DMP

Project Name DMP - Escape the past: A cue to forget emotional memories - DMP

Project Identifier 12R8622N

Grant Title 12R8622N

Principal Investigator / Researcher Anastasia Chalkia

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Description Emotional memories are at the root of anxiety-related disorders, yet current interventions aimed at modifying such memories suffer from a lack of long-lasting, persistent effects, allowing for the gradual return of anxiety complaints. This highlights the need for novel methods to manipulate emotional memories, to help people forget burdensome events. Directed forgetting manipulations have been repeatedly applied in declarative memory research to investigate intentional, instructed forgetting. We recently developed a novel directed forgetting fear conditioning procedure aimed at examining instructed forgetting of emotional, rather than declarative memories. In a series of studies, we observed a clear memory deficit for items that were instructed to be forgotten during encoding, as well as an attenuation of physiological fear expression (i.e., skin conductance reactivity) in relation to those items. While this work holds tremendous potential for memory therapeutics, many fundamental questions remain unanswered. This proposal aspires to corroborate and expand these initial findings by a) manipulating experiment-specific and biological factors that may play a role in the observation of the directed forgetting effect, b) investigating individual characteristics hypothesized to facilitate and impede directed forgetting, and c) exploiting directed forgetting to disrupt the expression of previously acquired memories upon their retrieval rather than initial encoding.

Institution KU Leuven

1. General Information

Name applicant

Anastasia Chalkia

FWO Project Number & Title

12R8622N - Escape the past: A cue to forget emotional memories

Affiliation

- KU Leuven

2. Data description

Will you generate/collect new data and/or make use of existing data?

- Generate new data

Describe in detail the origin, type and format of the data (per dataset) and its (estimated) volume. This may be easiest in a table (see example) or as a data flow and per WP or objective of the project. If you reuse existing data, specify the source of these data. Distinguish data types (the kind of content) from data formats (the technical format).

Work package	Type of data	Format	Volume	How data were collected
1-4	Skin conductance responses	.txt	2 GB (per experiment)	Physiological recordings during the experiments
2	Fear-potentiated startle responses	.txt	2 GB (total; only recorded in 1 experiment)	Physiological recordings during the experiment
1-4	Responses to computer tasks	.txt	1 MB (per experiment)	Inputed responses to computer tasks (e.g., ratings)
1-3	Hand-written responses	paper	45 sheets (per experiment)	Hand-written responses to free recall tasks during the experiments

3. Legal and ethical issues

Will you use personal data? If so, shortly describe the kind of personal data you will use. Add the reference to your file in KU Leuven's Register of Data Processing for Research and Public Service Purposes (PRET application). Be aware that registering the fact that you process personal data is a legal obligation.

- Yes

Privacy Registry Reference: G-2021-4374, G-2021-4385-R2(AMD), G-2022-4998

Short description of the kind of personal data that will be used: We will collect anonymized demographic data: age, sex, nationality, and educational level.

Informed consent forms and medical exclusion criteria forms will be signed by the participants. Together with the informed consent, participants will fill out the payment forms so they can be reimbursed for their participation. If participants opt for monetary payment, these forms will include their full name, address, and bank account number. All of these paper forms will be kept in key-locked cabinets, in a locked office, separately from the rest of the experimental data and will be destroyed after the required period. There will be no document linking identifying information in these paper forms with the digital experimental data (collected by participant number only).

Are there any ethical issues concerning the creation and/or use of the data (e.g. experiments on humans or animals, dual use)? If so, add the reference to the formal approval by the relevant ethical review committee(s)

- Yes

SMEC approval: G-2021-4374, G-2021-4385-R2(AMD)

SMEC pending approval: G-2022-4998

Does your work possibly result in research data with potential for tech transfer and valorisation? Will IP restrictions be claimed for the data you created? If so, for what data and which restrictions will be asserted?

- No

Do existing 3rd party agreements restrict dissemination or exploitation of the data you (re)use? If so, to what data do they relate and what restrictions are in place?

