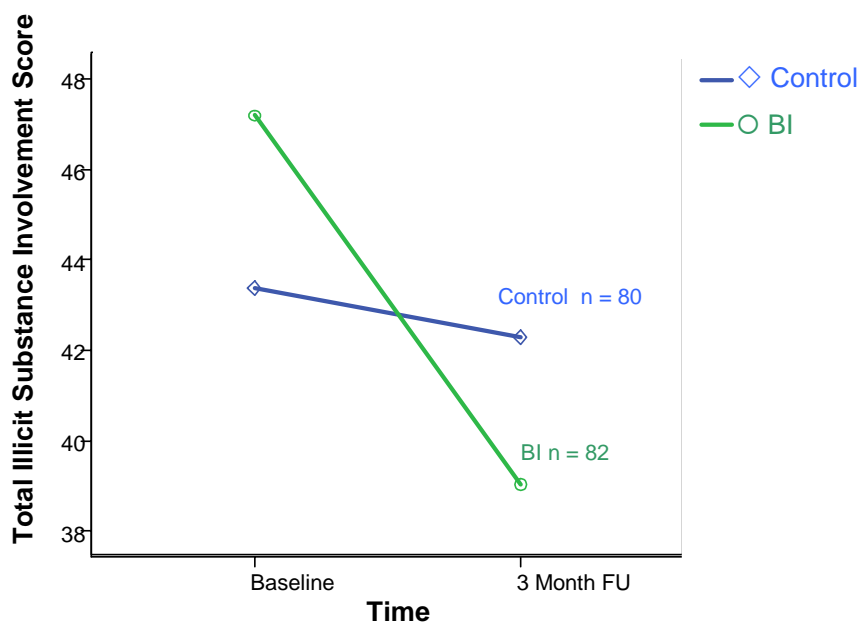


Figure 1 Total Illicit Substance Involvement scores over time, BI vs. Control

3.4.2

Effect of the ASSIST BI on Specific Cannabis Involvement Scores

Participants included were those randomised to receive BI for cannabis involvement at baseline (n=17), and those randomised to the Control Group for cannabis involvement at follow-up (n=13). Assumptions of normality, homogeneity of variance and sphericity were met. Two-way repeated measures ANOVA (Table 8) revealed no statistically significant difference in Specific Cannabis Involvement scores at follow-up between the two cannabis groups ($F(1,28) = 24.07, p = 0.137$, observed power 31%, $\alpha=0.05$). While not statistically significant, the results shown graphically in Figure 2 below indicate a trend in the direction of reduction of cannabis involvement for those receiving BI at baseline.

Table 8 *Specific Cannabis Involvement Scores – BI and Control at Baseline and Follow-up*

	Baseline Score (SD)	Follow-up Score (SD)
Cannabis Control Group (n=13)	19.1 (7.8)	18.7 (7.9)
Cannabis Brief Intervention (n=17)	20.2 (5.3)	17.2 (6.2)

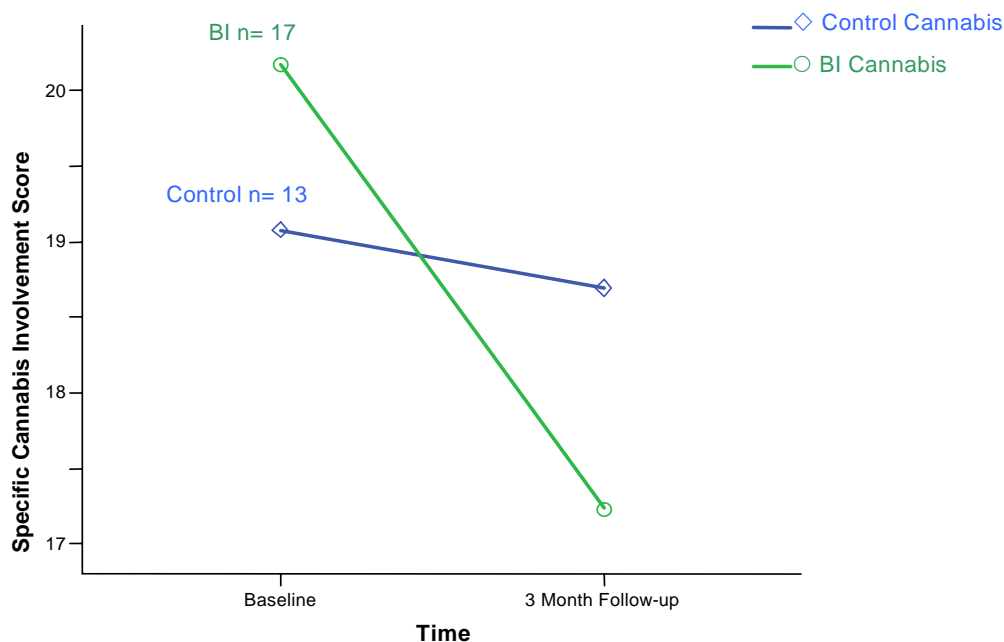


Figure 2 *Specific Cannabis Involvement scores over time, BI vs. Control*

3.4.3 Effect of the ASSIST BI on Specific ATS Involvement Score

Participants included were those randomised to receive Brief Intervention for ATS Involvement at baseline (n=59), and those randomised to Control Group for ATS at follow-up (n=63). Assumptions of normality, homogeneity of variance and sphericity were met. Two-way repeated measures ANOVA (Table 9) showed that the group receiving the Brief Intervention at Baseline had significantly lower Specific ATS Involvement scores at follow-up compared with the Control group ($F(1,120) = 7.89, p < 0.01$, observed power 80%, $\alpha = 0.05$). Results are shown graphically in Figure 3 below.

Table 9 Specific ATS Involvement Scores – BI and Control at Baseline and Follow-up

	Baseline Score (SD)	Follow-up Score (SD)
ATS Control Group (n=63)	15.5 (7.0)	13.6 (8.0)
ATS Brief Intervention (n=59)	17.4 (7.0)	12.2 (7.3)

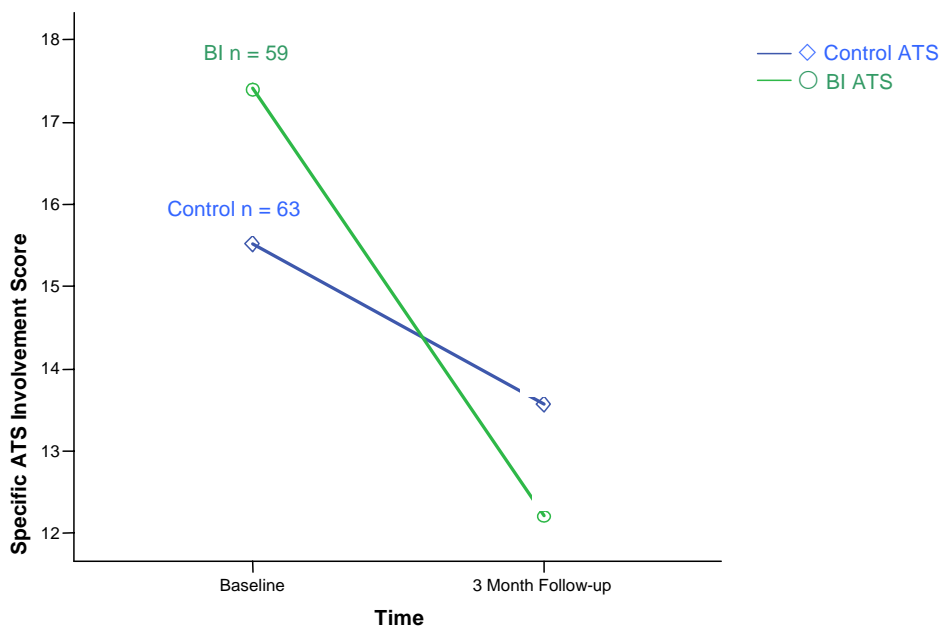


Figure 3 Specific ATS Involvement scores over time, BI vs. Control

3.4.4 *Changes in Specific Alcohol Involvement Scores and Tobacco Involvement Scores in BI participants over time*

Participants included were those randomised to receive a Brief Intervention for any illicit drug at baseline (n=82). Assumptions of normality, homogeneity of variance and sphericity were met. Paired t-tests (Table 10) showed no statistically significant difference between the baseline and follow-up scores for Specific Alcohol Involvement Scores. Specific Tobacco Involvement Scores tended to decrease over time.

Table 10 *BI Group only – Specific Alcohol Involvement score and Specific Tobacco Involvement Score at Baseline and Follow-up*

	Baseline Score (SD)	Follow-up Score (SD)	t, p value
ASSIST Specific Tobacco Involvement Scores (n=82)	16.3 (10.4)	15.3 (10.1)	t=1.96, p=0.053
ASSIST Specific Alcohol Involvement Scores (n=82)	11.8 (7.8)	11.1 (7.9)	t=1.2, p=0.234

SECTION 4 DISCUSSION

Evidence for the efficacy and successful implementation of brief interventions for illicit drugs within primary health care settings is limited. Brief intervention studies reported in the literature most frequently target at-risk populations of alcohol users, while a small proportion focus on targeting illicit drug use. Methodologies in these studies are varied and range from various forms of counselling and feedback, to more formal structured therapy (Barry *et al.*, 2004).

The majority of the recruitment sample for this randomized controlled study were Caucasian, reasonably well educated and tended to be employed, and were reflective of the type of client attending this particular Primary Health Care site. There were no demographic differences between the Control and BI groups, and while a small proportion of the sample had injected drugs and/or had received treatment for AOD problems, this was not a sample of dependent drug users. Follow-up rates in this study were very high (95%) and the main findings of this study indicate that the ASSIST is an acceptable and timely way of screening for risky substance use in a primary health care setting and can be linked easily into a BI.

