Statswork
Pioneer Statistical Consulting since 2001

Case study:

Meta-Analysis Holds Considerable Potential to Generate Wider and More General Conclusions from The Large Body of Qualitative Case Studies

Categories:
- Data Aggregation
- Methodological Analysis
- Continuous Outcome
- Network Analysis

Main Contributor:
- Quantitative synthesis
- Increases Statistical Power
- Resolves Conflicting Results
- Guides Evidence-Based Practice
- Improves Precision and Reliability

The Organization

StatsWork

Description

Multiple studies will be compiled and synthesised using a systematic methodological approach to give the representation of more accurate data displaying patterns that support Evidence Based Decision Making in the development of reliable strategies, improved outcomes and the best use of Resources.

Project Description

StatsWork uses Meta Analysis in conjunction with multiple individual research projects to create a comprehensive body of knowledge that can provide usable and valid conclusions regarding past research. Furthermore, by identifying commonalities between studies, this type of analysis can help organizations develop data-supported strategies at every level for accountability and to enhance their ability to achieve desired outcomes.

Key Areas of Application

Healthcare and clinical research

Education and learning interventions

Psychology and mental health

Social policy and community programs

Business and management research

Project Goals

- Create a synthesis of evidence drawn from multiple studies into reliable conclusions.
- Evaluate the size of an overall effect and estimate more accurately
- Resolve inconsistencies across studies.
- Determine patterns, trends and key factors that influence a study's outcome.
- Develop strategies and decisions using evidence rather than opinion.

Core Services

- Systematic literature review and study selection
- Data extraction and quality assessment
- Effect size calculation and data synthesis
- Heterogeneity and subgroup analysis
- Interpretation, reporting, and evidence-based recommendations

Platform Capabilities

- Systematic data collection and literature management
- Advanced statistical modelling and synthesis
- Heterogeneity, sensitivity, and subgroup analysis
- Visualization and summary reporting of results
- AI-assisted insights and decision support

Business Model

StatsWork is a rapid analytics service using a combination of expert methodology, AI synthesis, and advanced statistics for a meta-analysis. It is delivered through a scalable platform through subscription and project models to Enterprise, Research and Policy Maker customers.

As a scalable platform, StatsWork allows organisations to make evidence-based decisions, achieve better outcomes and provide measurable value across multiple industries.

Methodology of Implementation

StatsWork utilizes a systematic approach to analyse multiple studies in conjunction with an established protocol to identify relevant studies, extract and assess the quality of the data. The application of advanced statistical models synthesizes the evidence gathered from multiple studies and evaluates the level of variation (heterogeneity) between them.

The use of artificial intelligence (AI)-based instruments helps researchers to detect and validate trends while providing clear, precise, and replicable insights that contribute to making well-informed decisions based on the data.

Results of the Implementation

Here are key results from implementing StatsWork's Meta analytics solution

- Improved accuracy and reliability of decisions
- Reduced uncertainty through evidence synthesis
- Resolution of conflicting study findings
- Identification of key trends and influencing factors
- Stronger accountability through transparent analysis
- Enhanced strategic planning and productivity

Benefits from the Implementation

- More reliable and evidence-based decision-making
- Increased confidence through consolidated insights
- Better strategic planning and resource allocation
- Improved accountability and transparency
- Time and cost savings by leveraging existing research
- Enhanced productivity and organizational effectiveness

