

Erratum to: Intuitionistic and interval-valued intuitionistic fuzzy preference relations and their measures of similarity for the evaluation of agreement within a group and Some similarity measures of intuitionistic fuzzy sets and their applications to multiple attribute decision making

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Intuitionistic and interval-valued intuitionistic fuzzy preference relations and their measures of similarity for the evaluation of agreement within a group

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I recently found that several errors occur in the paper “Intuitionistic and interval-valued intuitionistic fuzzy preference relations and their measures of similarity for the evaluation of agreement within a group,” which can be corrected as follows:

The online version of the original article can be found under
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Eq. (7) should be

$$\begin{aligned} |\pi_A(x_j) - \pi_B(x_j)| &= |1 - \mu_A(x_j) - v_A(x_j) - (1 - \mu_B(x_j) - v_B(x_j))| \\ &= |(\mu_B(x_j) - \mu_A(x_j)) - (v_A(x_j) - v_B(x_j))| \end{aligned} \quad (7)$$

In Eq. (8):

$$\begin{aligned} &“|(\mu_A(x_i) - \mu_B(x_i)) - (v_A(x_i) - v_B(x_i))|” \text{ should be } “|(\mu_B(x_j) - \mu_A(x_j)) \\ &\quad - (v_A(x_j) - v_B(x_j))|” \end{aligned}$$

Eq. (10) should be

$$|\pi_{\alpha_1} - \pi_{\alpha_2}| = |(\mu_{\alpha_2} - \mu_{\alpha_1}) - (v_{\alpha_1} - v_{\alpha_2})| \quad (10)$$

and the corresponding Eqs. (11) and (15) should be

$$d(\alpha_1, \alpha_2) = \frac{1}{2}(|\mu_{\alpha_1} - \mu_{\alpha_2}| + |v_{\alpha_1} - v_{\alpha_2}| + |(\mu_{\alpha_2} - \mu_{\alpha_1}) - (v_{\alpha_1} - v_{\alpha_2})|) \quad (11)$$

and

$$|(\mu_{\alpha_2} - \mu_{\alpha_1}) - (v_{\alpha_1} - v_{\alpha_2})| \geq ||\mu_{\alpha_1} - \mu_{\alpha_2}| - |v_{\alpha_1} - v_{\alpha_2}|| \quad (15)$$

respectively.

In Example 1, “by (15)” should be “by (21)”; In Definition 9, “by (32)” should be “by (33)”; in Eqs. (18) and (33), “0.5” should be “1”, and the related calculations in the examples should be changed correspondingly.

Additionally, in the property (6) of Eqs. (18) and (33), “ $\neq 0$ ” should be inserted before “which”.

Some similarity measures of intuitionistic fuzzy sets and their applications to multiple attribute decision making

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The property (4) of Definition 2.1 in my paper “Some similarity measures of intuitionistic fuzzy sets and their applications to multiple attribute decision making” does not always hold, and thus, this property should be removed from the definition.

I apologize for making such mistakes and would like to bring them to the readers’ attention.