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*Correction*

**Correction: Interval-valued intuitionistic fuzzy MADM method based on TOPSIS and grey correlation analysis**

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**A correction on**

Interval-valued intuitionistic fuzzy MADM method based on TOPSIS and grey correlation analysis by Fankang Bu, Jun He, Haorun Li and Qiang Fu. *Mathematical Biosciences and Engineering*, 2020, 17 (5): 5584–5603. doi: 10.3934/mbe.2020300.

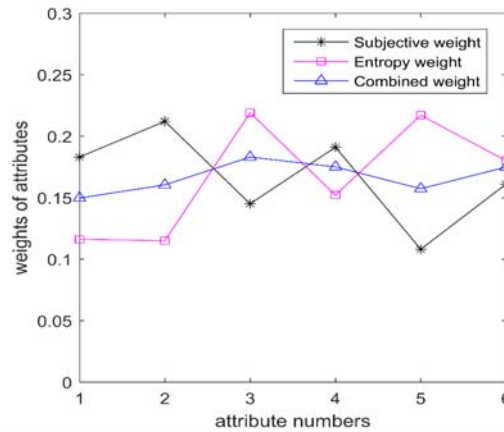
We would like to submit the following corrections to our recently published paper 1 due to the wrong calculation of the manuscript. The details are the following.

1. The Table 3 has been updated.

**Table 3.** Weights of attributes.

Attributes weights	Attributes					
	$T_1$	$T_2$	$T_3$	$T_4$	$T_5$	$T_6$
Subjective weight	0.183	0.212	0.145	0.191	0.108	0.161
Entropy weight	0.116	0.115	0.219	0.152	0.217	0.180
Combined weight	0.15	0.16	0.183	0.175	0.157	0.175

2. The Figure 3 has been updated.



**Figure 3.** The comparative analysis results of weights.

3. The Table 4 has been updated.

**Table 4.** Weighted Euclidean distances and weighted grey correlation degrees.

Alternative	Distance		Grey related degree	
	$d_i^+$	$d_i^-$	$\xi_i^+$	$\xi_i^-$
$A_1$	0.090	0.094	0.780	0.575
$A_2$	0.099	0.085	0.741	0.637
$A_3$	0.108	0.083	0.727	0.683

4. The Table 5 has been updated.

**Table 5.** Normalized treatment to weighted Euclidean distances and weighted grey correlation degrees.

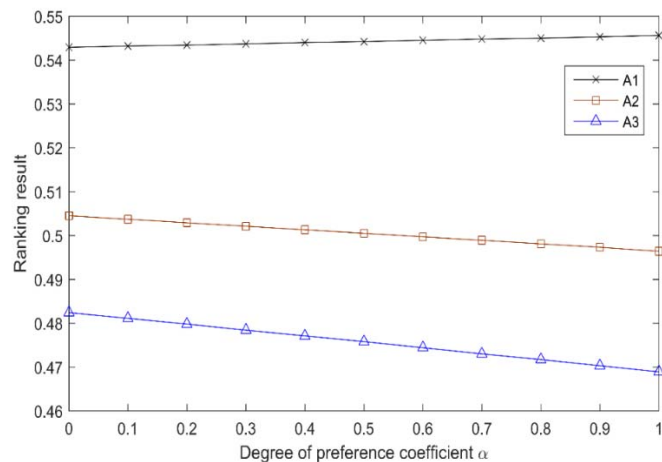
Alternative	Distance		Grey related degree	
	$D_i^+$	$D_i^-$	$E_i^+$	$E_i^-$
$A_1$	0.833	1.000	1.000	0.842
$A_2$	0.917	0.904	0.950	0.933
$A_3$	1.000	0.883	0.932	1.000

5. The Table 6 has been updated.

**Table 6.** Combination closeness degree and Rank.

Alternatives	$V_i^+$	$V_i^-$	$Z_i$	Rank
$A_1$	1.000	0.838	0.544	1
$A_2$	0.927	0.910	0.500	2
$A_3$	0.908	1.000	0.476	3

6. The Figure 4 has been updated.



**Figure 4.** Sensitivity analysis for preference coefficient.

7. The Table 7 has been updated.

**Table 7.** The ranking results of three methods.

Alternative	TOPSIS-GCA		DIF-MADM		IIHA	
	value	rank	value	rank	value	rank
$A_1$	0.544	<b>1</b>	0.569	<b>1</b>	0.081	<b>1</b>
$A_2$	0.500	<b>2</b>	0.544	<b>2</b>	-0.023	<b>2</b>
$A_3$	0.476	<b>3</b>	0.427	<b>3</b>	-0.071	<b>3</b>

These changes have no material impact on the conclusion of this paper. The manuscript will be updated. We apologize for any inconvenience caused to our readers.

## References

1. F. K. Bu, J. He, H. R. Li, Q. Fu, Interval-valued intuitionistic fuzzy MADM method based on TOPSIS and grey correlation analysis, *Math. Biosci. Eng.*, **17** (2020), 5584–5603.



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