Review of: "Results in Cone Metric Spaces and Related Fixed Point Theorems for Contractive Type Mappings"

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Potential competing interests: No potential competing interests to declare.

I want to thank the authors for their work. The work defined three types of contractions in a cone metric space. The following were observed;

1. Their preliminaries were detailed but however, it mirrored the presentation used in

L-G. Huang, X. Zhang, Cone metric spaces and fixed point theorems of contractive mappings, Journal of Mathematical Analysis and Applications, vol. 332, iss. 2, 2007, https://doi.org/10.1016/j.jmaa.2005.03.087

Major work is needed in their introduction and preliminaries.

2. page 2 line 1: replace “denoted” with “shall denote” and replace “0” with empty set.

3. page 2 line 2. Add “.” after “respect to P”. Then, reconstruct the next lines as "Thus, for any x, y$\in$ P, x, y $\leq$ if and only if y-x $\in$ P, x<y if and only if x$\leq$ y but x $\neq$ y, and x<<y if and only if y-x $\in$ int P."

4. Definition 4: replace “d(x,y) >0” with “0 < d(x,y)”

5. Justify the line “It is obvious that cone metric spaces generalize metric space”

6. Correct the errors in Example 5 and change to "0 $\leq$ α"

7. Page 3: Justify how the first equation resulted in (3.3)

7. Major corrections in needed in your main result as the following assertion is FALSE; "since$a_1 + a_2 + a_3 < 1$ implies that $\frac{a_1+a_3}{1-(a_1+a_2)} < 1$"

To see this, take $a_1 = \frac{1}{4}$, $a_2 = a_3 = \frac{1}{3}$, then $\frac{a_1+a_3}{1-(a_1+a_2)} = \frac{7}{5} > 1$

This error is a MAJOR issue as the justification of Theorems 3.3 and 3.4 and its subsequent corollaries results on this assumption.

I recommend that the authors be given back the work to see how to justify their theorems as the proof sent is faulty.