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Inconsistent and contradictory judgements in pairwise comparison method in the AHP.

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Summary: The aim of this paper is to show the relationship between inconsistent and contradictory matrices of data obtained as a result of the pairwise comparison of factors in the sense of the analytic hierarchy process. The consistency check is performed to ensure that judgements are neither random nor illogical. This paper shows that even if a matrix will pass a consistency test successfully, it can be contradictory. Moreover an algorithm of checking contradictions is proposed.

MSC:

90B50 Management decision making, including multiple objectives

Cited in **20** Documents

Keywords:

Analytic hierarchy process; Pairwise comparisons; Consistency test

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