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Abstract

The intentional binding (IB) phenomenon reflects a perceived attraction between a voluntary action and an intended consequence. Recent research has shown that during IB, intended outcomes expand in time. Although, this effect was significant only for shorter action-outcome delays. However, literature on IB suggests it can also exist for long delays. To address this, we implemented a temporal reproduction task to observe the expansion of an intended outcome. Results revealed the expansion of an intended outcome in the shorter and longer action-outcome delays. These results were discussed under the PIDI (proximal intent distal intent) framework since, using this methodology, both types of intention can be operationalized. Proximal for shorter delays under the motor action, and distal for longer delays as the inference made towards the objective duration to be reproduced. Our implementation allows a robust way to observe the temporal dynamics of an intended outcome, irrespective of the action-outcome delay.

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