The results indicate that the ASSIST linked BI effectively reduces total illicit substance involvement, regardless of the substance of focus. Moreover, the results show a significant reduction in specific substance involvement of ATS use for those participants receiving that specific BI. While the effect for cannabis was not statistically significant, the trend for those receiving the BI was downwards and this non-significant result most probably reflects the small sample size rather than a lack of efficacy.

Use of illicit substances often occurs within a context of use of other substances, including alcohol and tobacco. Moreover, there is empirical evidence that reduction in one illicit substance such as heroin, can result in substitution and with increased use of another substance (Fairbank *et al.*, 1993; Topp *et al.*, 2003), and this phenomenon also has been observed within the naturalistic setting. Results from this study demonstrate the implementation of the BI and resulting reduction in illicit substance use, does not appear to

result in increased uptake of alcohol or tobacco, and in fact it appears that it may have had the effect of reducing the use of tobacco.

This study was concerned with treatment efficacy, and the results demonstrate that the ASSIST-linked BI is effective in reducing substance use as measured by ASSIST scores after a three month period within an Australian Primary Health Care setting.

5.1 Participants' rating of the Brief Intervention Process

The ASSIST Brief Intervention Process Rating form (see Appendix 5) was administered at the follow-up interview (approximately three months after baseline). This rating form gave participants, who received a brief intervention at baseline, the opportunity to provide feedback via a series of open-ended questions and rating scales. Participant feedback was sought about the process of the BI including: responses to the information received as part of the BI; whether or not the self-help materials were read, and whether the BI procedure changed substance use behaviour. Participants also provided feedback on which aspect(s) of the BI they remembered most and which aspects were most influential (if any) in changing substance taking behaviour. Participants were aware that they were involved in a research project concerned with their responses to a questionnaire that measured their substance use, and also the ways in which they responded to the intervention and feedback given to them about their drug use however, the term 'brief intervention' was not used during any discussions with participants.

5.1.1 *Overview of Analysis*

Participants' responses for each question were considered to be a data set and each response was allocated an individual identification number; these numbers are shown in brackets at the end of the respective response. Where necessary [square brackets] surround words inserted for purposes of clarity. Responses to each open-ended question were coded using thematic analysis (Braun & Clarke, 2006). Responses in each data set were examined for similarities and/or differences, and themes were identified and coded manually. The analyses of several themes identified are presented below and where applicable, these themes are discussed in conjunction with results from participants' rating scales.

5.2 General Feedback on the ASSIST BI

Eighty-two (95.4%) of the 86 participants who received the ASSIST-linked BI at baseline were available for follow up at three months. Of those, 78 (95.1%) agreed to comment on their understanding of the purpose of the feedback and information they received on substance use as part of the BI. One dominant theme: '*Becoming aware*' and two minor themes '*I don't know*' and '*Just to inform me*' were identified from the analysis of these comments.

5.2.1 '*Becoming aware*'

Participants frequently commented that the information and feedback they received as part of the BI had made them 'realise' or become 'more aware' of their substance use and also of the potential side effects of such use. The way in which participants expressed this common theme of 'becoming aware' varied. For example, several participants referred directly to their increased understanding of the harms, side effects and health consequences of continued use:

- *Increased my awareness and the implications of my drug use (15).*
- *Made me realise [that] what I was doing to myself health-wise wasn't worth the outcomes (i.e. health problems). Made me think, stop and realise if it's worth feeling sick in morning after using. Made me aware of consequences of use, of feeling depressed after heavy session (25).*
- *Makes you aware of the health effects of using these substances (51).*
- *To make me aware of what substances were doing - of the consequences (65).*
- *Look at consequences of my drug use - harms to me(20).*
- *Information on my drug use - gave me perspective on the harmful aspects (50).*

Other participants spoke specifically about becoming more aware of their levels of consumption and the effects of that consumption:

- *To help me identify what my drug use is like (quantity) and the problems I may encounter if I continue using (56).*
- *Identifying my usage levels and realising the danger of using these drugs (13).*

- *Increase awareness/to bring to my attention what my intake was (14).*
- *Made me aware of risks and how much I had been taking (23).*

Comments, such as those outlined above, were representative of the kinds of positive feedback received from participants about the BI process and its ability to raise their awareness about the level of their substance use and subsequent potential health effects of continued use. Evidence of participants' increased awareness of levels of use and possible consequences of continued use suggest that the BI facilitated movement from pre-contemplation to contemplation (Prochaska & Di Clemente, 1982; Prochaska *et al.*, 2004). In the theme *Becoming Aware* the overall message about the purpose of the feedback and information participants received is perhaps best summed up by a comment made by one participant who said the BI was like a "*Slap in the face it woke me up to realise what I was doing*" (40).

Although it was clear that the majority of participants responded positively to the feedback and information they received, the two minor themes described below illustrate this was not the case for all participants.

5.2.2 *'I don't know' and 'Just to inform me'*

For example, two participants reported that they had 'no idea' what the BI was about:

- *Can't remember-probably to help me cut down my drug use (4).*
- *Don't know really (7).*

And a few participants reported that they thought the main aim of the BI was simply to provide information:

- *Just to inform me (17).*
- *To give people information about their drug use (53).*

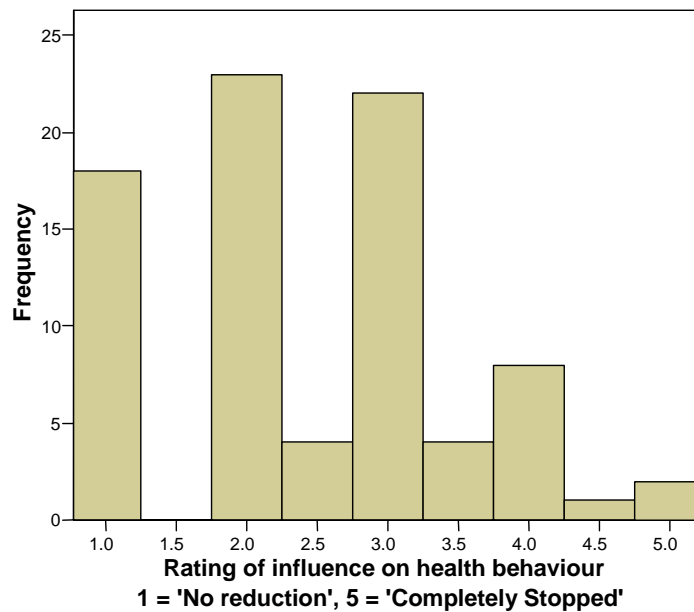
Although these kinds of comments were made by a minority of participants they stand as a reminder that, despite the overall success of the BI, when it comes to instigating change the BI process is unlikely to suit everyone.

5.3 Influence of ASSIST BI on health behaviour

Participants were asked to rate the influence of the ASSIST-linked BI on their health behaviour on a five point Likert scale (rating scale: 1 = 'no influence', 5 = 'completely influenced'). The bar chart below (see Figure 4) shows the majority of participants (78%) rated the influence of the ASSIST BI at two or more (N=82).

Figure 4 Brief Intervention group – rating of influence on health behaviour

Comments made by participants who rated the influence of the BI at two or



more (64, 78%) were analysed separately from those who rated the influence at one (18, 22%). Three broad themes '*I've cut down*', '*I've stopped using*' and '*I'm thinking about it*' were identified from the analysis of comments from the 64 participants who stated the ASSIST BI did influence their health behaviour (rating 2 or more). Two related themes '*Heard it all before*' and '*It's not an issue*' were identified from the analysis of comments made by the 18 participants who claimed the ASSIST-linked BI had 'no influence' on their health behaviour'. The five themes arising from these two groups are presented separately below.

5.3.1

'I've cut down'

The most dominant theme identified, from the analysis of those who rated the influence of the ASSIST-linked BI on their health behaviour at two or more, centred around issues of 'cutting down'. For example, many of these participants stated that the information they received confirmed what they already knew and this provided the impetus for cutting down:

- *Clarified what I already knew about drugs and make me aware of risks. It was the impetus for changing behaviour (2).*
- *Thought about side effects and risks and decided to cut down on cigarettes, drinking and amphetamines. Cemented what I already knew (62).*
- *Survey made me see how I was using drugs and made me more aware, more conscious of the problems associated with drug use. I did cut down my ATS use (60).*

Several participants also made mention of specific actions they had taken to cut down their substance use. These actions included the usefulness of keeping the 'drug diary':

- *Made me realise how much I was smoking (cannabis) - I also kept a drug diary and I was surprised by how much I was using. My smoking was due to boredom. I keep myself busy (new girlfriend) now and do not smoke much at all (32).*
- *Made me realise to what extent my intake was/how much money I was using. Made a point of keeping a drug diary and reducing because I realised the extent of my use (33).*

or setting goals:

- *Cut down on ATS & alcohol use. Set some financial goals-trying to save money-limited the amount of money I take with me so that I don't buy drugs. I'm focusing in on my health-exercise more (6).*

or seeking further help by consulting other professionals:

- *It made me stop and think about what I was doing. I looked at my habits. Asked other health professionals about potential harms of my drug use (23).*
- *Cut down ATS use. Went and got checkup by doctor. Found booklet informative and made me aware of harms (5).*

Di Clemente (1999) points out that engagement in these action-orientated kinds of activities can be seen as clear indicators of motivated behaviour:

Motivation for change has been related to treatment seeking, treatment attendance (going to treatment sessions), and treatment participation (talking in group, doing homework, participating in exercises) (Di Clemente & Prochaska, 1998, Smith Subich, & Kolodner, 1995 cited in (Di Clemente, 1999)).

The comments in the theme *'I've cut down'* above highlight some of the direct ways in which participants related their actions of cutting down to feedback and information they received as part of the BI. These comments suggest that participating in the BI process motivated these participants to engage in action-orientated behaviour.

