FWO DMP Template - Flemish Standard Data Management Plan

Version KU Leuven

Project supervisors (from application round 2018 onwards) and fellows (from application round 2020 onwards) will, upon being awarded their project or fellowship, be invited to develop their answers to the data management related questions into a DMP. The FWO expects a **completed DMP no later than 6 months after the official start date** of the project or fellowship. The DMP should not be submitted to FWO but to the research co-ordination office of the host institute; FWO may request the DMP in a random check.

At the end of the project, the **final version of the DMP** has to be added to the final report of the project; this should be submitted to FWO by the supervisor-spokesperson through FWO's e-portal. This DMP may of course have been updated since its first version. The DMP is an element in the final evaluation of the project by the relevant expert panel. Both the DMP submitted within the first 6 months after the start date and the final DMP may use this template.

The DMP template used by the Research Foundation Flanders (FWO) corresponds with the Flemish Standard Data Management Plan. This Flemish Standard DMP was developed by the Flemish Research Data Network (FRDN) Task Force DMP which comprises representatives of all Flemish funders and research institutions. This is a standardized DMP template based on the previous FWO template that contains the core requirements for data management planning. To increase understanding and facilitate completion of the DMP, a standardized **glossary** of definitions and abbreviations is available via the following link.

1. General Project Information	
Name Grant Holder & ORCID	**Patrick Luyten (https://orcid.org/0000-0002-1161-2817), PI**
Contributor name(s) (+ ORCID) & roles	**Claus Lamm (https://orcid.org/0000-0002-5422-0653), Co-PI** **Henryk Bukowski (https://orcid.org/0000-0001-9412-1855), Co-PI** **Ekaterina Pronizius (https://orcid.org/0000-0003-1446-196X), Postdoctoral researcher** **Celine De Meulemeester (https://orcid.org/0000-0003-1608-5304), Postdoctoral researcher**
Project number [1] & title	SAP project code: 3H240022 DMP code: D-2024-2962 Title: SELF-OTHER DISTINCTION IN BORDERLINE PERSONALITY DISORDER: INTEGRATING BEHAVIORAL AND NEUROSCIENTIFIC APPROACHES
Funder(s) GrantID [2]	FWO project code: **G057624N**
Affiliation(s)	X KU Leuven ☐ Universiteit Antwerpen ☐ Universiteit Gent ☐ Universiteit Hasselt ☐ Vrije Universiteit Brussel ☐ Other: ROR identifier KU Leuven: 05f950310

[1] "Project number" refers to the institutional project number. This question is optional. Applicants can only provide one project number.

[2] Funder(s) GrantID refers to the number of the DMP at the funder(s), here one can specify multiple GrantIDs if multiple funding sources were used.

Please provide a short project description	Problems in interpersonal relationships are a key feature of borderline personality disorder (BPD). Specifically, individuals with BPD struggle to tease apart their feelings, thoughts, beliefs, and desires from the mental states of others. During social interaction, individuals are prone to automatically mirror the bodily posture of their counterparts and reflect their thoughts, beliefs and emotions, with the goal to better understand what another person is feeling or thinking. Yet, humans also have the complementary ability to disentangle self- from other-related mental representations, a process called self-other distinction (SOD). The current research proposal combines multicenter experimental and diary studies with a brain-imaging approach in order to develop a more comprehensive understanding of the roots of the typical problems with SOD distinction in BPD. We will investigate the role of (interpersonal) stress in BPD patients' difficulties with SOD, both in the lab and in everyday life. On the neural level, we will investigate both functional and structural differences between BPD patients and healthy controls, such as whether we can find group differences in their brain structure and neural activations during tasks involving SOD. The combined evidence from different studies in this project will be used to refine theoretical models of self-other distinction in order to optimize treatment for these individuals.

2. Research Data Summary

List and describe all datasets or research materials that you plan to generate/collect or reuse during your research project. For each dataset or data type (observational, experimental etc.), provide a short name & description (sufficient for yourself to know what data it is about), indicate whether the data are newly generated/collected or reused, digital or physical, also indicate the type of the data (the kind of content), its technical format (file extension), and an estimate of the upper limit of the volume of the data [3].

				ONLY FOR DIGITAL DATA	*ONLY FOR DIGITAL DATA*	*ONLY FOR DIGITAL DATA*	*ONLY FOR PHYSICAL DATA*
Dataset Name	Description	New or Reused	Digital or Physical	Digital Data Type	Digital Data Format	Digital Data Volume (MB, GB, TB)	Physical Volume
1 DEMOGRAPHICS	Self-reported demographic information (e.g. sex/gender, age, educational level, etc.), collected via REDCap secure online survey software	☒ Generate new data ☐ Reuse existing data	☒ Digital ☐ Physical	☐ Audiovisual ☐ Images ☐ Sound ☒ Numerical ☒ Textual ☐ Model ☐ Software ☐ Other:	.xls, .csv, .sav, .R	☒ < 1 GB ☐ < 100 GB ☐ < 1 TB ☐ < 5 TB ☐ > 5 TB ☐ NA	
2 QUESTIONNAIRES	Participants' answers to the validated self-report questionnaires, collected via REDCap secure online survey software	New	Digital	Textual Numerical	.xls, .csv, .sav, .R	< 1 GB	
3 EXPERIMENTAL TASKS	Participants' behavioral responses (reaction time and response type) on 3 experimental tasks presented in	New	Digital	Numerical	.xls, .csv, .sav, .R	< 1 GB	

	PsychoPy experimental software						
4 PHYSIOLOGICAL STRESS	Stress responses (Skin conductance response SCR, heart rate HR, and heart rate variability HRV) of participants' during the task as measured using the IMEC Chillband+	New	Digital	Numerical	.xls, .csv, .sav, .R	< 1 GB	
5 SCID-5-P INTERVIEW	Diagnostic interview (Structured Clinical Interview for DSM-5, Personality Disorders) to assess presence of borderline personality disorder; data = presence (1) or absence (0) of 9 BPD criteria, only numerical scores + interviewer notes (no audio)	New	Digital	Numerical Textual	.xls, .csv, .sav, .R	< 1GB	

[3] Add rows for each dataset you want to describe.

