

Effects of Variable Response-Stimulus Interval (RSI) On Sequence Learning

Sneha Kummetha

Cognitive Science Lab, International Institute of Information Technology, Hyderabad, India

Anuj Shukla

Cognitive Science Lab, International Institute of Information Technology, Hyderabad, India

Raju Bapi

Cognitive Science Lab, International Institute of Information Technology, Hyderabad, India and School of Computer and Information Sciences, University of Hyderabad, Hyderabad, India

Abstract: The objective of this study was to investigate the effects of varying Response-to-Stimulus interval (RSI) on sequence learning by systematically varying it across three different groups (Group1: 0-300ms, Group2: 400-700ms and Group3: 800-1100ms) and to assess the implicitness and explicitness of the knowledge acquired through such learning. Serial Reaction time task followed by generation task and recognition task were used for this purpose. Results of the SRT task showed learning in all the three groups and the results of the free generation task and recognition task revealed that the sequence learning was implicit in Groups 1 and 2 while it was explicit in Group3. These results were discussed in the context of a recent theoretical framework that proposes conditions in which a switch from implicit to explicit knowledge acquisition is facilitated.