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Erratum to 'Common fixed point theorems for expansion mappings in various abstract spaces using concept of weak reciprocal continuity'

Saurabh Manro^{1*} and Poom Kumam²

*Correspondence: sauravmanro@hotmail.com ¹ School of Mathematics and Computer Applications, Thapar University, Patiala, Punjab, India Full list of author information is available at the end of the article

On critical examination of the results given in our paper [1], we notice one crucial error. We need to carry out the following correction.

Example 1 given in paper [1] is wrong as $g(X) \not\subset f(X)$ because $f(X) = \{2, 6\}$ and $g(X) = \{2, 20\}$. So, Example 1 in paper [1] is replaced by the following example.

Example 1 Let (X, G) be a *G*-metric space, where X = [0, 1] and

$$G(x, y, z) = (|x - y| + |y - z| + |z - x|)$$

for all $x, y, z \in X$.

Define $f, g: X \to X$ by $f(x) = \frac{x}{2}$ and $g(x) = \frac{x}{6}$ for all $x \in X$. Then, clearly, $g(X) \subset f(X)$ as $f(X) = [0, \frac{1}{2}]$ and $g(X) = [0, \frac{1}{6}]$. Moreover,

$$G(fx, fy, fz) = (|fx - fy| + |fy - fz| + |fz - fx|)$$
$$= \frac{3}{2}(|x - y|) \ge q \left[\frac{1}{2}(|x - y|)\right] = qG(gx, gy, gz)$$

for $1 < q \le 3$ and hence, the condition (2.2) of Theorem 2 is satisfied. Also, f and g are two weakly reciprocally continuous self-maps by taking the sequence $\{x_n = \frac{1}{n}\}$. However, the maps are compatible. Thus, all the conditions of Theorem 2 are satisfied and x = 0 is the unique common fixed point of f and g.

Competing interests

The authors declare that they have no competing interests.

Authors' contributions

All authors read and approved the manuscript.

Author details

¹School of Mathematics and Computer Applications, Thapar University, Patiala, Punjab, India. ²Department of Mathematics, Faculty of Science, King Mongkut's University of Technology Thonburi (KMUTT), Bang Mod, Thung Khru, Bangkok, 10140, Thailand.



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