5.3.2 *'I've stopped using'*

While most participants indicated they had seriously 'cut down' on their substance use, a few participants reported a complete change in lifestyle since their participation in the study:

- *Gave me self worth-changed my whole life. We changed our entire environment, cut connection with all users. Didn't go to parties and made a decision to stop using. My health has improved and I feel great (14).*
- *Stopped using and haven't since (58).*
- *Stopped using everything completely (59).*

The comments outlined in the two themes above focused on 'cutting down' and 'stopping' substance use and they can be seen to represent of the kinds of comments made by participants who had resolved their ambivalence. However,

in the following theme '*I'm thinking about it*' participants' comments show a continued ambivalence about drug use.

5.3.3 '*I'm thinking about it*'

These participants indicated they were influenced by information provided and they were weighing up their current behaviour with future actions:

- *Taken information seriously - weighing up whether to give up - weighing up pros and cons of giving up (61).*
- *Hasn't influenced my behaviour so far but has reinforced my belief that smoking can't be a long-term habit and that I must cut down. I have plans to cut down over the next few weeks (18).*
- *Made me more aware, thinking about consequences and long term effects and what will need to happen down the track (25).*

Some participants indicated that they had started to think about the link between specific drug use and health consequences.

- *Started thinking about dangers associated with smoking cannabis & tobacco (56).*
- *It made me realise that my drug use was probably linked to my depression and that I should reduce (22).*

The comments grouped under the theme '*I'm thinking about it*' are consistent with what would be expected from people who are 'contemplating' change (Prochaska & Di Clemente, 1982). Although these comments indicate that these participants have not yet changed their pattern of substance use, many of these comments still show that the BI had influenced their thinking about the health implications of their behaviour, and as such they indicate a potential for change in the future.

The final two related themes, '*Heard it all before*' and '*It's not an issue*' were identified from the analysis of comments from the 18 (22%) participants who reported that the feedback and information they had received as part of the ASSIST-linked BI had no influence on their health behaviour (who rated the question at one).

5.3.4 *'Heard it all before'*

These participants reported they had not changed their health behaviour as a result of the BI - either because they were already aware of the information or they were set in their ways and therefore the information had little or no influence on them:

- *Already aware of dangers (1).*
- *Heard it before (9).*
- *Heard the stuff before (10).*
- *I'm set in my ways (11).*

The kinds of comments outlined above convey a level of resistance to accepting substance use information – they've heard it all before and there seems to be little motivation for change.

5.3.5 *'It's not an issue'*

The comments that make up the second theme can be seen to add a slightly different perspective to the theme outlined above. In this theme participants intimate that not only have they heard it before, but it is their previous knowledge about problem drug behaviour that enables them to say that their own substance taking behaviour is not problematic.

- *Consider myself a 'safe drug user' and therefore do not think I have a problem (6).*
- *Don't think I read the information. I am happy with my level of using and don't think I'm in any danger (13).*
- *Class myself as well informed re drugs. I don't believe I am in a hazardous group, i.e. drug use (5).*
- *Choosing to smoke at the moment. I know the risks associated with it (4).*

As such the comments in the two related themes above convey the idea that participants have previously engaged with information on substance use and therefore their decision not to change their own substance taking behaviour can be seen as an active choice.

Comments chosen to illustrate the first three themes above (*I've cut down; I've stopped using and I'm thinking about it*) capture the main ideas put forward by the majority of participants who reported their health behaviours were influenced by the BI. In order to explore the extent of this influence on their health behaviour participants were asked to indicate whether they actually reduced their substance use and, if they did, how long they maintained this reduction.

5.4 Did you reduce your substance use?

Fifty-nine (72%) participants indicated that they did attempt to reduce their substance use after receiving feedback and information at baseline. These participants were asked to rate the extent to which they reduced their substance use (1 = 'No Reduction'; 5 = 'Completely Stopped') and the median response was 3.

Fifty-five (67%) participants provided information on the length of time they had managed to maintain their reduction in substance use. The average time participants maintained their reduction of substance use was 10.8 weeks. The maximum length of time was 18 weeks, and the minimum was 2 weeks (sd = 3.4 weeks, median = 12 weeks).

5.5 What influenced your health behaviour?

Participants were also invited to comment on which aspects of the information and feedback most influenced their health behaviour (substance use). The analysis below describes three related aspects of the information and feedback identified by participants as influential: 1) the score, 2) the interview and 3) hearing myself speak. Each of these three aspects relate to a single notion that can be expressed as one dominant theme: '*Identifying and defining the problem*'.

5.6 Identifying and defining 'the problem'

5.6.1 'The score'

Several participants spoke specifically about the way in which receiving a 'score' influenced their health behaviour. For example, for quite a few participants having a score made 'it' (the substance taking behaviour) more real:

- *The score put it into perspective, it made it more definite – more objective (43).*
- *Seeing it on paper and the risk score (44).*
- *The score on the form more than anything was pertinent to me as a number. I take more notice of numbers than words (42).*
- *The score (54).*

Other participants commented that being presented with a score helped them connect their substance use with symptoms they were experiencing:

- *High score on ATS and associated symptoms and I can relate my use to those symptoms (12).*
- *Realising that cannabis use has been linked with depression (which I have experienced) and linked with mood problems (37).*

Another aspect of receiving a score that participants commented upon was that having a score highlighted the risk factors associated with substance use and a number of participants specifically mentioned being surprised by the score they received:

- *The score. I was surprised at my score for BZD, it was higher than I thought it would be (57).*
- *The score was high and made me think "why am I doing this so much"? (56).*
- *Scale presenting at what level of risk I was of experiencing problems - i.e. moderate risk (41).*

The ASSIST scores provided as part of the BI provides participants with a unique 'measure' of their illicit substance use and the risks associated with that use. Participants' comments outlined above show that they valued the way in which the ASSIST score they received as part of the BI gave them the ability to 'quantify' and 'objectify' their substance taking behaviour. Clearly the score was considered an important part of participants' ability to gain an understanding of their current health problems. Importantly, participants' comments also demonstrate that the score also enabled them to make the

connections between their substance taking behaviour and their future risk of developing particular health problems. One participant captures the essence of comments made around the influence of the 'score':

- *Having a summary of it all really influenced my behaviour - when I saw my score it really had an impact. When I go out now and see other people using it makes me think "God did I look that stupid". It's disgusting actually (9).*

5.6.2 'The interview'

A number of participants referred to the ways in which the BI interview confirmed, or helped them make the important connection between their substance use and harmful effects:

- *Drawing links between using drugs and harmful effects. It was an opportunity to reflect on my drug use and realise that many of the effects and problems I was experiencing were probably related to drug use (4).*
- *The whole thing about the amphetamines and the risk level associated with use. The study really opened my eyes as to what is going on, I haven't been hanging around the same people [anymore](60).*
- *The session focused my thinking on drug use and effects. It has become a goal of mine to reduce my drug use (58).*
- *I wanted to do it myself (cut down drug use). The interview made me stop and think about my drug use. The information was useful and the interview wasn't too long which was good (15).*

Making the connection between substance taking behaviour and outcomes is a vital aspect of motivating change and previous research has shown that substance users are more likely to change their behaviour if they can connect their substance use with any related problem (Miller & Rollnick, 1991). The comments above support the idea that, for some participants at least, the BI interview provided them with an opportunity to stop and think about their substance taking behaviour, and realise that their substance use is affecting their health and, importantly, they that can change their substance using behaviour.

5.6.3

'Hearing myself speak'

Participants' comments identified in this theme suggest that it was during the process of actually verbalising answers to questions about their substance that they came to appreciate the significance of the substance taking behaviour. The comments below were chosen to highlight some of the more common realizations participants mentioned they came to in the process of answering the BI questions and talking about their substance use:

- *Answering the questions made me realise how much I was using. The talk afterwards was also helpful and I was able to weigh up the good and bad (1).*
- *Asking me how much I use made me realise what I'm putting my body through (2).*
- *Me telling you the bad things about using just clicked in my head and I thought "What am I doing"? (23).*
- *Talking about it and realising they (opioids) are addictive and getting the score-seeing it in black and white really hit home (46).*
- *Talking about it and verbalising it (47).*
- *Talking about my drug was putting in my thoughts (48).*

The practice of providing people with the opportunity to weigh up the pros and cons of their behaviour in a non-confrontational manner is a key factor in motivational interviewing (Miller & Rollnick, 2002). Although MI is considered a client centred approach, it is not applied entirely without direction and one important intention of MI is to ensure that it is the client who voices the arguments for change (Miller & Rollnick, 2002). Integral to the success of brief motivational interviewing is the ability to elicit 'change talk' from participants and this is fundamentally linked to the interviewers' ability to empathise and listen reflectively (Miller & Rollnick, 2002). These ideas have their foundations in social psychology, and in particular self-perception theory which posits that as one argues on behalf of a particular position he or she becomes more committed to that position:

"In the language of self-perception theory, "As I hear myself talk, I learn what I believe." In everyday language we can literally *talk* ourselves into (or out of) things (Bem, 1967, 1972, cited in Miller, 2002, p. 21).

The success of incorporating these motivational interviewing techniques into the ASSIST-linked BI is clearly evident in the comments outlined above, which illustrate some of the ways in which participants' valued the opportunity to hear themselves talk about the effects of their substance use more fully. These comments also indicate that the opportunity to generate such 'change-talk' played an integral role in positively influencing their health behaviour. As one participant put it, they were influenced by *thinking, and thinking objectively about drug use, rather than rationalizing your use to your self* (61). Moreover, research suggests that people who generate self-motivated behaviour for change are more likely and more willing to maintain that change (Deci & Ryan, 1985; Ryan, 1995).

While the comments above indicate the majority of participants valued the information and feedback they received as part of the ASSIST BI, there were nevertheless a few participants who simply stated that the information and feedback did not influence their behaviour; it merely confirmed what they already knew:

- *Feel like I knew a fair bit about it already. I was not really influenced by the feedback* (7).
- *No influence* (25).
- *Not really. Revision of what I already knew* (27).
- *No influence on my drug using behaviour. I thought about how much I used and how it was affecting me but came to the conclusion that I use safely* (26).
- *It reinforced what I already knew* (39).

