Review of: "Generalized N-metric Spaces"

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About two months ago, i was thinking on this kind of generalisation of the notion of standard metric space in the form of a polygonal metric spaces. I stuck in the formulation of some interesting non trivial examples. In the presen work, the author are utilising there efforts with one particularly defined metric (3). In my opinion, for the case when N is even a counter example can be constructed as you did for N=4. For instance, when N=6

$d(1/6,1/7)=1\leq d(1/6, 1) + d(1, 1/8) + d(1/8, 2), d(2, 1/10) + d(1/10, 0) + d(0, 1/7) =319/420$

a contradiction.

Similarly for other even Ns can be tried.

Actually, when N is even, you always have a choice on right hand side to take every term with distance of point with one from A and the other from B. As the resulting distance is the element from B, there is always a possibility to get some distances from B with sum less than 1.

On the other hand, when N is odd, you have to have one distance of both points from B and so end up with sum > 1.

So, in this particular example, explore the case when N is odd.