



The neural representations of confidence in human reinforcement learning task

Project details

ERB number	2018-EXT-9205
ID	9205
Title	The neural representations of confidence in human reinforcement learning task
Department	External research
Status	ERB approved
Created	2018-05-15 22:15:31
Modified	2018-05-15 22:22:27

Project collaborators

Chih-Chung Ting	Owner	C.Ting@uva.nl	0205254252
Jan Engelmann	Supervisor	J.B.Engelmann@uva.nl	
Maël Lebreton	Supervisor	M.P.Lebreton@uva.nl	0205254353

General

Responsible researcher

ChihChung Ting; Jan Engelmann; Mael Lebreton

Who conducts the research?

ChihChung Ting, PhD-student

Research location

Spinoza Centre: Roeterseiland, building L Nieuwe Achtergracht 129 1018 WS Amsterdam

Brief project description

The confidence is a crucial element for assessing beliefs of uncertainty/reliability that influence our choices overtime, like reinforcement learning. The Recent studies have showed that confidence judgments were modulated by the valence outcome in both perceptual and value-based decision (Lebreton et al., 2017; Lebreton et al., in processing). Specifically, confidence in gain only condition is higher than loss only condition, despite both conditions share the same difficulty. However, little is known about how neural represent confidence and engage in learning. To fill in the gap, we will follow previous study (Lebreton et al., in processing) and apply the same probabilistic learning task with confidence rating in the MRI scanner.

Expected duration of the project

6 months

Expected number of participants

35

This project is comparable with the following ERB-project(number)

Scientific integrity checklist

Who will store and inspect the data?

ChihChung Ting; Jan Engelmann; Mael Lebreton

When will data collection start (approximately)?

2018-06-18

When will the data collection be completed?

2018-09-11

Is the study exploratory or confirmatory?

exploratory (check this option if the study is both exploratory and confirmatory)

Ethics Checklist

A1. METC vs Local ERB (FMG-UvA)

The WMO-act does not apply; the research can be submitted to the local ERB.

A2. Participants

Yes, Category 1: UvA Students participating for course credit or monetary reward

A3. Freedom to participate

Yes

A4. Screening

Yes

A5. Chance Incidents

No, the method precludes chance incidents

A6. Information and informed consent

Yes, please submit the information letter and the consent form as attachment

A7. Anonymity and privacy

Yes

A8. Deception and debriefing

There is no deception

A9. Discomforting research

No

B1 Does the research fully comply with the guidelines for Standard Research?

B7. Functionele MRI

Attachments

Add a concise research description (max 1 A4) and any other relevant documents.

1. 20180522_Confidence Judgment in fMRI.pdf

Information letter for the participant

1. InformationLetter_v1.pdf
2. spinoza_rec_mri_info_en_v7.pdf

Informed Consent Form for the participant

1. Consent Inform_v1.pdf
2. fMRI_Prescreen.pdf
3. informedconsentmri_gp_spinozarec__en_v2.pdf

Attachments scientific integrity checklist

Project history

✉ 2018-05-25 12:31:39 Project approved [by Wery van den Wildenberg]

Dear Mr. Chih-Chung Ting,

Thank you for submitting the ethics application filed as **2018-EXT-9205** ("*The neural representations of confidence in human reinforcement learning task*").

Your study qualifies as "standard research" according to the ERB guidelines.

Note: since you are not employed by the Faculty of Behavioural and Social Sciences (FMG), the DISCLAIMER below applies.

Sincerely,

Wery van den Wildenberg

Ethics Review Board (FMG-UvA)

DISCLAIMER

The ERB evaluates research projects under responsibility of its staff. Once approved, the FMG takes on legal responsibility and insurance is covered. Note that this is NOT the case for research from other Faculties or Universities. If external researchers use FMG Lab facilities, the ERB evaluates the proposal as if it were an internal (FMG-UvA) project. However, the decision concerning external proposals is nothing more than a cordial advice. The primary external investigator, not the FMG, remains fully responsible for all matters related to external research, and is directed to the external institute for making formal arrangements concerning ethical approval, liability, and insurance.

i 2018-05-23 16:51:15 Project submitted for ERB review. [by Chih-Chung Ting]

i 2018-05-15 22:15:31 Project created [by Chih-Chung Ting]
