

Search Strategy without database-specific controlled vocabulary

PICO(S)-component	derived general string for database search
Pa adults with specific learning difficulties, such as "concentration problems/challenges," "attention and memory issues," and "rapid fatigue/exhaustion (lack of motivation)"	„concentration problem“ OR „concentration difficulties“ OR „concentration difficulty“ OR „focus issue“ OR „inattention“ OR „attention problem“ OR „memory problem“ OR „memory issue“ OR „fatigue“ OR „exhaustion“ OR „tiredness“ OR „lack of drive“ OR „lack of motivation“ OR „learning problem“
Pb adults with potentially associated mental health disorders, specifically depressive disorders (depressive episode, persistent depressive disorder, premenstrual dysphoric disorder), bipolar and related disorders (specifier: "with anxious distress", bipolar affective disorder, current episode manic without psychotic symptoms), anxiety disorders (generalized anxiety disorder), trauma- and stressor-related disorders (acute stress disorder/acute stress reaction, posttraumatic stress disorder (ptsd)), attention-deficit/hyperactivity disorder (adhd)/disturbance of activity and attention, fatigue syndrome and neurasthenia, addictive disorders	"mental disorder" OR "psychological disorder" OR "mental illness" OR "mental disease" OR "mental health problem" OR "mental sickness" OR „depressive disorder“ OR „persistent depressive disorder“ OR „PMDD“ OR „premenstrual dysphoric disorder“ OR „bipolar disorder“ OR „anxiety disorder“ OR „generalized anxiety disorder“ OR „trauma-related disorder“ OR „acute stress disorder“ OR „PTSD“ OR „post-traumatic stress disorder“ OR „substance-related disorder“ OR „addiction“ OR „substance use disorder“ OR „attention deficit disorder“ OR „ADHD“ OR „ADD“ OR „neurasthenia“ OR „fatigue syndrome“
Ia digital applications for screening	(„screen“ OR „diagnos“ OR „prediagnos“ OR „pre-diagnos“ OR „prescreen“ OR „pre-screen“ OR „phenotyp“ OR „self-diagnos“ OR „selfassessment“ OR „self-assessment“ OR „self assessment“ OR „symptom assessment“) AND („digital“ OR „computer assist“ OR „expertsystem“ OR „app“ OR „apps“ OR „tool“ OR „tools“ OR „application“ OR „mobile technolog“ OR „computer programm“ OR „webbased“ OR „artificial intelligence“ OR „Symptom-checker“ OR „symptom checker“ OR „digital intervention“ OR „DiGA“ OR „DIGA“ OR „Digitale-Gesundheitsanwendung“ OR „Digitale Gesundheitsanwendung“)
Ib digital applications for decision support	„decision support system“ OR „decision system“ OR expertsystem* OR „expert system“ OR „digital decision making“ OR „computer assisted decision making“ OR „computer-assisted decision making“
C alternative concepts in digital support	excluded
O characteristics of the systems	excluded
Derived search string links, in bold preferred link for export: (Pa AND Pb) AND (Ia AND Ib) → exactly matches the research question, but returns very few results (Pa OR Pb) AND (Ia AND Ib) → focus on both types of systems/applications (Pa AND Pb) AND (Ia OR Ib) → focus on both learning and mental disorders simultaneously (Pa OR Pb) AND (Ia OR Ib) → covers the range of relevant studies for the research question Applied filters and search specifications: Final filters for the bold search string: use an age filter for individuals over 18, combined with an option to filter out subjects over 65 by linking with the NOT operator—this excludes studies focusing on children and older adults. Additionally, exclude studies on dementia/Alzheimer's using the NOT operator, and, if available, filter for texts in English and German. In the Web of Science database, only relevant research areas should be considered.	