

Critical appraisal checklist for a questionnaire study

Reference: British Medical Journal (BMJ):

<http://www.bmj.com/content/suppl/2004/05/27/328.7451.1312.DC1#e>

Research question and study design

What information did the researchers seek to obtain?

Was a questionnaire the most appropriate method and if not, what design might have been more appropriate?

Were there any existing measures (questionnaires) that the researchers could have used? If so, why was a new one developed and was this justified?

Were the views of consumers sought about the design, distribution, and administration of the questionnaire?

Validity and reliability

What claims for validity have been made, and are they justified? (In other words, what evidence is there that the instrument measures what it sets out to measure?)

What claims for reliability have been made, and are they justified? (In other words, what evidence is there that the instrument provides stable responses over time and between researchers?)

Format

Was the title of the questionnaire appropriate and if not, what were its limitations?

What format did the questionnaire take, and were open and closed questions used appropriately?

Were easy, non-threatening questions placed at the beginning of the measure and sensitive ones near the end?

Was the questionnaire kept as brief as the study allowed?

Did the questions make sense, and could the participants in the sample understand them? Were any questions ambiguous or overly complicated?

Instructions

Did the questionnaire contain adequate instructions for completion—eg example answers, or an explanation of whether a ticked or written response was required?

Were participants told how to return the questionnaire once completed?

Did the questionnaire contain an explanation of the research, a summary of what would happen to the data, and a thank you message?

Piloting

Was the questionnaire adequately piloted in terms of the method and means of administration, on people who were representative of the study population?

How was the piloting exercise undertaken—what details are given?

In what ways was the definitive instrument changed as a result of piloting?

Sampling

What was the sampling frame for the definitive study and was it sufficiently large and representative?

Was the instrument suitable for all participants and potential participants? In particular, did it take account of the likely range of physical/mental/cognitive abilities, language/literacy, understanding of numbers/scaling, and perceived threat of questions or questioner?

Distribution, administration and response

How was the questionnaire distributed?

How was the questionnaire administered?

Were the response rates reported fully, including details of participants who were unsuitable for the research or refused to take part?

Have any potential response biases been discussed?

Coding and analysis

What sort of analysis was carried out and was this appropriate? (eg correct statistical tests for quantitative answers, qualitative analysis for open ended questions)

What measures were in place to maintain the accuracy of the data, and were these adequate?

Is there any evidence of data dredging—that is, analyses that were not hypothesis driven?

Results

What were the results and were all relevant data reported?

Are quantitative results definitive (significant), and are relevant non-significant results also reported?

Have qualitative results been adequately interpreted (e.g. using an explicit theoretical framework), and have any quotes been properly justified and contextualised?

Conclusions and discussion

What do the results mean and have the researchers drawn an appropriate link between the data and their conclusions?

Have the findings been placed within the wider body of knowledge in the field (eg via a comprehensive literature review), and are any recommendations justified?