



The Effectiveness of Online Educational Interventions for Diagnosing Mental Health Disorders in Primary Care and Community Settings: A Systematic Review

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Laidlaw Scholarship Project – PH4

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Why is this important?

Mental health disorders are frequently encountered in primary care, yet underdiagnosis remains a persistent challenge.

Early and accurate diagnosis is essential to ensure timely access to appropriate treatment and support.

Healthcare professionals may face challenges in recognising and diagnosing mental health conditions due to limited training, time constraints, and diagnostic complexity.

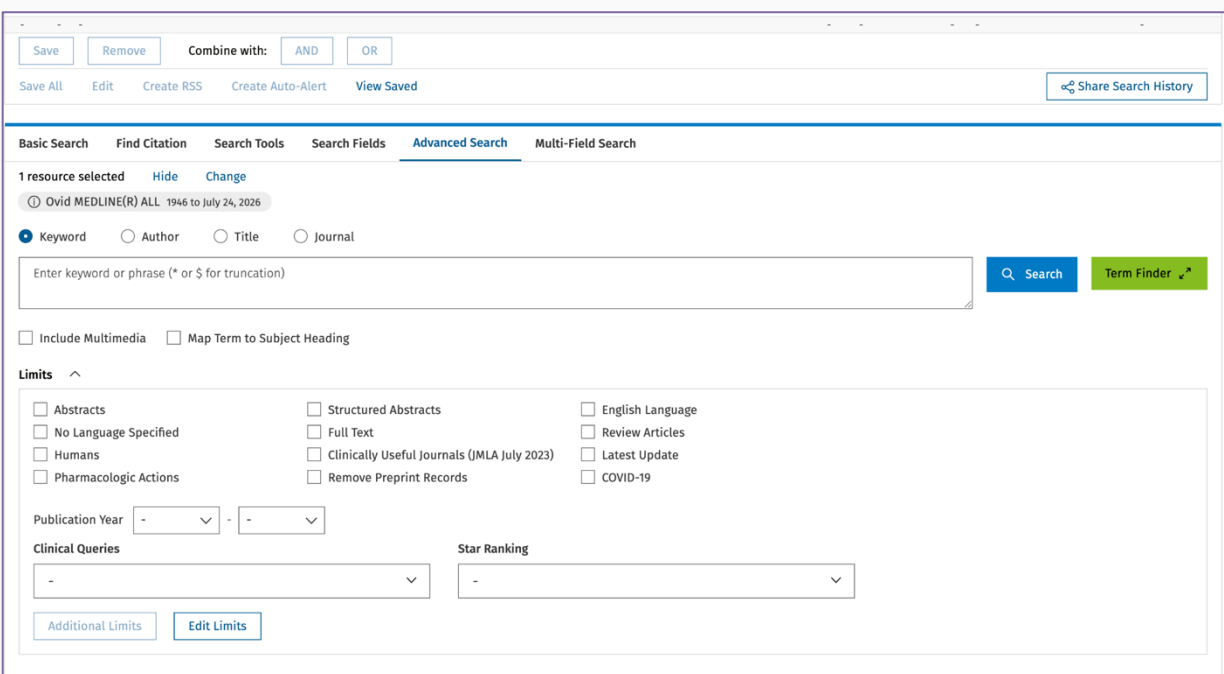
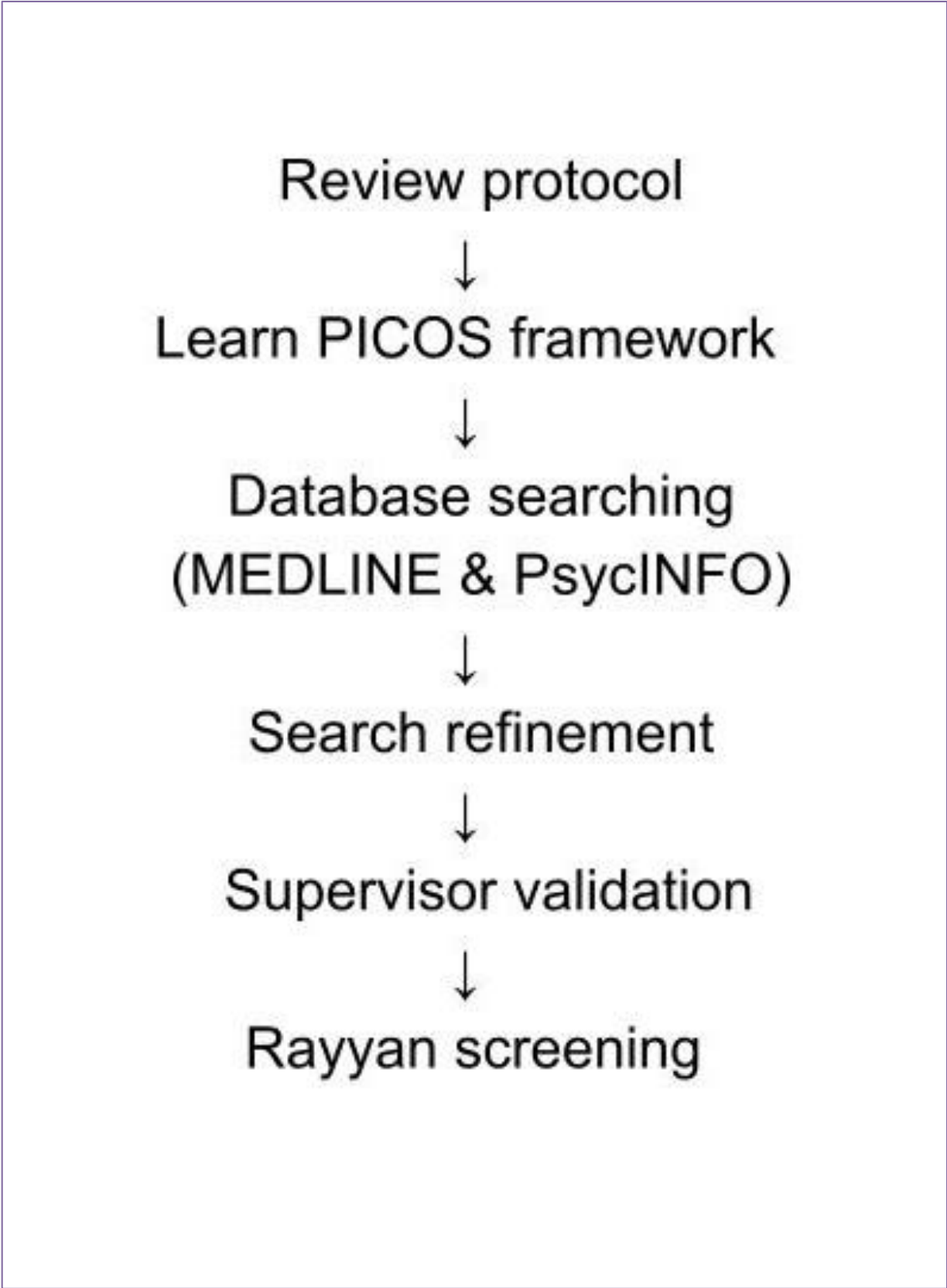
Online educational interventions offer a scalable and accessible approach to improving diagnostic skills, but their effectiveness remains unclear.