These comments are indicative of what would be expected from participants whose behaviour was not influenced by the BI. As with the comments identified in the two related themes *Heard it all before* and *It's not an issue* described earlier, they are likely to represent those participants have remained 'pre-contemplative'. It was not expected that the BI would influence the health behaviour of all participants.

5.7 Analysis and discussion on feedback on 'Self-help' material

At completion of the BI at baseline participants were given a self-help booklet containing material designed to reinforce information discussed during the brief intervention (Humeniuk *et al.*, 2003). At the three month follow-up each participant was asked whether they recalled receiving the booklet, how much of it they read, and how useful they found it. Analysis and discussion of participant responses to these questions is presented below.

5.7.1 *How much of the 'Self-help' booklet did you read?*

Each of the seventy-eight participants (95.1%) who recalled receiving the self-help strategies booklet at baseline were asked to rate how much of it they had read (1 = none, and 5 = read all). Sixty-three participants (80.8%) reported reading some of the book (rating 1.5 or more) and of those 19 (24.4%) reported having read it all (rating 5).

Those participants who reported having read little or none (rated '2' or less) of the self-help booklet were asked "what stopped you from reading through all of the booklet?" (36, 46.1%). The most common response given for not reading the booklet related to lack of time or interest:

- *Couldn't be bothered-not the right time (3).*
- *Lack of interest/time (18).*
- *Moving house and busy (19).*

A few participants claimed that they did not read the information because they did not need it - either because they were already aware of 'this kind of stuff' or it 'wasn't relevant' to them. The following response was typical of these kinds of claims:

- *Aware of much of the information - did not think I needed to read it all (2).*

Two of the participants who reported they '*already knew*' or '*couldn't be bothered*' also mentioned that they resisted reading the information because their prior knowledge also made them feel '*like an idiot*' or they '*didn't want to hear what it was telling them*':

- *Already have a knowledge of this kind of stuff. Reading it makes me feel like an idiot (1).*
- *Partly did not have time, couldn't be bothered, and I didn't want to hear what it was telling me, sort of know some of it already (28).*

The above comments highlight that those participants who did not read the self-help material most frequently referred to a lack of time or inclination.

5.7.2 *How useful was the self-help booklet?*

Those participants who indicated that they had read some or all the self-help booklet (rating 2 or more) were asked to rate the usefulness of this material (56, 71.8%). Five areas of 'usefulness' were explored:

1. helping them understand their level of risk;
2. weighing up the positive and negatives of using (drug);
3. understanding options concerning changing their drug use;
4. providing realistic strategies and guidelines for change, and
5. whether it actually helped them cut down or stop using.

Four responses were available for the five areas of usefulness ('Not at all useful', 'Somewhat useful', 'Very useful' or 'Don't know').

The majority of participants found the information in the self-booklet useful (combining the categories 'somewhat useful' and 'very useful') for understanding their level of risk, weighing up their drug use, and providing them with realistic strategies and guidelines. Understanding options about changing drug use and helping cut down on drug use were also rated positively, but less so than the previous three categories (see Table 11 below).

Table 11 How useful was the booklet for ...? n(%)

How useful was the booklet?:	Not at all useful	Somewhat useful	Very useful	Don't know	Total N (%)
Understanding your level of risk?	3 (5.4)	27 (48.2)	19 (33.9)	7 (12.5)	56 (100.0)
Weighing up your drug use?	4 (7.1)	29 (51.8)	17 (30.4)	6 (10.7)	56 (100.0)
Understanding your options about changing drug use?	12 (21.4)	18 (32.1)	16 (28.6)	10 (17.9)	56 (100.0)
Providing realistic strategies & guidelines?	9 (16.1)	22 (39.3)	16 (28.6)	9 (16.1)	56 (100.0)
Helping you cut down on drug use?	16 (28.6)	19 (33.9)	15 (26.8)	6 (10.7)	56 (100.0)

5.8 Participants' final comments

At the conclusion of the follow-up interview, participants were asked whether there was anything else they would like to say about their participation in this project and a total of 55 participants took the opportunity to comment. Analysis revealed the majority of comments were positive and participants expressed the benefits they gained from taking part in the study in a variety of ways. For example, several participants stated that the ASSIST-linked BI was a 'good program' and that it had made them think about their substance use:

- *Good program. Made me think about my drug use (20).*
- *Good. Very informative. Made me think about my drug use (19).*
- *More people should participate because it is an eye-opener (35).*
- *Weighing up drug use, the negatives have started to outweigh the positives (59).*
- *It was well done (32).*

Others drew attention to particular aspects of the process that they found beneficial. For example:

- *Discussion after administering questionnaire was very good and gave an opportunity for talking about personal issues (10).*
- *One on one session good. Comfortable and easygoing session. Very discreet. Not too long (47).*
- *It was straight forward and clear. I learned a bit from information presented (31).*

The comments above highlight the importance of being able to deliver a brief, one on one session that provides targeted clear and straightforward information.

Participants also made specific mention of the importance of feedback:

- *Feedback was best part of it. It would be good for people who are using more drugs (15).*
- *Good to have the personal feedback it makes it more meaningful (21).*

Perhaps the most interesting aspect of the final feedback comments about the ASSIST-linked BI was the frequency with which participants connected their behaviour change to issues of 'timing' or 'readiness'. For example, a few participants talked about the idea that people had to be 'ready' to change:

- *You have to be ready for the information to have an effect (60).*
- *Depends on where you are in life as to whether you are ready to stop (7).*

Many of the participants' who reported that they had changed their substance taking behaviour connected this resultant change of behaviour in a positive way to the 'timing' of their participation in this study:

- *Feels like the BI session and booklet was really "meant to be". Thank you (16).*
- *[the BI] Came at right time (4).*
- *Just what I needed, it came at right time. Have since thought about the baseline interview at least once a week (33).*
- *The score and symptoms. Just came at the right time (56).*
- *Timely influence and reminder (57).*

Despite the success of the BI there remained a few participants who indicated that they did not change their substance taking behaviour:

- *[...] I wasn't ready as I am happy with the level of my drug use (42).*
- *Done well [the BI]. I'm just not ready to give up. I only use very occasionally (12).*

These comments illustrate that for some participants the idea of 'not being ready' legitimated not changing their substance taking behaviour. Importantly however, the 'not ready yet' quality of these comments also confirms that participants understand that substance taking behaviour is a non-static behaviour that is amenable to change, and therefore these comments also allude to the possibility of change at some future time – just not now.

The idea that substance taking behaviour is amenable to change was also alluded to in a different way by several participants who commented on the way in which their substance taking behaviour was connected to circumstantial events in their personal life:

- *I didn't care about my drug use. Initially put book aside, it's a very personal thing and it depends on personal circumstances whether the information you receive is meaningful and if it has effect. Recently I met someone so drugs are not important anymore (25).*
- *I wasn't ready then but I am ready now because it is stuffing up my life (58).*
- *My use was predominantly tied to my wife's death and coping with it (36).*

Comments such as these indicate that some participants have made the connection between their substance use and particular life circumstances. Moreover, participants' ability to place their substance taking behaviour on a continuum of time (which is their life) highlights their understanding that substance taking behaviour can have a past, a present and a future. Importantly, these comments confirm that these participants recognise that their substance taking behaviour is a not a feature of their personality or a

static character trait, and thus there always remains the possibility of changing behaviour in the future.

It is clear that many participants in this study related to the idea that there is a 'right time for change'. It is also clear that the idea that there is a 'right time for change' can be drawn upon to support either the instigation of, or the deferment of change. One of the founding principles of the 'readiness to change' model is its connection to motivation and the movement through the continuum of change; from pre-contemplation to contemplation and on to action (Miller & Rollnick, 2002). Participants' comments point to the successful and appropriate incorporation of motivational interviewing techniques (Miller & Rollnick, 2002) with a brief intervention that incorporates ASSIST scores to bring attention to the less positive aspects (risks) of continued substance use in a way elicits the person's own reasons for and advantages of changes. The overall results of this study show that participants allocated to the Brief Intervention Group did change their substance taking behaviour when compared to the Control group, indicating that the implementation of the ASSIST-linked BI facilitated participants' 'readiness to change'.

Historically, the evidence for the efficacy and successful implementation of screening-linked brief interventions for illicit drugs within primary health care settings has been limited. Brief intervention studies reported in the literature most frequently target at-risk population of alcohol users and the few that target illicit drug use tend to last longer than 30 minutes (Barry et al., 2004). Barriers to screening and brief interventions include time, patient defensiveness and the skills of primary health care staff (Barry et al., 2004). The overarching aim of this study was concerned with treatment efficacy, and the results demonstrate that the ASSIST-linked BI is effective in reducing substance use as measured by ASSIST Scores after a three month period within an Australian primary health care setting.

The results obtained from this study indicate that the ASSIST-linked BI effectively reduces Total Illicit Substance Involvement regardless of the focus of the BI, and significantly reduces ATS involvement for those participants receiving a BI targeting amphetamine-type stimulants. While the effect for cannabis was not statistically significant, the trend for those receiving a BI for cannabis was downwards and this result most probably reflects the small sample size rather than a lack of efficacy. Participants' direct reference to the reduction of the specific substances also supports the efficacy of allocating participants to targeted intervention groups (cannabis, ATS, etc) and these results study clearly indicate that, tailoring information toward specific substances that are of relevance to individual participants, makes the information provided in the BI personally relevant.

The use of illicit substances often occurs in conjunction with the use of other substances, including alcohol and tobacco. Moreover, there is evidence that reduction in one illicit substance such as heroin, can result in substitution and or increased use of another substance (Fairbank *et al.*, 1993; Topp *et al.*, 2003), and this phenomenon also has been observed in the naturalistic settings. Results from this study demonstrate that the reduction in illicit drug use due to the implementation of the ASSIST-linked BI does not appear to result in increased uptake of alcohol or tobacco and indeed, it appears that use of these substances has decreased.