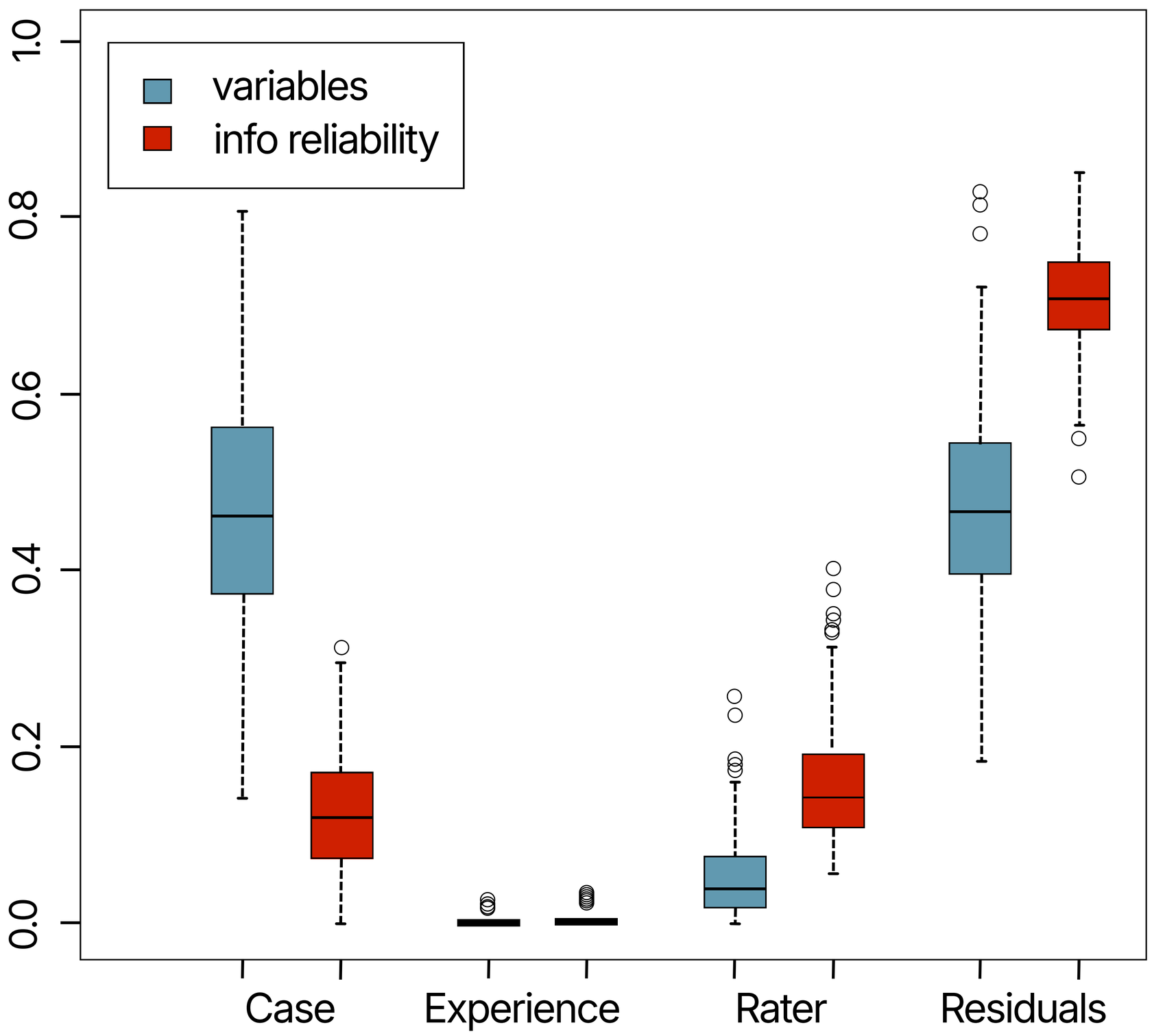
Mistakes to Avoid

The credibility, dependability and influence of each of a meta-analysis's results may ultimately be compromised by biases stemming from an author's use of low-quality or substantially biased research studies; inconsistent data-evaluation processes; and neglecting heterogeneity; improper interpretation of effect sizes; lack of methods transparency; and over-generalization.

Platform Capabilities

- A meta-analysis provides more reliable and higher-quality evidence than a single study.
- Quality and consistency of the studies included in the analysis are critical to the overall outcome.
- A meta-analysis that utilizes a transparent method is more credible and trusted.
- Proper interpretation of the findings prevents over-generalization.
- Ankleted insights from multiple studies will aid leaders in making better strategic decisions.

Variances of variable and information reliability scores



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Turn complex studies into clear strategies with StatsWork Meta-Analysis