Generalizations and error analysis of the iterative operator splitting method

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The properties of iterative splitting with two bounded linear operators is analyzed by Faragó et al. We present two possible ways to extend iterative splitting to the case of more than two bounded linear operators. There appears to be many alternative extensions of iterative splitting depending on the number of suboperators. We give an overview of these methods and discuss their accuracy. We prove the accuracy of the two specific methods we present and show our related numerical results.