Project Aim

To contribute to a systematic review investigating the effectiveness of online educational interventions for improving the diagnosis of mental health disorders in primary care and community settings.

Objectives

- Learn systematic review methodology.
- Refine literature search strategies.
- Evaluate database searches.
- Screen studies using Rayyan.
- Develop research and critical appraisal skills.



Concept	Text words (Txt)	MeSH / Emtree
Population	mental disorder*.mp. mental illness*.mp. psychiatric disorder*.mp. behavio?r disorder*.mp. diagnos*.mp.	exp Mental Disorders/ exp Differential Diagnosis/
Intervention	educational intervention* online education online learning e-learning web-based education distance learning computer-assisted instruction virtual patient* ((online or web or internet or digital) adj3 (education or learning or training))	Health Knowledge, Attitudes, Practice/ Attitude of Health Personnel/ Computer-Assisted Instruction/ Education, Distance/ Health Education/ Internet/
Comparator	None specified	None specified
Outcome	None specified (effectiveness will be assessed during study selection rather than searched as a concept)	None specified
Setting	primary care primary health care general practi* general practitioner* family physician* community health community service* primary care physician* health professional* healthcare professional* clinician*	Primary Health Care/ Community Health Services/ Community Services/ Health Personnel/ Physicians, Primary Care/ General Practitioners/ Nurses/

Population	Patient or population undergoing the phenomena of interest. Age, ethnicity, condition /health status, disease, presentation, setting.
Intervention	What intervention is the focus of the search - the specific treatment, test, or action you want to test.
Comparator	The alternative choice or standard care you measure the intervention against, if any.
Outcomes	The specific result or effect you hope to measure or find (e.g., lower blood sugar levels).
Setting	The physical environment, geographic location, or clinical care level.

My Contribution

Understanding the Review

- Reviewed systematic review protocol
- Learned PICOS framework
- Explored previous year's project
- Familiarised with UCL Library resources

Search Strategy Development

- Learned Ovid MEDLINE and PsycINFO
- Refined search terms
- Expanded keywords and MeSH headings
- Improved search specificity while maintaining sensitivity

Search Validation

- Compared original and revised searches
- Discussed findings with supervisors
- Evaluated indicative studies
- Web of Science excluded due to reproducibility issues

Study Screening

- Learned Rayyan software
- Applied inclusion/exclusion criteria
- Screened training studies
- Developed confidence identifying relevant literature

Reflection

- Systematic reviews require extensive planning and refinement.
- Small changes to search terms can greatly affect results.
- Database searching is an iterative process.
- The placement improved my confidence in academic research and evidence synthesis.

Future Directions

- Continue title and abstract screening.
- Complete full-text screening.
- Perform data extraction and risk of bias assessment.
- Inform development of a new mental health case for the UCL eCREST platform.