The focus of the ASSIST-linked BI was on the facilitation of change. A “key in eliciting change” is producing ambivalence as an essential aspect of change, as without ambivalence there is nothing to resolve (Miller & Rollnick, 2002). A major factor in the success of the ASSIST-linked BI is the incorporation of motivational interviewing techniques that consciously direct focus on intentionally resolving ambivalence. The ASSIST-linked BI gives substance users the opportunity to voluntarily enter into an intentional process of change rather than being coerced by a partner, health worker, or legal authority.

The themes identified in the analysis of participant responses to the ASSIST-linked BI highlighted some of the benefits participants obtained from participating in this BI and in particular the value they placed on personalised feedback. For participants, a valued and important feature of personalised feedback in this BI was the provision of a personal baseline ASSIST score for their illicit substance use. The ASSIST-linked BI is unique in that it offers participants a baseline illicit drug use score against which they can ‘measure’ the risks around their own illicit substance use. Participants’ noted that having an illicit drug use score helped bring attention to the less positive aspects (risks) of continued substance use.

Not only does the baseline score provide participants with a ‘measure’ of the own illicit substance use it also provides a non-judgmental focal point for the open ended questions that aim to explore and resolve participant ambivalence. The ASSIST score provides a means of focussing the BI on participant concerns, which enables participants’ to hear themselves talk about their current health status and their risk(s) of developing future health problems. Participants’ can explore their own illicit substance use in a way that helps bring forth their own reasons for changing some of the less positive aspects of continued use (risks) and helps elicit intrinsic motivations for behaviour change (Miller & Rollnick, 2002).

The analysis of participants' comments also suggests that participant resistance and defensiveness to the ASSIST-linked BI was low and, overall, participants' health behaviour responses to the intervention were positive. The notion that there was minimal resistance from participants was also reinforced by the empirical findings, which showed that most participants managed to cut down their substance use - some completely - while only a few participants did not change their health behaviour at all.

Exactly what makes people 'ready' for change has been the subject of much clinical and academic debate, and while this study does not identify 'markers' of readiness to change, the inferential results and the analysis of participants' comments point to the successful development of a brief intervention for illicit substance use that has integrated ASSIST scores with motivational interviewing techniques. Furthermore, the analysis of participants' perceptions on their experiences of undertaking the BI supports participant validity of the BI process.

One of the distinct advantages of the ASSIST-linked BI is its brevity (median 8 minutes); an administration time that would undoubtedly be a clear advantage in primary health care settings. In terms of primary health care staff skills, it is intended that this intervention should be relatively easy to implement by primary health care staff and as such the ASSIST-linked BI has been developed based on nine simple steps that are easy to follow and require no previous motivational interviewing training. Moreover, comments received from participants regarding the impact of the opportunity to engage, albeit briefly, in discussion about their substance use behaviour confirms that positive changes in health behaviour can be achieved through the implementation of a brief intervention linked to ASSIST scores.

Responses received from participants confirm both the effectiveness of the ASSIST-linked BI in reducing targeted illicit substance use and the validity of the screening intervention process. Accordingly, 72% of participants did attempt to cut down on their substance use as a result of being engaged in the process. Follow-up rates in this study were very high (95%) and when the inferential results are viewed in conjunction with the thematic analysis of participants' responses to the BI they confirm that the ASSIST-linked BI is a

brief, acceptable, and simple to administer process of screening for risky substance use in a primary health care setting - and one that provides substance users with a timely and welcome opportunity for change.

- *I was thinking about cutting down and your information just cemented this. The interview was good-the info useful-self help book really helped me (41).*

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SECTION 8 APPENDICES

APPENDIX 1: The ASSIST V3.0 questionnaire

APPENDIX 2: ASSIST Feedback Report Card

APPENDIX 3: Example of the 9-step brief intervention.

APPENDIX 4: Part 7 – Brief Intervention Record

APPENDIX 5: Part 9 – Brief Intervention Process Rating Form – Follow up

APPENDIX 1

WHO - ASSIST V3.0

CLINICIAN ID	<input type="text"/>	CLINIC	<input type="text"/>
PATIENT ID	<input type="text"/>	DATE	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>

INTRODUCTION (Please read to patient. Can be adapted for local circumstances)

(Many drugs & medications can affect your health. It is important for your health care provider to have accurate information about your use of various substances, in order to provide the best possible care.)

The following questions ask about your experience of using alcohol, tobacco products and other drugs across your lifetime and in the past three months. These substances can be smoked, swallowed, snorted, inhaled, injected or taken in the form of pills (show drug card).

Some of the substances listed may be prescribed by a doctor (like amphetamines, sedatives, pain medications). For this interview, we will not record medications that are used as prescribed by your doctor. However, if you have taken such medications for reasons other than prescription, or taken them more frequently or at higher doses than prescribed, please let me know. While we are also interested in knowing about your use of various illicit drugs, please be assured that information on such use will be treated as strictly confidential.

NOTE: BEFORE ASKING QUESTIONS, GIVE ASSIST RESPONSE CARD TO PATIENT

Question 1

In your life, which of the following substances have you <u>ever used</u> ? (NON-MEDICAL USE ONLY)	No	Yes
a. Tobacco products (cigarettes, chewing tobacco, cigars, etc.)	0	3
b. Alcoholic beverages (beer, wine, spirits, etc.)	0	3
c. Cannabis (marijuana, pot, grass, hash, etc.)	0	3
d. Cocaine (coke, crack, etc.)	0	3
e. Amphetamine type stimulants (speed, diet pills, ecstasy, etc.)	0	3
f. Inhalants (nitrous, glue, petrol, paint thinner, etc.)	0	3
g. Sedatives or Sleeping Pills (Valium, Serepax, Rohypnol, etc.)	0	3
h. Hallucinogens (LSD, acid, mushrooms, PCP, Special K, etc.)	0	3
i. Opioids (heroin, morphine, methadone, codeine, etc.)	0	3
j. Other - specify:	0	3

<p>Probe if all answers are negative: “Not even when you were in school?”</p>	<p>If "No" to all items, stop interview. If "Yes" to any of these items, ask Question 2 for each substance ever used.</p>
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Question 2

In the <u>past three months</u> , how often have you used the substances you mentioned (<i>FIRST DRUG, SECOND DRUG, ETC</i>)?	Never	Once or Twice	Monthly	Weekly	Daily or Almost Daily
a. Tobacco products (cigarettes, chewing tobacco, cigars, etc.)	0	2	3	4	6
b. Alcoholic beverages (beer, wine, spirits, etc.)	0	2	3	4	6
c. Cannabis (marijuana, pot, grass, hash, etc.)	0	2	3	4	6
d. Cocaine (coke, crack, etc.)	0	2	3	4	6
e. Amphetamine type stimulants (speed, diet pills, ecstasy, etc.)	0	2	3	4	6
f. Inhalants (nitrous, glue, petrol, paint thinner, etc.)	0	2	3	4	6
g. Sedatives or Sleeping Pills (Valium, Serepax, Rohypnol, etc.)	0	2	3	4	6
h. Hallucinogens (LSD, acid, mushrooms, PCP, Special K, etc.)	0	2	3	4	6
i. Opioids (heroin, morphine, methadone, codeine, etc.)	0	2	3	4	6
j. Other - specify:	0	2	3	4	6

If "Never" to all items in Question 2, skip to Question 6.

If any substances in Question 2 were used in the previous three months, continue with Questions 3, 4 & 5 for each substance used.

Question 3

During the <u>past three months</u> , how often have you had a strong desire or urge to use (<i>FIRST DRUG, SECOND DRUG, ETC</i>)?	Never	Once or Twice	Monthly	Weekly	Daily or Almost Daily
a. Tobacco products (cigarettes, chewing tobacco, cigars, etc.)	0	3	4	5	6
b. Alcoholic beverages (beer, wine, spirits, etc.)	0	3	4	5	6
c. Cannabis (marijuana, pot, grass, hash, etc.)	0	3	4	5	6
d. Cocaine (coke, crack, etc.)	0	3	4	5	6
e. Amphetamine type stimulants (speed, diet pills, ecstasy, etc.)	0	3	4	5	6
f. Inhalants (nitrous, glue, petrol, paint thinner, etc.)	0	3	4	5	6
g. Sedatives or Sleeping Pills (Valium, Serepax, Rohypnol, etc.)	0	3	4	5	6
h. Hallucinogens (LSD, acid, mushrooms, PCP, Special K, etc.)	0	3	4	5	6
i. Opioids (heroin, morphine, methadone, codeine, etc.)	0	3	4	5	6
j. Other - specify:	0	3	4	5	6

Question 4

During the <u>past three months</u> , how often has your use of (<i>FIRST DRUG, SECOND DRUG, ETC</i>) led to health, social, legal or financial problems?	Never	Once or Twice	Monthly	Weekly	Daily or Almost Daily
a. Tobacco products (cigarettes, chewing tobacco, cigars, etc.)	0	4	5	6	7
b. Alcoholic beverages (beer, wine, spirits, etc.)	0	4	5	6	7
c. Cannabis (marijuana, pot, grass, hash, etc.)	0	4	5	6	7
d. Cocaine (coke, crack, etc.)	0	4	5	6	7
e. Amphetamine type stimulants (speed, diet pills, ecstasy, etc.)	0	4	5	6	7
f. Inhalants (nitrous, glue, petrol, paint thinner, etc.)	0	4	5	6	7
g. Sedatives or Sleeping Pills (Valium, Serepax, Rohypnol, etc.)	0	4	5	6	7
h. Hallucinogens (LSD, acid, mushrooms, PCP, Special K, etc.)	0	4	5	6	7
i. Opioids (heroin, morphine, methadone, codeine, etc.)	0	4	5	6	7
j. Other - specify:	0	4	5	6	7

