**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 by Westbrook and colleagues (2013), 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 adapted 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. Individuals with high disposition in Need for cognition prefer cognitively demanding tasks, therefore our adaption describes interindividual differences more accurately. Secondly, determining subjective values for effortful tasks whose levels have no objective order of difficulty. Properties are used to target two research questions. The first question is… replicates the analyses of the original study with our new paradigm. The second questions is to examine whether our approach is suitable for determining subjective values in the the new context of an emotion regulation. To investigate both properties rigorously, both research questions are covered in separate Registered Reports that we have submitted concurrently. Here we present the Registered Report for the first research question, 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 regarding alternative decisions in preprocessing steps.

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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