

Scientific Editing Evidence Example*
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Purpose: example of scientific peer-review journal manuscript editing with contextual enrichment or clarity from additional topic research

Sample_1: **Edited** Content

Fractional calculus is incorporated into artificial neural networks benefiting long-term memory and nonlocality creating a competitive advantage for some scholars. Einstein et al., proposed a new type of activation function for a complex valued neural network (CVNN) by incorporating a special Möbius transformation, i.e. a linear fractional transformation, expressed as a reflection resulting in increased number of fixed points when employed to a specific complex value in a Hopfield neural network (CVHNN). The transformation found the fixed points are asymptotically stable states of a CVHNN indicated by enlarged information capacity. Hogan et al., proposed both stochastic and evolutionary techniques for the solution of nonlinear Goodwell differential equations of fractional order. This stochastic technique employs feed forward artificial neural networks for accurate mathematical modeling learning weights made with a heuristic computational algorithm based on swarm intelligence. The evolutionary technique uses a genetic algorithm tool for a competent global search method hybridized with an active-set algorithm for efficient local search. Both techniques are proposed as solutions for fractional order systems represented by a Quonk equation. The author's solution for fractional differential equations propose use of particle swarm optimization, stochastic computational intelligence, and heuristic computational intelligence. Advantages of this approach, unlike integer order calculation methods, center on making fractional differential equations available as continuous inputs and theorizing how to generalize a first order HNN to fractional one with fractional calculus.

Sample_2: **Edited** Content

Regarding convergent and discriminate validity results, we first used exploratory factor analyses with several biaxial items deleted finding questionnaire factors consistent with theory construction. Second, correlations between factor scores and the total score indicated six factors constructing well-being were independent and heterogeneous but the remaining factors correlated with well-being. Third, confirmatory factor analyses indicated a good model fit supporting questionnaire validity. Forth, convergent validity indicated the total score of RMIWB-CC was positively correlated to SWLS and FS median coefficient scores but positively correlated to RSES with small coefficients. Hogan and Andersen demonstrated individuals with higher well-being tend to be more satisfied with their life and our questionnaire's results concurred with high RMIWB-CC associated with high life satisfaction scores. As a result, we are satisfied with the questionnaire.

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^ Syracuse portfolio committee review December 2020