

Supplemental Information

SUPPLEMENTAL TABLE 3 Checklist for Authors Before Educational Article Submission**Title and abstract**

The title is clear and representative of content.

The abstract concisely describes study and key findings.

Conclusions in the abstract are justified given information provided in abstract.

All information provided in the abstract is presented in the text.

All information in the abstract, text, figures, and tables is consistent.

Introduction

Builds a convincing case why this problem is important with literature review

Identifies gaps in literature and addresses how this study will fill the gaps

Conceptual framework is explicit and justified (and/or in Discussion).

Specific aim of the study (and hypothesis when applicable) is clearly stated.

Methods

For all studies

Research design is appropriate to address research question.

Research design is stated clearly (ie, cross-sectional cohort study).

Methods are described clearly in sufficient detail to permit study to be replicated.

Study population (sampling, selection bias)

Study intervention (Objectives, activities, time allocation, training)

Study instrument validity evidence (Instrument development; content; preparation of observers, interviewers, and/or raters; scoring method; psychometric properties)

Study outcomes are defined clearly (and high on Kirkpatrick's pyramid; may be inversely related to level of innovation, with less innovative ideas requiring higher outcome levels).

Data analysis is appropriate for research design and research question.

Data analysis procedures are described clearly in sufficient detail to be replicated.

IRB approval or exemption and consent are clearly stated.

For quantitative studies

Generalizability: the study is generalizable because of the selection of participants, setting, educational intervention and/or materials (external validity: less innovative studies require higher generalizability with more sites, etc).

Internal validity: potential confounding variables are addressed and adjusted for in analysis.

Reliability: potential sources of error are identified and minimized.

Analysis is appropriate to address research question and study design; statistical tests are appropriate.

Type I error minimized: adequate power in studies that make statistical inferences (particularly important if results are not significant, but this is better to determine in advance)

Type II error minimized: effect size and functional significance are discussed when appropriate; when making multiple comparisons, adjustment for significance level for multiple tests and/or comparisons are considered.

SUPPLEMENTAL TABLE 3 Continued

For qualitative studies

Philosophical framework is stated clearly (eg, grounded theory).

Transferability: the study offers concepts or theories that are transferable to other settings and methods described in sufficient detail (setting, sample).

Trustworthiness and/or credibility: the study design incorporates techniques to establish confidence in truth of findings for subject and/or context (ie, triangulation, prolonged observation).

Confirmability: characteristics of the researchers that may influence the research are described and accounted for during data collection and/or analysis (eg, use coders with multiple perspectives, member crosschecking).

Dependability: use methods that would allow findings to be consistent if study is replicated (eg, audiotaping and/or transcribing, software program)

For mixed-methods (quantitative and qualitative) studies

Justify use of mixed methods (study must do justice to both methodologies)

Justify order of quantitative and qualitative study

Results

All results are presented and align with study question and methods. All results are presented in Results section (and not in other sections).

Sufficient data are presented to support inferences and/or themes.

Tables, graphs, and/or figures are used judiciously to illustrate and complement main points in the text.

Discussion

Key findings are stated clearly. Conclusions follow from design, methods, results.

Findings are placed in the context of relevant literature, including conceptual framework. Alternative interpretations of findings are considered as needed.

Study limitations and study strengths are discussed.

Practical significance or implications for medical education are discussed. Guidance for future studies is offered.

References

Literature review is comprehensive, relevant, and up to date.

Ideas and materials of others are appropriately attributed (no plagiarism).

Final journal check

The study is relevant to mission of the journal and journal audience.

Author guidelines are followed (including word count).

Previous publication(s) by author(s) of substantial portions of the data are appropriately acknowledged.

Conflicts of interest are disclosed.

The text is well written and easy to follow.

The article is well organized.

Adapted from Li ST, Klein M, Vinci B, Gusic M, Szilagyi P. Crossing the finish line: getting your medical education work published. In: Pediatric Academic Societies Meeting. May 6-9, 2017; San Francisco, CA. Adapted from Durning SJ, Carline JD, eds. *Review Criteria for Research Manuscripts*. 2nd ed. Washington, DC: Association of American Medical Colleges; 2015:xi-xii.