Question 5

During the <u>past three months</u> , how often have you failed to do what was normally expected of you because of your use of (<i>FIRST DRUG, SECOND DRUG, ETC</i>)?	Never	Once or Twice	Monthly	Weekly	Daily or Almost Daily
a. Tobacco products					
b. Alcoholic beverages (beer, wine, spirits, etc.)	0	5	6	7	8
c. Cannabis (marijuana, pot, grass, hash, etc.)	0	5	6	7	8
d. Cocaine (coke, crack, etc.)	0	5	6	7	8
e. Amphetamine type stimulants (speed, diet pills, ecstasy, etc.)	0	5	6	7	8
f. Inhalants (nitrous, glue, petrol, paint thinner, etc.)	0	5	6	7	8
g. Sedatives or Sleeping Pills (Valium, Serepax, Rohypnol, etc.)	0	5	6	7	8
h. Hallucinogens (LSD, acid, mushrooms, PCP, Special K, etc.)	0	5	6	7	8
i. Opioids (heroin, morphine, methadone, codeine, etc.)	0	5	6	7	8
j. Other - specify:	0	5	6	7	8

Ask Questions 6 & 7 for all substances ever used (i.e. those endorsed in Question 1)

Question 6

Has a friend or relative or anyone else <u>ever</u> expressed concern about your use of (<i>FIRST DRUG, SECOND DRUG, ETC.</i>)?	No, Never	Yes, in the past 3 months	Yes, but not in the past 3 months
a. Tobacco products (cigarettes, chewing tobacco, cigars, etc.)	0	6	3
b. Alcoholic beverages (beer, wine, spirits, etc.)	0	6	3
c. Cannabis (marijuana, pot, grass, hash, etc.)	0	6	3
d. Cocaine (coke, crack, etc.)	0	6	3
e. Amphetamine type stimulants (speed, diet pills, ecstasy, etc.)	0	6	3
f. Inhalants (nitrous, glue, petrol, paint thinner, etc.)	0	6	3
g. Sedatives or Sleeping Pills (Valium, Serepax, Rohypnol, etc.)	0	6	3
h. Hallucinogens (LSD, acid, mushrooms, PCP, Special K, etc.)	0	6	3
i. Opioids (heroin, morphine, methadone, codeine, etc.)	0	6	3
j. Other – specify:	0	6	3

Question 7

Have you <u>ever</u> tried and failed to control, cut down or stop using (<i>FIRST DRUG, SECOND DRUG, ETC.</i>)?	No, Never	Yes, in the past 3 months	Yes, but not in the past 3 months
a. Tobacco products (cigarettes, chewing tobacco, cigars, etc.)	0	6	3
b. Alcoholic beverages (beer, wine, spirits, etc.)	0	6	3
c. Cannabis (marijuana, pot, grass, hash, etc.)	0	6	3
d. Cocaine (coke, crack, etc.)	0	6	3
e. Amphetamine type stimulants (speed, diet pills, ecstasy, etc.)	0	6	3
f. Inhalants (nitrous, glue, petrol, paint thinner, etc.)	0	6	3
g. Sedatives or Sleeping Pills (Valium, Serepax, Rohypnol, etc.)	0	6	3
h. Hallucinogens (LSD, acid, mushrooms, PCP, Special K, etc.)	0	6	3
i. Opioids (heroin, morphine, methadone, codeine, etc.)	0	6	3
j. Other – specify:	0	6	3

Question 8

	No, Never	Yes, in the past 3 months	Yes, but not in the past 3 months
Have you <u>ever</u> used any drug by injection? (NON-MEDICAL USE ONLY)	0	2	1

IMPORTANT NOTE:

Patients who have injected drugs in the last 3 months should be asked about their pattern of injecting during this period, to determine their risk levels and the best course of intervention.

PATTERN OF INJECTING

Once weekly or less *or*
Fewer than 3 days in a row

INTERVENTION GUIDELINES

Brief Intervention including “risks associated with injecting” card

More than once per week *or*
3 or more days in a row

Further assessment and more intensive treatment*

HOW TO CALCULATE A SPECIFIC SUBSTANCE INVOLVEMENT SCORE.

For each substance (labelled a. to j.) add up the scores received for questions 2 through 7 inclusive. Do not include the results from either Q1 or Q8 in this score. For example, a score for cannabis would be calculated as: **Q2c + Q3c + Q4c + Q5c + Q6c + Q7c**

Note that Q5 for tobacco is not coded, and is calculated as: **Q2a + Q3a + Q4a + Q6a + Q7a**

THE TYPE OF INTERVENTION IS DETERMINED BY THE PATIENT’S SPECIFIC SUBSTANCE INVOLVEMENT SCORE

	Record specific substance score	no intervention	receive brief intervention	more intensive treatment *
a. tobacco		0 - 3	4 - 26	27+
b. alcohol		0 - 10	11 - 26	27+
c. cannabis		0 - 3	4 - 26	27+
d. cocaine		0 - 3	4 - 26	27+
e. amphetamine		0 - 3	4 - 26	27+
f. inhalants		0 - 3	4 - 26	27+
g. sedatives		0 - 3	4 - 26	27+
h. hallucinogens		0 - 3	4 - 26	27+
i. opioids		0 - 3	4 - 26	27+
j. other drugs		0 - 3	4 - 26	27+

NOTE: *FURTHER ASSESSMENT AND MORE INTENSIVE TREATMENT may be provided by the health professional(s) within your primary care setting, or, by a specialist drug and alcohol treatment service when available.

APPENDIX 2

**Alcohol, Smoking and Substance Involvement Screening Test
(WHO ASSIST V3.0) Feedback REPORT CARD**

Name _____ Test Date _____

Specific Substance Involvement Scores

Substance	Score	Risk Level
a. Tobacco products		0-3 Low 4-26 Moderate 27+ High
b. Alcoholic Beverages		0-10 Low 11-26 Moderate 27+ High
c. Cannabis		0-3 Low 4-26 Moderate 27+ High
d. Cocaine		0-3 Low 4-26 Moderate 27+ High
e. Amphetamine type stimulants		0-3 Low 4-26 Moderate 27+ High
f. Inhalants		0-3 Low 4-26 Moderate 27+ High
g. Sedatives or Sleeping Pills		0-3 Low 4-26 Moderate 27+ High
h. Hallucinogens		0-3 Low 4-26 Moderate 27+ High
i. Opioids		0-3 Low 4-26 Moderate 27+ High
j. Other - specify		0-3 Low 4-26 Moderate 27+ High

What do your scores mean?

- Low:** You are at low risk of health and other problems from your current pattern of use.
Moderate: You are at risk of health and other problems from your current pattern of substance use.
High: You are at high risk of experiencing severe problems (health, social, financial, legal, relationship) as a result of your current pattern of use and are likely to be dependent

Are you concerned about your substance use?

a. tobacco	Your risk of experiencing these harms is:..... Low <input type="checkbox"/> Moderate <input type="checkbox"/> High <input type="checkbox"/> (tick one)
	Regular tobacco smoking is associated with:
	Premature ageing, wrinkling of the skin
	Respiratory infections and asthma
	High blood pressure, diabetes
	Respiratory infections, allergies and asthma in children of smokers
	Miscarriage, premature labour and low birth weight babies for pregnant women
	Kidney disease
	Chronic obstructive airways disease
	Heart disease, stroke, vascular disease
	Cancers

b. alcohol	Your risk of experiencing these harms is:..... Low <input type="checkbox"/> Moderate <input type="checkbox"/> High <input type="checkbox"/> (tick one)
	Regular excessive alcohol use is associated with:
	Hangovers, aggressive and violent behaviour, accidents and injury
	Reduced sexual performance, premature ageing
	Digestive problems, ulcers, inflammation of the pancreas, high blood pressure
	Anxiety and depression, relationship difficulties, financial and work problems
	Difficulty remembering things and solving problems
	Deformities and brain damage in babies of pregnant women
	Stroke, permanent brain injury, muscle and nerve damage
	Liver disease, pancreas disease
	Cancers, suicide

c. cannabis	Your risk of experiencing these harms is:..... Low <input type="checkbox"/> Moderate <input type="checkbox"/> High <input type="checkbox"/> (tick one)
	Regular use of cannabis is associated with:
	Problems with attention and motivation
	Anxiety, paranoia, panic, depression
	Decreased memory and problem solving ability
	High blood pressure
	Asthma, bronchitis
	Psychosis in those with a personal or family history of schizophrenia
	Heart disease and chronic obstructive airways disease
	Cancers

d. cocaine	Your risk of experiencing these harms is:....	Low <input type="checkbox"/>	Moderate <input type="checkbox"/>	High <input type="checkbox"/>
	(tick one)			
Regular use of cocaine is associated with:				
	Difficulty sleeping, heart racing, headaches, weight loss			
	Numbness, tingling, clammy skin, skin scratching or picking			
	Accidents and injury, financial problems			
	Irrational thoughts			
	Mood swings - anxiety, depression, mania			
	Aggression and paranoia			
	Intense craving, stress from the lifestyle			
	Psychosis after repeated use of high doses			
	Sudden death from heart problems			

e. amphetamine type stimulants	Your risk of experiencing these harms is:.....	Low <input type="checkbox"/>	Moderate <input type="checkbox"/>	High <input type="checkbox"/>
	(tick one)			
Regular use of amphetamine type stimulants is associated with:				
	Difficulty sleeping, loss of appetite and weight loss, dehydration			
	jaw clenching, headaches, muscle pain			
	Mood swings –anxiety, depression, agitation, mania, panic, paranoia			
	Tremors, irregular heartbeat, shortness of breath			
	Aggressive and violent behaviour			
	Psychosis after repeated use of high doses			
	Permanent damage to brain cells			
	Liver damage, brain haemorrhage, sudden death (from ecstasy) in rare situations			

f. inhalants	Your risk of experiencing these harms is:.....	Low <input type="checkbox"/>	Moderate <input type="checkbox"/>	High <input type="checkbox"/>
	(tick one)			
Regular use of inhalants is associated with:				
	Dizziness and hallucinations, drowsiness, disorientation, blurred vision			
	Flu like symptoms, sinusitis, nosebleeds			
	Indigestion, stomach ulcers			
	Accidents and injury			
	Memory loss, confusion, depression, aggression			
	Coordination difficulties, slowed reactions, hypoxia			
	Delirium, seizures, coma, organ damage (heart, lungs, liver, kidneys)			
	Death from heart failure			

g. sedatives	Your risk of experiencing these harms is: Low <input type="checkbox"/> Moderate <input type="checkbox"/> High <input type="checkbox"/> (tick one)
	Regular use of sedatives is associated with:
	Drowsiness, dizziness and confusion
	Difficulty concentrating and remembering things
	Nausea, headaches, unsteady gait
	Sleeping problems
	Anxiety and depression
	Tolerance and dependence after a short period of use.
	Severe withdrawal symptoms
	Overdose and death if used with alcohol, opioids or other depressant drugs.

