

A review study to identify adaptive algorithms for increasing the efficiency of Comparative Judgement

San Verhavert, Vincent Donche, Sven De Maeyer and Liesje Coertjens

Background.

People are better at comparing things rather than making an absolute judgement about them.

Drawing on this and derived from Thurstone's Law of Comparative Judgement (1927a, b), the method of Comparative Judgement (CJ) has already proven to be a reliable assessment method merits (e.g. see Jones & Inglis, 2015;

Jones, Swan, & Pollitt, 2015).

However, CJ suffers from efficiency problems.

Despite this issue being known quite a long time in the field (i.e. since Bramley, Bell, & Pollitt, 1998) no systematic search has been conducted toward algorithms that might increase CJ efficiency.

This systematic review is an attempt to fill this gap.

Research Question.

What adaptive selection algorithms can potentially increase efficiency in the context of CJ?

Method.

Our method is an adaptation of that described in Petticrew and Roberts (2006).

Analyses.

From the articles we extracted the algorithm descriptions and we attempted to make a taxonomy based on the algorithm's adaptiveness.

