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CORRIGENDUM TO "ON FIXED POINT RESULTS FOR A CLASS OF GENERALIZED MEAN NONEXPANSIVE MAPPINGS"

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Abstract. In this corrigendum, we offer a correction to the paper *On fixed point results for a class of generalized mean nonexpansive mappings*, Methods Funct. Anal. Topology, 26 (2020), no. 4, 356-372.

1. Introduction

This corrigendum concerns a result in [1] by Mebawondu et al. In [1], the authors state in Theorem 3.4 that if C is a non-empty subset of a Banach space X and $T\colon C \to X$ is a generalized mean nonexpansive mapping, then $F(T)$ is closed. The following example shows that this theorem is false.

Example 1.1. Suppose that $X = \mathbb{R}$ and $C = \{x \in X : 0 < x < 1\}$. Define $T\colon C \to \mathbb{R}$ by

$$T(x) = x \qquad \text{for all } x \in C.$$

Then T is a generalized mean nonexpanxive mapping, but $F(T) = C$ is not closed set of $\mathbb{R}$.

The correct statement of Theorem 3.4 in [1] should be as follows.

Theorem 1.2. *Let C be a non-empty closed subset of a Banach space X and $T\colon C \to X$ be a generalized mean nonexpansive mapping. Then $F(T)$ is closed. Furthermore, if X is strictly convex and C is convex, then $F(T)$ is convex.*

References

[1] A. A. Mebawondu, C. Izuchukwu, K. O. Oyewole, and O. T. Mewomo, *On fixed point results for a class of generalized mean nonexpansive mappings*, Methods Funct. Anal. Topology **26** (2020), no. 4, 356–372, doi:10.31392/MFAT-npu26_4.2020.07.

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