Title and Abstract Screening

During this stage, you will refer only to the title, abstract, and keywords to exclude articles that are clearly irrelevant. Articles that you cannot be certain whether they meet inclusion criteria should be included for full text review. You do not need to select a reason for exclusion during this stage. However, you should use the following criteria to determine whether each article is eligible to proceed to full text review:

- There must be some reference to one or more problems with substance use (e.g., smoking), behavioural addictions (e.g., gambling), excessive behaviours (e.g., overeating), or aspects thereof (e.g., cravings, triggers, coping skills, mindfulness); other mental/physical health problems may be targeted as well but not be the primary focus.
- There must be some reference to technology as a means to provide non-pharmaceutical support, education, prevention, assessment, or intervention for the problem as defined above. The hardware should be such that it could be privately owned, accessed, or operated (e.g., phone, watch, tablet, sensor, computer, laptop, handheld device) and not something exclusive to professional settings (e.g., fMRI, other medical equipment).
- The study should focus on human behaviour, cognition, emotion, motivation, or other psychological construct (i.e., not animal studies, genetic studies, pharmaceutical drug development, cardiac health, etc.).
- The study should be reported in English.

Full Text Review

Articles should be excluded based on the first exclusion criterion that is met, regardless of subsequent criteria. You will need to select one reason for exclusion for each article.

Important: If any articles are ineligible yet seem highly relevant for discussion anyway (e.g., a review of user experiences with smartphone interventions, a qualitative study of user experiences with an online workbook), use the "ineligible but relevant" tag within Covidence.

Step 1: Assess article type and general characteristics. Grey literature can be included as long as it satisfies all other eligibility criteria. Grey literature refers to that which is not published via traditional peer-reviewed academic streams (e.g., government policy, program evaluation, technical report, preprint, thesis, dissertation, white paper, research report, annual report, etc.).

Question	Examples	Action	Exclusion reason
(1) Is the article NOT an evidence synthesis?	**Ineligible:** Scoping review Systematic review Meta-analysis	If YES, proceed to next question. If NO, exclude article and indicate exclusion reason.	(1) Article 1: Evidence synthesis
(2) Is the article based on more than one or few individuals?	**Ineligible:** Case study/report Case series N=1 study	If YES, proceed to next question. If NO, exclude article and indicate exclusion reason.	(2) Article 2: Minimal cases
(3) Is the article based on an original empirical study or existing empirical data?	**Ineligible:** Editorial Study protocol Opinion piece Commentary Conference proceeding Theoretical discussion Framework proposal Intervention recommendation Special issue introduction Book/article review Book chapters *Note:* Book chapters that report an original empirical study should be included.	If YES, proceed to next question. If NO, exclude article and indicate exclusion reason.	(3) Article 3: Non-empirical
(4) Does the article report on any quantitative analyses?	**Ineligible:** Phenomenology study Grounded theory study Ethnography study Thematic analysis study *Note:* Articles that contain both quantitative and qualitative analyses should be retained.	If YES, proceed to next question. If NO, exclude article and indicate exclusion reason.	(4) Article 4: Qualitative

Step 2: Assess sample characteristics.

Question	Examples	Action	Exclusion reason
(5) Is the sample exclusively comprised of adults and/or adolescents aged 16 or greater?		If YES, proceed to next question. If NO, exclude article and indicate exclusion reason.	(5) Sample 1: Age
(6) Does the sample present with one or more problems with addiction, substance use, excessive behaviour, or aspect thereof (e.g., cravings, urges)?	*Note:* Concurrent mental and physical conditions are acceptable (e.g., depression, fibromyalgia, cancer). *Note:* Eating disorders satisfy this criterion if the focus is on bingeing (e.g., bulimia nervosa, binge eating disorder) but not if the focus is on purging (e.g., bulimia nervosa) or restriction (e.g., anorexia nervosa).	If YES, proceed to next question. If NO, exclude article and indicate exclusion reason.	(6) Sample 2: Addiction

Step 3: Assess intervention characteristics. If the study contains multiple treatment groups, only one group needs to satisfy criteria in this step. However, it must be the same group that satisfies all criteria. Concurrent medical and/or psychological care is acceptable. Assessment studies are permitted if they satisfy all other criteria (e.g., ecological momentary assessment).

Question	Examples	Action	Exclusion reason
(7) Is the intervention at least partially delivered via technology that could be privately owned, accessed, or operated?	**Ineligible:** Paperback workbooks In-person health services fMRI Hospital assessments **Eligible:** Smartphone application Automated text message Online program Internet workbook Push notifications Digital diary	If YES, proceed to next question. If NO, exclude article and indicate exclusion reason.	(7) Intervention 1: Technology
(8) Is the intervention at least partially delivered without professional, clinical, social, or technical support?	**Ineligible:** Virtual synchronous therapy Telephone support Helplines Social/group interaction *Note:* Social interaction is permitted ONLY if it is with treatment-seeking peers or significant others that are simultaneously engaged with the intervention (e.g., peer leaderboard on smoking cessation smartphone app).	If YES, proceed to next question. If NO, exclude article and indicate exclusion reason.	(8) Intervention 2: Dependence
(9) Is the intervention primarily non-pharmaceutical in approach?	**Ineligible:** Pharmaceutical drug Nicotine replacement therapy (e.g., nicotine patch) **Eligible:** Cognitive restructuring Behavioural activation Coping skills/strategies	If YES, proceed to next question. If NO, exclude article and indicate exclusion reason.	(9) Intervention 3: Pharmaceutical

Note: "Without support" (8) means that intervention content, features, or activities are initiated and completed either automatically (i.e., no person initiates it, but contextual factors like GPS can) OR by the user without professional help/guidance.

Step 4: Assess quantitative outcomes.

Question	Examples	Action	Exclusion reason
(10) Does the study measure and report on at least one quantitative measure of the problem as defined above with respect to intervention outcomes?	**Eligible:** Frequency of behaviour (e.g., number of drinking days) Severity of diagnosis (e.g., number of criteria met) Amount of consumption Intensity of cravings Expenditures (e.g., daily, monthly) Blood alcohol content (BAC)	If YES, proceed to next question. If NO, exclude article and indicate exclusion reason.	(10) Outcome 1: Addiction
(11) Does the study measure and report any findings related to participant engagement, adherence, or subjective experience?	**Eligible:** Quality ratings Time spent with intervention Number of times accessed Number of complete modules Completed activities Adherence rate Retention rate Attrition rate Treatment completion	If YES, proceed to next question. If NO, exclude article and indicate exclusion reason.	(11) Outcome 2: Engagement

Step 5: Assess sample for duplication. Most duplicates will have been automatically removed already. Sometimes, however, the same sample of participants will be reported on in different articles based on data collected at different time points (e.g., two papers that represent a randomized controlled/clinical trial [RCT] with 12-month and 24-month follow-up data, respectively).

Question	Examples	Action	Exclusion reason
(12) If the study sample is not unique, is it the version with the longest follow-up time period?	**Ineligible:** Duplicate samples for which a longer follow-up is reported elsewhere	If YES, include article in this review and prepare for data extraction. If NO, exclude article and indicate exclusion reason.	(12) Duplication 1: Follow-up time