Scientific Editing Evidence Example*
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Sample_1:

The classical first order Hopfield neural network (HNN) is one of the most influential and well-known neural networks [1-4]. The circuit configuration of HNN's first order neuron is based on a first order integral circuit consisting of one operational amplifier, related capacitor, resistors, and identical circuit configuration. There are many classical applications of HNN including content addressable memory [1], analogue-to-digital converter [5], and linear programming [3]. Dynamic associative memories are also closely related to HNN such as the Li-Michel neural network [6,7] and bidirectional associative memories [8,9]. Given HNN's widespread application, high-order HNNs [10-13], fuzzy HNNs [14,15], and stochastic HNNs [16,17] are proposed with fractional calculus implementation.

Fractional calculus is incorporated into artificial neural networks benefiting long-term memory and nonlocality creating a competitive advantage for some scholars. N. Özdemir et al., proposed a new type of activation function for a complex valued neural network (CVNN) [18] 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 all asymptotically stable states of a CVHNN indicating enlarged information capacity. M.A.Z. Raja et al., proposed both stochastic [19] and evolutionary techniques [20] for the solution of nonlinear Riccati 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 the 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 Bagley-Torvik equation. The author's solution for fractional differential equations propose use of particle swarm optimization [23], stochastic computational intelligence[24], and heuristic computational intelligence [25]. Advantages of this approach, unlike other integer order calculation methods, center on making fractional differential equations available as continuous inputs and generalizing a fractional calculus implementation with a first order HNN.

Sample_2:

Regarding convergent and discriminate validity results, we first used exploratory factor analyses with several biaxial items deleted finding questionnaire factors were consistent with theory construction. Second, correlations between factor scores and the total score indicated six factors constructing well-being were independent and heterogeneous while the remaining factors correlated with well-being. Third, confirmatory factor analyses indicated good model fit suggesting construct validity with the developed questionnaire. Forth, convergent validity indicated the total score of RMIWB-CC was positively correlated to the SWLS and FS median coefficient scores. However, the total score of RMIWB-CC was positively correlated to the score of RSES with small coefficients. Our results indicate higher RMIWB-CC scores are associated with higher life satisfaction which is consistent with Busseri and Sadava (2011) who demonstrated individuals with higher well-being also tend to be more satisfied with their life. Overall, we are satisfied the questionnaire's integrity.

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