Assessing generalizability (external validity) of evidence to practice

A summary of

How to cite this NCCMT summary:

Categories: Tool, Adapt, Organizational capacity and management

Relevance For Public Health
This tool provides a series of 16 questions to look at factors within intervention studies to help professionals decide whether or with what caution the findings can be used in their local setting.

Description
Program planners and practitioners need to assess whether research evidence is generalizable and relevant to their local setting. This tool, developed by Green and Glasgow (2006), evaluates research across four domains to assess the external validity of evidence for use in policy and practice.

To determine the external validity of research studies and intervention studies relevant for public health, researchers must report population characteristics, details of the intervention (such as implementation issues), reach, adoption, outcomes and sustainability of the intervention (Thomson & Thomas, 2012). Based on this information, professionals can determine if the findings are relevant to their particular setting.

While internal validity measures whether the observed results can be attributed to the intervention (Brownson, Gurney & Land, 1999), external validity may improve the usefulness of research findings and potentially the quality of available evidence (Thomson & Thomas, 2012). Building on Cronbach et al.’s work (1972) on generalizability and the RE-AIM model, this tool provides a set of questions to assess external validity and potential for implementation.

This set of questions can be used at the Adapt stage of Evidence-Informed Public Health and supports the transferability aspect of NCCMT’s Applicability and Transferability Tool.

This article discusses:
- a set of criteria for external validity
- a series of questions to assess external validity
- a set of considerations in applying evidence in local settings and populations

Implementing the Tool
Who is Involved?
Anyone interested in evaluating the generalizability of research findings to their situation or setting would find this tool useful.

Steps for Using Tool
The tool provides 16 questions in four domains to assess the generalizability of study findings:
- Population — Representativeness of target population, setting and reach of intervention
- Intervention — Implementation and adaptation
Evaluation and Measurement Characteristics

Evaluation

Has been evaluated.

Thomson and Thomas (2012) tested the Green & Glasgow tool on 39 studies assessing the health impacts of housing improvement. They found that the tool is useful in assessing external validity of studies, but may require tailoring to the content area.

Validity

Information not available

Reliability

Information not available

Methodological Rating

Not applicable

Tool Development

Developers

Lawrence W. Green
Russell E. Glasgow

Method of Development

Information not available

Release Date

2006

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<th>Title of Primary Resource</th>
<th>Evaluating the relevance, generalization and applicability of research: Issues in external validation and translation methodology</th>
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<th>External validity in healthy public policy: Application of the RE-AIM tool to the field of housing improvement</th>
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