CAEP EDUCATION RESEARCH (QUANTITATIVE) ABSTRACT REVIEWER CRITERIA

	1 – Unacceptable	2 – Poor	3 – Good	4 – Very Good	5 - Excellent
CLARITY OF OBJECTIVES	No identifiable research objective/question, or objective is fundamentally inappropriate.	Objective/question is vague, incomplete, or difficult to evaluate.	Objective/question is identifiable and appropriate but lacks some specificity or clarity.	Objective/question is clear, specific, appropriate, and feasible.	Objective/question is exceptionally clear, focused, and well-defined, with the population/exposure or intervention/outcome specified as appropriate.
CHOICE OF APPROACH	Design did not assess stated hypothesis/objectives or design used is not clear	Chosen study design was sub-optimal to assess the stated objectives	Chosen study design was reasonable to assess the stated objectives	Chosen study design was a very good method for assessing the stated objectives	Study design is highly appropriate and well aligned with the research question/objectives, taking into account the educational context and feasibility.
OUTCOME MEASURES AND VALIDITY	Outcomes are absent, inappropriate, or inadequately defined; measures lack necessary validity evidence where applicable.	Outcomes are identifiable but poorly defined or measured; important concerns exist regarding appropriateness or validity.	Outcomes and measures are generally appropriate and sufficiently defined, with reasonable validity evidence where applicable.	Outcomes are clearly defined, relevant to the objectives, and measured using appropriate instruments with suitable validity evidence where applicable (e.g., content, response process, internal structure).	Outcomes are exceptionally well aligned with the objectives and measured using well-justified instruments or approaches with strong validity evidence appropriate to their intended use.
RISK OF BIAS / METHODOLOGICAL RIGOUR	Major sources of bias are present and unaddressed, substantially undermining the validity or interpretability of the findings.	Important sources of bias are inadequately addressed or not clearly considered, resulting in substantial concerns about the validity of the findings.	Potential sources of bias are reasonably addressed, although some methodological limitations remain that may affect interpretation of the findings.	Important potential sources of bias are clearly considered and appropriately addressed through the study design, conduct, and/or analysis, with only minor limitations.	Potential sources of bias are comprehensively and appropriately addressed using rigorous methods suited to the study design, supporting a high degree of confidence in the validity and interpretation of the findings.
STATISTICS	Severely flawed or no statistical methods were reported	Statistical methods and conclusions are suboptimal or incomplete	Statistical methods and reporting are mostly adequate, but not comprehensive. Statistical approach matches research question (descriptive or inferential as appropriate).	Statistical methods and reporting are largely correct, but are missing few descriptors. Statistical approach matches research question (descriptive or inferential as appropriate).	Statistical methods and reporting are comprehensive and correct (i.e., p-values/CI/Kappa/ Categorizations for qualitative or systematic reviews). Statistical approach matches research question (descriptive or inferential as appropriate).
SAMPLE SIZE APPROPRIATENESS	Sample size not addressed. Examples: study size not reported, poor survey response rate, or no description of databases searched for systematic reviews.	Sample size mentioned but no justification. Examples: (a) inadequately powered RCT or prospective cohort study or retrospective studies; (b) small or low-response-rate surveys; (c) inadequate number of databases covered for systematic reviews.	Sample size mentioned but poorly justified. Examples: (a) feasibility or single-centre RCT or prospective cohort study or retrospective studies; (b) large, suitable-response-rate surveys; (c) adequate number of databases covered for systematic reviews; single-institution education study with adequate sample for effect detection.	Adequate sample size with justification. Examples: (a) well-powered single-centre RCT or prospective cohort study or retrospective studies; (b) large, national, high-response-rate surveys; (c) most appropriate databases covered for systematic reviews; multi-site education study with appropriate sample size for generalizability.	Sample size is clearly justified (e.g., sample size/power calculation reported, where applicable) and appropriate for the design and intended generalizability. Examples: (a) well-powered multicentre RCT or prospective cohort study or retrospective studies; (b) large, international, high-response-rate surveys; (c) all relevant databases covered for systematic reviews; multi-site education study with appropriate sample size for generalizability.

IMPORTANCE OF TOPIC	Not relevant to EM	Either limited interest or applicable to only a few practitioners of EM	Either important topic or may influence educational practice/policy in EM.	Both an important topic and may Influence educational practice/policy or address significant educational gaps in EM.	Highly innovative, both in important topic and may influence education practice/policy or address significant gaps in EM.
WRITING QUALITY	Poorly written and hard to understand	Inadequately written or structured	Generally well-written, but requires minor clarifications or corrections	Well-written, but requires a slight correction	Perfect grammar, no errors, very clear expression of ideas
OVERALL IMPRESSION	Unacceptable Major methodological or conceptual limitations substantially undermine the study's validity or contribution.	Poor Important limitations reduce confidence in the findings or their educational contribution.	Good Sound study that provides a useful contribution despite some methodological or interpretive limitations.	Very Good Strong, methodologically sound study that makes a meaningful contribution to emergency medicine education.	Excellent Exceptionally rigorous and coherent study that makes an important contribution to emergency medicine education and has strong potential to advance knowledge, practice, policy, or future research.