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**A comparative study on eigen weight vectors.** (English) [Zbl 0558.90051](#)

Decision making with multiple objectives, Proc. 6th Int. Conf. Multiple criteria decision making, Cleveland/Ohio 1984, Lect. Notes Econ. Math. Syst. 242, 388-399 (1985).

[For the entire collection see [Zbl 0552.00017](#).]

There are infinitely many eigen weight vectors which can be constructed for any given data of estimated weight ratios. Assuming that the reliability of these individual ratios can be different, we study the properties of the different eigen weight vectors, including that of Saaty and that recently proposed by Cogger and Yu. A general framework for the construction of eigen weight vectors based on the reliability of the data will be proposed and discussed.

**MSC:**

[90B50](#) Management decision making, including multiple objectives

**Keywords:**

[eigen weight vectors](#)