h. hallucinogens	Your risk of experiencing these harms is:..... Low <input type="checkbox"/> Moderate <input type="checkbox"/> High <input type="checkbox"/> (tick one)
	Regular use of hallucinogens is associated with:
	Hallucinations (pleasant or unpleasant) – visual, auditory, tactile, olfactory
	Difficulty sleeping
	Nausea and vomiting
	Increased heart rate and blood pressure
	Mood swings
	Anxiety, panic, paranoia
	Flash-backs
	Increase the effects of mental illnesses such as schizophrenia

i. opioids	Your risk of experiencing these harms is: Low <input type="checkbox"/> Moderate <input type="checkbox"/> High <input type="checkbox"/> (tick one)
	Regular use of opioids is associated with:
	Itching, nausea and vomiting
	Drowsiness, constipation, tooth decay
	Difficulty concentrating and remembering things
	Emotional problems and social problems
	Reduced sexual desire and sexual performance
	Relationship difficulties
	Financial and work problems, violations of law
	Tolerance and dependence, withdrawal symptoms
	Overdose and death from respiratory failure

APPENDIX 3

**The ASSIST Brief Intervention
9 simple Steps**

- 1. FEEDBACK - use card**
- 2. ADVICE**
- 3. RESPONSIBILITY**
- 4. CONCERN about score**
- 5. GOOD THINGS ABOUT USING**
- 6. LESS GOOD THINGS ABOUT USING**
- 7. SUMMARISE**
- 8. CONCERN about less good things**
- 9. TAKE-HOME INFORMATION AND BOOKLET**

9 STEP Program Example – the ASSIST Brief Intervention

The following is an example of how to word an ASSIST brief intervention for someone who scores in the moderate risk range for amphetamines using the ASSIST Feedback Report card for patients. You can use this example for other substances also. The ASSIST feedback report card for patient lists the health and other effects associated with the use of specific substances.

1. FEEDBACK

Would you like to see the results of the questionnaire you just did?

These are your scores for each substance that we talked about. You scored a 21 for tobacco which puts you in the moderate risk group for that substance, a 6 for cannabis which also is in the moderate risk group and 14 for amphetamine type stimulants like speed, ecstasy and meth which is also in the moderate risk group. You were in the low risk group for all other substances.

A score in the moderate risk group means that you are at risk of health and other problems from your current pattern of substance use. You may not be experiencing any problems now, but a score in the moderate risk range means that you are also at risk of developing health and other problems in the future.

(Open booklet)

Because your risk of experiencing harms from amphetamines is moderate, the kinds of things that are associated with your current pattern of use are (go through list) difficulty sleeping, loss of appetite, dehydration, jaw clenching, headaches, muscle pain, things like anxiety, depression, panic, paranoia. Some people get aggressive and violent when they use amphetamines, and some people experience psychosis which is like schizophrenia. Unfortunately amphetamines and ecstasy can also cause permanent damage to brain cells, liver damage, brain haemorrhage – which is a stroke and sometimes sudden death.

2. ADVICE

The best way you can reduce the likelihood of these things happening to you is to either cut down or stop using amphetamines.

3. RESPONSIBILITY

What you do with this information is up to you. We're just here to let you know the health and other risks that are associated with your current pattern of use.

(Turn back to front of booklet and point to amphetamine score)

4. CONCERN

Does your score for amphetamines concern you?

5. GOOD THINGS ABOUT USING

What are the good things about using amphetamines for you?

6. LESS GOOD THINGS ABOUT USING

What are the less good things about using amphetamines for you personally?

(May need to prompt with things like effects on health and relationships, work and study, any legal problems or problems with the police, any financial problems because of spending money on substances)

7. SUMMARISE

So the good things about using meth for you is that it makes you feel up and active and you can party all night with your friends and have a really good time, but on the down side you get pretty depressed in the come down and you've noticed that you're feeling more moody and irritable in general than you have in the past, and that it has caused a few problems with your boyfriend, particularly because of your irritability and mood swings.

8. CONCERN

Do the less good things for you about using amphetamines concern you?

9. TAKE-HOME INFORMATION AND BOOKLET

You can take this score sheet home with you and I'll also give you this information sheet on amphetamines. I'll also give this booklet ("Self-help strategies for cutting down or stopping substance use: A guide") which people often find useful to help them decide whether or not they want to cut down on using substances. If you do decide that you want to cut down or stop using, then it provides some strategies that you might find helpful.



PART 1. General Information about the Brief Intervention

7.1 TO WHICH GROUP HAS THE PARTICIPANT BEEN RANDOMISED? (PLEASE FILL IN ONE COLUMN ONLY)													
COLUMN A (Baseline BI)	COLUMN B (Follow-up BI)												
<p>a. Brief Intervention group (tick) <input style="width: 40px; height: 20px;" type="checkbox"/></p>	<p>b. Weight List Control group (tick) <input style="width: 40px; height: 20px;" type="checkbox"/></p>												
<p>7.2a DATE BASELINE INTERVIEW</p> <table border="1" style="width: 100%; height: 20px; border-collapse: collapse;"> <tr> <td style="width: 15%;"></td> <td style="width: 15%;"></td> <td style="width: 15%;"></td> <td style="width: 15%;"></td> <td style="width: 15%;"></td> <td style="width: 15%;"></td> </tr> </table>							<p>7.2b DATE FOLLOW-UP INTERVIEW</p> <table border="1" style="width: 100%; height: 20px; border-collapse: collapse;"> <tr> <td style="width: 15%;"></td> <td style="width: 15%;"></td> <td style="width: 15%;"></td> <td style="width: 15%;"></td> <td style="width: 15%;"></td> <td style="width: 15%;"></td> </tr> </table>						
<p>7.3a RECORD BASELINE ASSIST SCORES</p>	<p>7.3b RECORD FOLLOW-UP ASSIST SCORES</p>												
<p>(i) Cannabis <input style="width: 40px; height: 20px;" type="text"/></p> <p>(ii) Cocaine <input style="width: 40px; height: 20px;" type="text"/></p> <p>(iii) Amphetamine-type stimulants <input style="width: 40px; height: 20px;" type="text"/></p> <p>(iv) Opioids <input style="width: 40px; height: 20px;" type="text"/></p>	<p>(i) Cannabis <input style="width: 40px; height: 20px;" type="text"/></p> <p>(ii) Cocaine <input style="width: 40px; height: 20px;" type="text"/></p> <p>(iii) Amphetamine-type stimulants <input style="width: 40px; height: 20px;" type="text"/></p> <p>(iv) Opioids <input style="width: 40px; height: 20px;" type="text"/></p>												
<p>7.4a Which drug is the focus of the BI?.....</p>	<p>7.4b Which drug is the focus of the BI?.....</p>												
<p>7.5a START TIME OF BI AT BASELINE?</p> <table style="width: 100%;"> <tr> <td style="width: 15%;"><input style="width: 20px; height: 20px;" type="text"/></td> <td style="width: 15%;"><input style="width: 20px; height: 20px;" type="text"/></td> <td style="width: 10%; text-align: center;">:</td> <td style="width: 15%;"><input style="width: 20px; height: 20px;" type="text"/></td> <td style="width: 15%;"><input style="width: 20px; height: 20px;" type="text"/></td> <td style="width: 30%; text-align: right;">24 hour clock</td> </tr> </table>	<input style="width: 20px; height: 20px;" type="text"/>	<input style="width: 20px; height: 20px;" type="text"/>	:	<input style="width: 20px; height: 20px;" type="text"/>	<input style="width: 20px; height: 20px;" type="text"/>	24 hour clock	<p>7.5b START TIME OF BI AT FOLLOW-UP?</p> <table style="width: 100%;"> <tr> <td style="width: 15%;"><input style="width: 20px; height: 20px;" type="text"/></td> <td style="width: 15%;"><input style="width: 20px; height: 20px;" type="text"/></td> <td style="width: 10%; text-align: center;">:</td> <td style="width: 15%;"><input style="width: 20px; height: 20px;" type="text"/></td> <td style="width: 15%;"><input style="width: 20px; height: 20px;" type="text"/></td> <td style="width: 30%; text-align: right;">24 hour clock</td> </tr> </table>	<input style="width: 20px; height: 20px;" type="text"/>	<input style="width: 20px; height: 20px;" type="text"/>	:	<input style="width: 20px; height: 20px;" type="text"/>	<input style="width: 20px; height: 20px;" type="text"/>	24 hour clock
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<input style="width: 20px; height: 20px;" type="text"/>	<input style="width: 20px; height: 20px;" type="text"/>	:	<input style="width: 20px; height: 20px;" type="text"/>	<input style="width: 20px; height: 20px;" type="text"/>	24 hour clock								
<p>7.6a END TIME OF BI AT BASELINE?</p> <table style="width: 100%;"> <tr> <td style="width: 15%;"><input style="width: 20px; height: 20px;" type="text"/></td> <td style="width: 15%;"><input style="width: 20px; height: 20px;" type="text"/></td> <td style="width: 10%; text-align: center;">:</td> <td style="width: 15%;"><input style="width: 20px; height: 20px;" type="text"/></td> <td style="width: 15%;"><input style="width: 20px; height: 20px;" type="text"/></td> <td style="width: 30%; text-align: right;">24 hour clock</td> </tr> </table>	<input style="width: 20px; height: 20px;" type="text"/>	<input style="width: 20px; height: 20px;" type="text"/>	:	<input style="width: 20px; height: 20px;" type="text"/>	<input style="width: 20px; height: 20px;" type="text"/>	24 hour clock	<p>7.6b END TIME OF BI AT FOLLOW-UP?</p> <table style="width: 100%;"> <tr> <td style="width: 15%;"><input style="width: 20px; height: 20px;" type="text"/></td> <td style="width: 15%;"><input style="width: 20px; height: 20px;" type="text"/></td> <td style="width: 10%; text-align: center;">:</td> <td style="width: 15%;"><input style="width: 20px; height: 20px;" type="text"/></td> <td style="width: 15%;"><input style="width: 20px; height: 20px;" type="text"/></td> <td style="width: 30%; text-align: right;">24 hour clock</td> </tr> </table>	<input style="width: 20px; height: 20px;" type="text"/>	<input style="width: 20px; height: 20px;" type="text"/>	:	<input style="width: 20px; height: 20px;" type="text"/>	<input style="width: 20px; height: 20px;" type="text"/>	24 hour clock
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<p>7.7a LENGTH OF BI (MINUTES) <input style="width: 80px; height: 20px;" type="text"/></p>	<p>7.7b LENGTH OF BI (MINUTES) <input style="width: 80px; height: 20px;" type="text"/></p>												



