Additional file 3: Screening questions used by reviewers to decide if records met inclusion criteria

**Level 1 questions (title and abstract)**

1. Study is written in:
   - English
   - French
   - Other than English or French
   - Unclear

2. Does this study evaluate a brief intervention (BI) targeting the non-medical use of psychoactive substances (including the non-medical use of pharmaceuticals or the use of legal inhalants or solvents for their intoxicating effects)?
   - Yes/unclear
   - No, other (eg, any alcohol, nicotine, caffeine only study; animal or laboratory study; other treatment)

3. Was the intervention provided to those NOT seeking or receiving treatment for substance use?
   - Yes, not seeking or receiving treatment / Unclear
   - No, they are seeking or receiving treatment / Not applicable

4. Is this possibly a primary study design of interest?
   - Yes/unclear
   - No, a BI protocol
   - No, a systematic review
   - No, other (e.g. editorial, comment, letter, retrospective, case report)

**Level 2 questions (full text articles)**

1. The full-text report for this record is not available.
   - Yes

2. Study is written in:
   - English
   - French
   - Other than English or French

3. Is this a primary study design of interest?
   - Yes, RCT or cluster RCT
   - Yes, conference abstract (try to seek full text)
• Yes, is non-RCT, CBA, ITS
• No, is a protocol
• No, is a systematic review/meta-analysis
• No, is a secondary analysis of a study (query to locate original article)
• No, other (e.g., editorial, comment, letter, case report, case series, qualitative only, survey only, retrospective design, no control group)

4. Population: Are individuals included by means of recruitment or asked to volunteer to take part in the study (before screening takes place)?
  • Yes, recruited/voluntary
  • No
  • Unsure
  • Not applicable (ONLY for "No, other" or "No, systematic review" answers in Q2)

5. Population: Are individuals seeking/receiving treatment for ANY substance, from or in a treatment facility/community treatment program, or eligibility for participation is that they have been previously diagnosed with a substance use disorder?
  • Yes, treatment seeking / receiving / facility / program OR previously diagnosed
  • No
  • Unsure

6. Population: Are individuals being universally screened upon entering a program or organization (e.g., hospital, primary care clinic, prison, school program, etc.) as part of a standard intake procedure or process? (Note: Screening may be explicitly stated or simply implied)
  • Yes, universally screened
  • No
  • Unsure

7. Is this study assessing a brief intervention (BI)?
  • Yes, BI explicitly defined and has 4 or less sessions
  • Yes, BI explicitly defined but has >4 sessions
  • Yes, BI explicitly defined but unclear number of sessions (contact authors)
  • No, does not meet the BI definition (e.g., other intervention)
  • Unclear whether a BI (contact authors)

8. Is this intervention targeting the non-medical use of psychoactive substances and presents those results separately?
  • Yes/presents those results separately
  • No, does not present results separately
  • No, other (e.g., alcohol, nicotine, caffeine only)
9. Is the BI delivered in a one-to-one, verbal format, directed to the individual at risk?
   - Yes
   - No, not directed to the individual at risk
   - No, group (2+ people receiving) or online/computer intervention without video (text only)
   - No, other (e.g., provision of written materials without accompanying discussion)
   - Unclear, does not state format but in-person presumed

Level 3 questions (full text articles)

1. Population: Are individuals being universally screened?
   - Yes
   - No
   - Unclear, contact author. Related text from article:

2. Population: Is the study population 12 years (or equivalent based on schooling) or older?
   - Yes
   - No
   - Unsure, contact author

3. Intervention: Is this study assessing a brief intervention (BI)?
   - Yes, BI explicitly defined and has 4 or less sessions
   - Yes, BI explicitly defined but has >4 sessions
   - Yes, BI explicitly defined but unclear number of sessions (contact authors)
   - No, does not meet the BI definition (e.g., other intervention)
   - Unclear whether a BI (contact authors)

4. Intervention: Does the BI have at least one of the following FRAMES elements? (feedback on behaviour and consequences, responsibility to change, advice, menu of options to bring about change, empathy, self-efficacy for change)
   - Yes
   - No
   - Unclear, contact authors

5. Intervention: Is this intervention targeting the non-medical use of psychoactive substances and presents those results separately)
   - Yes/presents those results separately
   - No, does not present results separately
   - No, other
   - Unclear % of baseline population screened positive for substance not of interest only (contact authors)
6. Intervention: Is the BI delivered in a one-to-one, verbal format, directed to the individual at risk?
   - Yes
   - No, not directed to the individual at risk
   - No, group (2+ people receiving) or online/computer intervention (text only)
   - No, other (e.g., provision of written materials without accompanying discussion)
   - Unclear, does not state format but in-person presumed

7. Comparison: Is there a comparison group of interest? (e.g., no BI, pamphlets or other info only, delayed intervention)
   - Yes
   - No, not comparison of interest
   - Unclear comparison group (e.g., 'control group'), contact author

8. Should this study be excluded for another reason?
   - Yes (specify reason)

Level 4 – Contact author

Can this study now be included after contacting the author?
   - Yes, because the following eligibility criteria are now met (specify)
   - Yes, did not obtain information from authors but interpretation of information is reasonable to consider eligible
   - No, was not able to obtain a response from one or more authors
   - No, is a conference abstract that should be tracked for future available data
   - Yes but is the companion to refid (specify)

Level 4 – Collate multiple reports

Is this study included in the review?
   - Yes
   - Yes but is a companion report of refid (specify)