College of Engineering
BIOMEDICAL ENGINEERING

Joshua Cashaback
Assistant Professor
📞 +1.302.784.5986
✉ joshcash@udel.edu
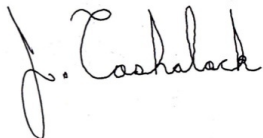
October 3, 2024

Dear Editor,

We are writing to request that you consider our paper, **Indecision under time pressure arises from suboptimal switching behaviour**, for publication in *Journal of Experimental Psychology: General*.

Indecisions can be catastrophic, preventing a life-saving response or leading to a loss of large sums of money. Despite their importance and high prevalence, indecisions have been surprisingly ignored in the literature. The main culprit is that the field of decision-making leans heavily on the classic two-alternative forced choice task—where a human or animal *must* select one of two potential options—which simply does not permit a non-response past some deadline (i.e., indecision). Of the few papers that have considered a deadline, indecisions are usually only mentioned in passing and, more often, simply removed from analyses and discarded from model fitting. **The field has consequently overlooked a common and hallmark feature of human and animal behaviour–indecisions.**

Here we designed a novel paradigm to study high pressure scenarios that lead to indecisions. We found a median indecision rate of approximately 20%, **with some participants even displaying over 50% indecisions despite having plenty of time to make a guess.** Our computational modelling suggested that these indecisions arose by not accounting for the time delay and uncertainty associated when switching from reacting to guessing. In a second experiment, we show for the first time there is an inherent and functionally relevant time delay when switching from reacting to guessing, a phenomenon previously unreported in the literature. **Our paper novelly provides a mechanism to explain how indecisions arise.**

We fully expect that our work will broadly draw interest from fields as diverse as Decision-Making, Economics, and Sports Science, which are all interested in the role of decision-making on behaviour. Thank you for your time and consideration.

Sincerely,

Joshua G. A. Cashaback, Ph.D.

REVIEWER SUGGESTIONS

Laurence Maloney, New York University, laurence.maloney@nyu.edu
   Expert in statistical decision theory and computational modeling of decisions

Michael S Landy, New York University, landy@nyu.edu
   Expert in statistical decision theory and computational modeling of decisions

Heather Neyedli, Dalhouse University, hneyedli@dal.ca
   Expert in decision-making under risk and optimal decision-making

Todd Hudson, New York University, Todd.Hudson@nyulangone.org
   Expert in optimal timing and decision-making

EDITOR SUGGESTIONS

Joo-Hyun Song

Jared Medina