PART 2. DETAILED INFORMATION ABOUT THE BRIEF INTERVENTION
(TO BE COMPLETED IMMEDIATELY AFTER BRIEF INTERVENTION)

7.8a WHAT MATERIALS WERE GIVEN TO PARTICIPANT TO ACCOMPANY BRIEF INT.? (TICK ALL THAT APPLY)

(i) Substance Users Guide to cutting down or stopping	<input type="checkbox"/>
(ii) Specific Information Cannabis	<input type="checkbox"/>
(iii) Specific Information Cocaine	<input type="checkbox"/>
(iv) Specific Information Amphetamine-type stimulants	<input type="checkbox"/>
(v) Specific Information Opioids	<input type="checkbox"/>
(vii) Other (specify)	<input type="checkbox"/>
(viii) Other (specify)	<input type="checkbox"/>
(ix) Other (specify)	<input type="checkbox"/>

7.9 This section is designed to rate the session engagement and expected outcome following the brief intervention. Immediately after the brief intervention, please complete the following rating scale. To what extent to you consider the client was: (please circle)?

	Not at all							A Great deal
a. Easy to talk to and co-operative during the session	1	2	3	4	5	6	7	
b. Resistant to talking about their substance use	7	6	5	4	3	2	1	
c. Appeared to have insight into the ways they use substances & potential or actual problems arising	1	2	3	4	5	6	7	
d. Committed to reducing the frequency of their substance use	1	2	3	4	5	6	7	
e. Committed to reducing the amount they consume of one or more substances	1	2	3	4	5	6	7	
f. Appeared to be confident that they could avoid future substance-related problems	1	2	3	4	5	6	7	

7.9g. Total score is derived through cumulation of Questions a. through f. A high score indicates greater session engagement & greater likelihood of positive change through BI.

7.9g. Total score



APPENDIX 5

PART 9. BRIEF INTERVENTION PROCESS RATING FORM – FOLLOW-UP

To be administered to participants at **follow-up** concerning the Brief Intervention that they received at baseline (participants from Wait-List Control are **not** administered this form). There are three main parts to this form:

Part 1 General Information about the feedback and information

Part 2 Specific questions concerning the information and feedback received during the session with the interviewer

Part 3 Specific questions concerning the written information (Substance Users Guide)

Please administer to participants at the follow-up interview AFTER you have administered the ASSIST

INTERVIEWER ID	<input type="text"/>	COUNTRY	<input type="text"/>	CLINIC	<input type="text"/>
SUBJECT ID	<input type="text"/>				
DATE TODAY	<input type="text"/>				
What drug was the focus of the BI for this participant? (refer to 7.4a)	<input type="text"/>			→	Use this information where term (drug) is found in this form
How many weeks ago was the baseline interview for this participant? (refer to 7.2a)	<input type="text"/>				

PLEASE READ TO PARTICIPANT

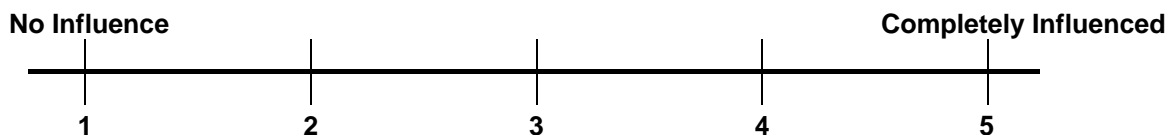
You may remember that after you completed the questionnaire three months ago, the interviewer gave you feedback & information on your (insert drug name) use, & may have discussed with you the positive & negative aspects of your (drug) use. The interviewer also may have given you some written information to take home & read. This questionnaire aims to find out what you honestly thought of the feedback & information you received in general (Part 1), and also your thoughts on the specific aspects of the session with the interviewer (Part 2), and the written information that you were given to take home (Part 3).

Part 1. General

9.1 COULD YOU PLEASE BRIEFLY DESCRIBE WHAT YOU THOUGHT WAS THE PURPOSE OF THE FEEDBACK AND INFORMATION YOU RECEIVED ON (DRUG) USE?



9.2a ON A SCALE OF 1 TO 5, HOW DID THE INFORMATION AND FEEDBACK INFLUENCE YOUR HEALTH BEHAVIOUR? - where 1 equals “no influence whatsoever”, and 5 equals “completely changed my behaviour” (Please circle)



9.2b. If '1' was circled ask, “*Why was there no influence on your behaviour?*” (If participant is having problems giving a full answer, you can prompt with questions like; “*was there anything particular that you didn’t like about the session with the interviewer?*” or “*what do you think it would take to influence your health behaviour?*”)

9.2c...If '2' or greater was circled ask, “*If it did have some effect, how did it influence your health behaviour?*”

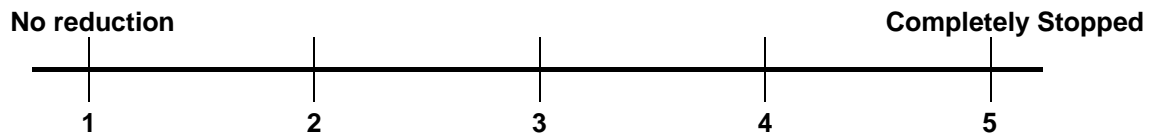


9.3a DID YOU ATTEMPT TO CUT DOWN ON YOUR (DRUG) USE AFTER RECEIVING THE FEEDBACK & INFORMATION?

No → Go to Part 3 (Q9.5)

Yes → Go to Q9.3b

9.3b ON A SCALE OF 1 TO 5, TO WHAT EXTENT DID YOU ACTUALLY REDUCE YOUR (DRUG) USE? - where 1 equals “did not reduce my (drug) use whatsoever”, and 5 equals “completely stopped (drug) use after the last interview” (Please circle)



9.3c. If circled '2' or greater ask, “How long did this last?”
(Code in weeks. Remind participant of how many weeks it has been since their first interview as per 7.2a)

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Part 2. Information and feedback session with interviewer

9.4 WHAT PARTICULAR ASPECT OF THE FEEDBACK AND INFORMATION SESSION WITH THE INTERVIEWER WAS IT THAT INFLUENCED YOUR HEALTH BEHAVIOUR AND (DRUG) USE? (If the participant is having problems giving a full answer, you can prompt with questions like; “what do you remember most about the session with the interviewer?” or “what struck you the most?”)



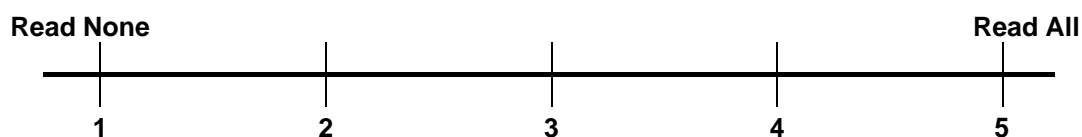
Part 3. Written Information (See 7.8a for this participant)

9.5a. DO YOU REMEMBER RECEIVING THE BOOKLET “THE SUBSTANCE USERS GUIDE TO CUTTING DOWN OR STOPPING”? (Show participant a copy)

No → Go to Q9.7

Yes → Go to Q9.5b.

9.5b ON A SCALE OF 1 TO 5, HOW MUCH OF THE BOOKLET DID YOU READ? - where 1 equals “none of the booklet whatsoever”, & 5 equals “read all of booklet cover to cover” (Please circle)



9.5c. If circled ‘2’ or less ask, “What stopped you from reading through all of the booklet?”

9.6. If circled ‘2’ or more ask, “How useful did you find the booklet for.....” (circle one number for each row)

	Not useful	Some-what useful	Very useful	Don't know
a. helping you to understand your level of risk	1	2	3	9
b. helping you to weigh up the positive & negatives of using (drug)	1	2	3	9
c. understanding your options concerning changing your (drug) use	1	2	3	9
d. providing you with realistic strategies & guidelines for change	1	2	3	9
e. actually helping you to cut down or stop using (drug)	1	2	3	9

9.7 IS THERE ANYTHING ELSE YOU WOULD LIKE TO TELL US ABOUT YOUR PARTICIPATION IN THIS PROJECT? For example, how could the feedback and information be improved?