**Stage 1 Cover Letter**

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Dr. Stavroula Kousta

Chief Editor

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Dear Dr. Kousta,

we would like to submit the Stage 1 Registered Report titled “When easy is not preferred: An effort discounting paradigm for estimating subjective values of tasks” for consideration in *Nature Human Behaviour*.

Our study advances an existing paradigm, which investigates interindividual differences in the relation of effort and reward in decision making by determining the subjective values of different levels of a working memory task. We changed the paradigm in such a way that it allows two crucial things: Firstly, determining subjective values without assuming that the objectively easiest level is preferred, thereby describing interindividual differences more accurately, and secondly, determining subjective values for tasks that have no objective order of difficulty. We test these properties in two lab sessions with healthy participants. The first session replicates the analyses of the original study with our new paradigm, the second session extends the paradigm to the new context of an emotion regulation task. To investigate both properties rigorously, we have written a Stage 1 Registered Report for each of them and submit them on the same day. This cover letter regards the Report for the first session, which is of great interest for fields such as psychology, economics, and cognitive science, offering an effective and adaptable way to assess the preference for cognitive effort with different rewards. We not only adapt and replicate the original paradigm with a larger sample, but apply Specification Curve Analysis to verify our results, repeating the analysis with 63 differently preprocessed data sets.

Following Stage 1 acceptance in principle of both Reports, we will collect the data over a span of three months, and analyse the data and write the Stage 2 Report within four to six weeks, resulting in a total project duration of about four to five months. Depending on how the Covid-19 pandemic impacts the feasibility of data collection in the lab, this estimation can vary.

We hereby confirm that all necessary support and approvals are in place for the study to commence immediately. We agree to share the raw data, study materials, and analysis code openly on the Open Science Framework. We agree to register the approved protocol publicly available preprint on the Open Science Framework following Stage 1 acceptance in principle. We agree to *Nature Human Behaviour* publishing a short summary under a section Withdrawn Registrations, should we choose to withdraw our paper.

Thank you very much for considering our manuscript.

Yours sincerely,

Josephine Zerna

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