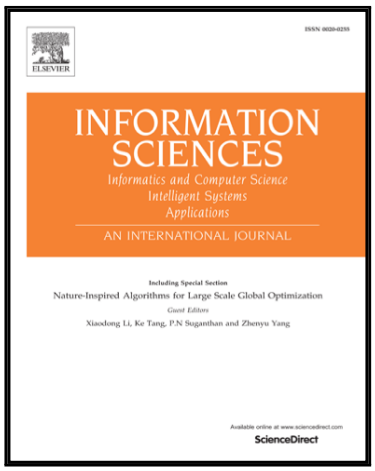

Notes on “Aggregation functions for typical hesitant fuzzy elements and the action of automorphisms” (Inform Sci. 255 (2014) 82-99)

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Notes on "Aggregation functions for typical hesitant fuzzy elements and the action of automorphisms" (Inform Sci. 255 (2014) 82-99)

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Abstract: The purpose of this note is, first, to point out several assertions (Proposition 1, Example 4) in Bedregal et al. [1] are incorrect by counterexamples, and second, to give some partial orders on H.

Keywords: Typical hesitant fuzzy set; Typical hesitant fuzzy element; α-normalization; β-normalization

1. Introduction

Hesitant fuzzy sets (HFS) were introduced by Torra [10] as an extension of fuzzy sets in which the membership degree of a given element is defined as a set of possible values. In recent years, HFS has been applied in many decision making problems and has attracted a great deal of attention from researchers [1-7, 9-14]. Xu and Xia [12] studied several distance measures and similarity measures for HFSs. Zhang [13] proposed some hesitant fuzzy power aggregation operators and developed techniques for multiple attribute group decision making with hesitant fuzzy information. Farhadinia [4] presented a series of score functions for ranking HFSs. Bedregal et al. proposed typical hesitant fuzzy sets (THFS) and investigated some properties of typical hesitant aggregation functions [1] and typical hesitant fuzzy negations [2]. Based on Xu and Xia's partial order, Santos et al. [9] further studied typical hesitant fuzzy negations.

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