Key components of a research paper

Good research articles tend to have all of the following components, so look for them to help determine the credibility of a study.

Research questions
- A well-defined and specific research question guides the study design.
- A research question should require analysis to provide an answer and should be feasible, specific, focused, measurable, and clear.

Literature review
- Literature reviews show how the study contributes to, challenges, and/or extends the current knowledge base, practice, or methodology in the field.
- A good literature review provides recent and relevant citations that reference empirical* scientific studies.

Research design
- Research design is the selection of methods used to collect and analyze data to answer a research question.
- Research designs fall into one of two broad categories: qualitative research designs, and quantitative research designs.
- Qualitative research designs focus on things in their natural settings, and seek in-depth understanding of underlying meanings—the why—of social phenomena.
- Quantitative research designs use numerical data to generate statistical results than can generalize from a smaller group or sample to a larger population.

Population and sample
- The target population is the overall group being studied and should be well-defined.
- Most studies are conducted with a part of the target population, a sample.
- Findings from the sample extend (or generalize) to the population.

Measures
- Reliability and validity are critical for helping to evaluate the quality of the measures.
- Reliability is the extent to which a measure produces stable and consistent results.
- Validity is the extent to which the scores from a measure represent the variable they are intended to.

Findings/results
- The results section provides the answers to the research questions.

Discussion and implications
- In the discussion section, authors interpret the findings in relation to other similar studies and explore the implications of the research, practice, or policy.
- Limitations of the study should be described by the authors.

*What is empirical research?
Empirical research is based on observed and measured phenomena and derives knowledge from actual experience rather than from theory or belief.