



Reflection Guide for Empirical Articles about IECMHC

This resource provides a series of reflection questions to consider while reading an empirical paper about IECMHC. It is intended for readers who are seeking to fully understand a study's strengths and limitations, and the potential implications of the findings for their work. While this resource was designed for studies about IECMHC, many of the questions could apply to other topics as well. The reflection guide is organized according to the order of sections in most scholarly journal articles; but it could also apply to a review of an empirical paper that has not been peer-reviewed. Overall, this resource is intended to empower readers to interpret articles about IECMHC such that they can pull out the main points and assess the extent to which the findings apply to their own work.

Introduction

1. What is the existing research on the topic? What do we already know?
 1. What are the limitations of the existing research in terms of **equity**? Can results be generalized to more diverse populations?
2. What gap(s) in the research is this study attempting to fill?
3. What are the specific research questions? Do they have hypotheses?
 1. Do the authors identify ways in which the research questions are driven by the priorities, belief systems, and values of the population being studied?
 2. Do the authors plan to conduct **disaggregated analyses** to investigate what works for whom?
 1. If investigating racial/ethnic group differences, do the research questions incorporate analysis of the history and context of the community to provide findings with sufficient context for interpreting results how they may be driven by structural inequities?
 2. Did the authors consider intersectional identities (e.g., race/ethnicity, language, immigration status)?

Methods

1. How do they describe IECMHC?
 1. Does it sound similar to how you understand IECMHC?

2. How much specificity do the authors provide about the following? How does it compare to other programs you know about?
 1. Consultation setting (e.g., ECE, home visiting, child welfare) and location (e.g., urban, rural, tribal)
 2. Consultation “dose” (e.g., how often and for how long is consultation provided?)
 3. Consultant qualifications, training, and access to reflective supervision
2. Who were the participants in the study? Consider that there may be multiple samples if there are different subgroups (e.g., children, teachers, and consultants).
 1. What are the demographics (e.g., age, race/ethnicity) of the sample(s)?
 1. What do we know about the authors’ identity characteristics, if anything? How might these identity characteristics have influenced the research process (e.g., interpreting data)?
 2. What is the sample size?
 3. How much missing data are there? (Do the authors specifically mention missing data?)
3. What measures do they use?
 1. Do the measures have strong **psychometric** properties, according to the description? Were they normed with a sample that is similar to the study sample in terms of age, linguistic background, race/ethnicity, socioeconomic status, etc.? Have they been validated with the specific population being studied to ensure validity and reliability?
 2. Do the measures capture the **construct** of interest?
 3. Who completed the measures? Are there multiple respondent types (e.g., parents and home visitors)?
 4. Who gathered the data, and were the data gathered in a culturally-responsive manner (e.g., attending to non-verbal cues)?
 1. Are there any concerns about biased response patterns? For example, if a consultant is the one asking the consultee about their satisfaction with consultation, there is a risk that consultees will provide overly-positive answers compared to answers given anonymously.
 5. At what time point(s) were data collected? If assessing change over time, has there been enough time elapsed for the change to occur?
 6. For the papers that included quantitative data analysis, did the authors also conduct any qualitative research to allow for more nuanced understanding of quantitative findings?
4. Data analysis
 1. Do the analytical approaches match up with the type and quantity of data?
 2. How rigorous are the methods? The below research methods increase the rigor of a study:
 1. **Control group or comparison group**

2. Control variables
3. Random assignment

Results

1. Read and review all tables and figures, paying attention to what is and is not statistically significant. What were the **statistically significant** and **null findings**, and can you notice any patterns?
2. With large sample sizes, results may be statistically significant, but the size of the differences may not be clinically significant in the real world. Can you tell from the results how much of an impact consultation has made?
3. Did the authors share **effect sizes**?
4. Did the community being studied contribute to the interpretation of the data to complement the researchers' knowledge and further illuminate contextual factors?

Discussion

1. Overall, were their results in line with the stated hypotheses and/or your own expectations? What surprised you?
2. Did the authors acknowledge and address root causes, contextual factors, and social determinants in their interpretation of the data?
3. Do the methods and results justify the conclusions the authors drew?
4. To whom do the results apply? In other words, how **generalizable** are the results?
5. How do the results fit in with the existing literature base? In other words, do they expand upon prior findings or contradict them?
6. How thoroughly do the authors acknowledge their study's limitations?
 1. What is the impact of the power differential that may exist between researcher and participant?
7. What will you (the reader) take away from reading this article? What else did you want to know?
8. How will you use what you have learned to further develop your program or practices, particularly when working with individuals with diverse intersecting identities?

GLOSSARY

Equity: Acknowledges differences in identities and experiences and takes those differences into account to ensure fair practices, policies, decisions, behaviors, actions, and, ultimately, a fair outcome. It is the presence of values and systems that ensure fairness and justice. Racial and ethnic equity in research means applying tools and practices needed to recognize people of color's experiences with unequal power differentials and access to resources and opportunity, while considering historical and current lived realities, including structural racism.

Psychometric: The branch of psychology concerned with the quantification and measurement of mental attributes, behavior, performance, and the like, as well as with the design, analysis, and improvement of the tests, questionnaires, and other instruments used in such measurement.

Construct: A complex idea or concept formed from a synthesis of simpler ideas.

Control group: A group in a study whose members are randomly-assigned not to receive the treatment under investigation. The responses of those in the control group are compared with the responses of participants in one or more experimental groups that are given the new treatment being investigated.

Comparison group: A control group (see above) but without random assignment

Control variables: A variable that is considered to have an effect on the response measure in a study but that itself is not of particular interest to the researcher. To remove its effects a control variable may be held at a constant level during the study or managed by statistical means (e.g., a partial correlation).

Random assignment: A study design where participants are randomly selected to either be a part of the “treatment” group receiving the intervention or the “control” group who does not get the treatment. This design is considered the gold standard of scientific studies as it reduces many forms of bias and maintains a higher level of control over the environmental conditions.

Statistically significant: It is determined during significance testing with a statistical test. It is gauged by a critical p value, (typically considered significant if less than $p=0.05$) which is the probability of obtaining the observed data if the null hypothesis (i.e., of no significant relationship between variables) were true. Significance generally is a function of sample size; the larger the sample, the less likely it is that one’s findings will have occurred by chance.

Null findings: The situation in which the outcome of a statistical hypothesis-testing procedure indicates that there is no relationship, or no significant relationship, between experimental variables.

Effect sizes: Any of various measures of the magnitude or meaningfulness of a relationship between two variables. For example, Cohen’s d shows the number of standard deviation units between two means. Often, effect sizes are interpreted as indicating the practical significance of a research finding. Additionally, in meta-analyses, they allow for the computation of summary statistics that apply to all the studies considered as a whole.

Disaggregated analyses: Data that has been broken down by detailed sub-categories, for example by marginalized group, gender, region, or level of education. Disaggregated data can reveal differences or inequalities that may not be fully reflected in aggregated data.

Generalizability/generalizable: The extent to which results or findings obtained from a sample are applicable to a broader population.

Glossary Sources:

- APA Dictionary of Psychology
- My CoLab Partners, adapted from National Education Association, n.d.
- Andrews, K., Parekh, J., & Peckoo, S. (2019). *How to embed a racial and ethnic equity perspective in research: Practical guidance for the research process*. Child Trends.

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