- No

4. Documentation and metadata

What documentation will be provided to enable reuse of the data collected/generated in this project?

Raw experimental data will be collected and stored per experiment, including a text file with a clear description of what the data represent and how they were collected. Further, processed data will be included, together with a text file decribing the processing pipeline. The name of the folder will contain the name and description of the experiment. In addition, a codebook will be included that contains information on study design, sampling methodology, variable naming and computation, and all information necessary for a secondary analyst to use the data accurately and effectively.

Will a metadata standard be used? If so, describe in detail which standard will be used. If no, state in detail which metadata will be created to make the data easy/easier to find and reuse.

- Yes

OSF metadata standard will be used as it is required for deposit with them.

5. Data storage and backup during the FWO project

Where will the data be stored?

The time-stamped master copy of the digital data will be kept on our research unit central storage facility as well as backed up to the KUL OneDrive folder of the FWO fellow during the research. Since all data will be collected by participant number only and will not contain identifying information, copies can be made and kept on personal devices.

How is backup of the data provided?

The data will be stored on the university's central servers with automatic daily back-up procedures. During the research, data will also be backed up daily to the FWO fellow's KUL OneDrive folder.

Is there currently sufficient storage & backup capacity during the project? If yes, specify concisely. If no or insufficient storage or backup capacities are available then explain how this will be taken care of.

- Yes

The University servers have sufficient storage and back up capacity.

What are the expected costs for data storage and back up during the project? How will these costs be covered?

FWO allows for part of the allocated project budget to be used to cover the cost associated with data storage (currently these are estimated at 0 euro).

Data security: how will you ensure that the data are securely stored and not accessed or modified by unauthorized persons?

All data will be collected by participant number only and thus, will not contain sensitive personal information. Even so, all digital data will be stored in secure university servers. Only the informed consent forms will contain sensitive personal information and those will be stored seperately, in a key-locked cabinet, in a locked room, that only the FWO fellow has access to.

6. Data preservation after the FWO project

Which data will be retained for the expected 5 year period after the end of the project? In case only a selection of the data can/will be preserved, clearly state the reasons for this (legal or contractual restrictions, physical preservation issues, ...).

All collected data will be retained at the end of the project for preservation and will also be deposited to the OSF. Informed consent forms will be destroyed after 5 years.

Where will the data be archived (= stored for the longer term)?

The data will be stored on the university's central servers (with automatic back-up procedures) for at least 10 years, as is the KU Leuven RDM policy. Data will also be deposited on the OSF.

What are the expected costs for data preservation during the retention period of 5 years? How will the costs be covered?

KU Leuven offers limited free storage capacity to its employees. The size of the collected data falls within the free-offered storage capacity.

7. Data sharing and reuse

Are there any factors restricting or preventing the sharing of (some of) the data (e.g. as defined in an agreement with a 3rd party, legal restrictions)?

- No

Which data will be made available after the end of the project?

The full dataset will be uploaded in both .cvs and .xlsx formats in the OSF under a CC-BY license. OSF data servers located within the EU will be used for storage.

Where/how will the data be made available for reuse?

- In an Open Access repository

The full dataset will be uploaded in both .cvs and .xlsx formats in the OSF under a CC-BY license.

When will the data be made available?

- Upon publication of the research results

Who will be able to access the data and under what conditions?

The full dataset will be uploaded in both .cvs and .xlsx formats in the OSF as an open access dataset under a CC-BY license. Therefore, it will be available to anyone for any purpose, provided that they give appropriate credit to the creators.

What are the expected costs for data sharing? How will the costs be covered?

None.

8. Responsibilities

Who will be responsible for data documentation & metadata?

The FWO fellow - Anastasia Chalkia.

Who will be responsible for data storage & back up during the project?

The FWO fellow - Anastasia Chalkia.

Who will be responsible for ensuring data preservation and reuse ?

The FWO fellow - Anastasia Chalkia.

Who bears the end responsibility for updating & implementing this DMP?

The FWO fellow bears the end responsibility of updating & implementing this DMP.