A Triple-Stopping Threshold System For a Sequential Decision Task: A Cast-Net Stopping Rule Model

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Abstract: In this study compared single stopping rules models to the Cast-Net stopping rule model. The Cast-Net model assumes that several stopping rules can be used simultaneously to determine the stopping point to stop information search and to proceed to making a final decision. We analyzed whether the Cast-net model would pay the price for being more complex when compare to single stopping rule models (critical difference, fixed-sample size and runs). The models were compared under different decision making conditions (time pressure and validity of recommendations). The model fitting procedure was conducted on the full data stopping-value distributions, by simultaneously fitting the correct and incorrect responses. Across variety of experimental conditions, the general results supported the validity of the Cast-Net model. These results challenge many decision making models that utilize only one type of a stopping rule, and may provide a new direction in the exploration of cognitive computational models.