

The development of a checklist to enhance methodological quality in intervention programs

Chacón-Moscoso S.

Sanduvete-Chaves S.

Sánchez-Martín M.

The methodological quality of primary studies is an important issue when performing meta-analyses or systematic reviews. Nevertheless, there are no clear criteria for how methodological quality should be analyzed. Controversies emerge when considering the various theoretical and empirical definitions, especially in relation to three interrelated problems: the lack of representativeness, utility, and feasibility. In this article, we (a) systematize and summarize the available literature about methodological quality in primary studies; (b) propose a specific, parsimonious, 12-items checklist to empirically define the methodological quality of primary studies based on a content validity study; and (c) present an inter-coder reliability study for the resulting 12-items. This paper provides a precise and rigorous description of the development of this checklist, highlighting the clearly specified criteria for the inclusion of items and a substantial inter-coder agreement in the different items. Rather than simply proposing another checklist, however, it then argues that the list constitutes an assessment tool with respect to the representativeness, utility, and feasibility of the most frequent methodological quality items in the literature, one that provides practitioners and researchers with clear criteria for choosing items that may be adequate to their needs. We propose individual methodological features as indicators of quality, arguing that these need to be taken into account when designing, implementing, or evaluating an intervention program. This enhances methodological quality of intervention programs and fosters the cumulative knowledge based on meta-analyses of these interventions. Future development of the checklist is discussed. © 2016 Chacón-Moscoso, Sanduvete-Chaves and Sánchez-Martín.

Checklist

Content validity

Inter-coder reliability

Methodological quality

Primary studies