GUIDANCE: *The data description forms the basis of your entire DMP, so make sure it is detailed and complete. It includes digital and physical data and encompasses the whole spectrum ranging from raw data to processed and analysed data including analysis scripts and code. Physical data are all materials that need proper management because they are valuable, difficult to replace and/or ethical issues are associated. Materials that are not considered data in an RDM context include your own manuscripts, theses and presentations; documentation is an integral part of your datasets and should described under documentation/metadata.* *RDM Guidance on data*	
If you reuse existing data, please specify the source, preferably by using a persistent identifier (e.g. DOI, Handle, URL etc.) per dataset or data type.	NA
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, refer to specific datasets or data types when appropriate and provide the relevant ethical approval number.	☒ Yes, human subject data; provide SMEC or EC approval number: ☐ Yes, animal data; provide ECD reference number: ☐ Yes, dual use; provide approval number: ☐ No Additional information: Human subject data is created in all datasets (1-5). The research project will be reviewed by the Ethical Committee EC Research UZ/KU Leuven to ensure we comply to the ethical guidelines of UZ/KU Leuven and the code of conduct for human experimentation (e.g. the Declaration of Helsinki, 1964). The EC submission is still in preparation since the project start has been delayed until October 1st 2024.

Will you process personal data[4]? If so, please refer to specific datasets or data types when appropriate and provide the KU Leuven or UZ Leuven privacy register number (G or S number).	☒ Yes (provide PRET G-number or EC S-number below) ☐ No Additional information: Personal data will be processed in the following datasets: 1) DEMOGRAPHICS, 2) QUESTIONNAIRES, 4) PHYSIOLOGICAL STRESS, 5) SCID-5-P INTERVIEW. Examples of personal data we will collect are: name and e-mail address. Special category personal data we will collect are: (mental) health data. Specifically, we will collect data on subject's health via 1) self-report questionnaires; 2) clinical interview (only scores and notes are collected, no full transcripts or audio); and 3) physiological stress measures (heart rate and skin conductance) via a wearable device. Compliance with **GDPR legislation** will be ensured by: 1) gaining informed consent; 2) pseudonymization; 3) encrypted data storage via KU Leuven Bitlocker encryption and use of protected OneDrive servers. This will be reviewed by **EC UZ/KU Leuven and PRET**, submission is still in preparation since the project start has been delayed until October 1st 2024.
Does your work have potential for commercial valorization (e.g. tech transfer, for example spin-offs, commercial exploitation, …)? If so, please comment per dataset or data type where appropriate.	☐ Yes ☒ No If yes, please comment:
Do existing 3rd party agreements restrict exploitation or dissemination of the data you (re)use (e.g. Material/Data transfer agreements, research collaboration agreements)? If so, please explain to what data they relate and what restrictions are in place.	☐ Yes ☒ No If yes, please explain:
Are there any other legal issues, such as intellectual property rights and ownership, to be managed related to the data you (re)use? If so, please explain to what data they relate and which restrictions will be asserted.	☐ Yes ☒ No If yes, please explain:

[4] See Glossary Flemish Standard Data Management Plan

3. Documentation and Metadata	
Clearly describe what approach will be followed to capture the accompanying information necessary to keep **data understandable and usable**, for yourself and others, now and in the future (e.g. in terms of documentation levels and types required, procedures used, Electronic Lab Notebooks, README.txt files, Codebook.tsv etc. where this information is recorded). *RDM guidance on documentation and metadata*.	General procedures for all datasets: - For each dataset, a **Readme** file will be created following the KU Leuven template https://www.kuleuven.be/rdm/en/README - Detailed **protocols** on the methodology used to collect the data will be published in research papers, and will be shared on the Open Science Framework (OSF) platform - **Codebooks** will be created for each dataset with coding rules, describing in detail what the meaning is of the data (how each row and each column in the dataset was coded) (.docx, .xls, .csv) - **Syntax** files will be created and saved describing how raw data was processed and analyzed (SPSS syntax files .sps; R script .r); relevant syntax files will be shared on the OSF platform Specific information per dataset: - Datasets 1), 2), and 5) contain self-reported data (textual) that are processed into numerical categories. Datasets 1) and 2) are collected via REDCap survey software. Meta-data will be exported (as a data dictionary) out of the REDCap project. Each row in the data dictionary corresponds to one field in the project's dataset. - Dataset 3) contains numerical data on participant's experimental task response in terms of reaction time or response type. This data is collected via PsychoPy experimental software. Meta-data will be exported out of the experimental software in txt. File format describing each event in the experiment. The anonymized dataset will be shared on the OSF platform (with the readme.txt file) together with the syntax files for the main analyses. - Dataset 4) contains physiological stress parameters per participant and per timeframe. This data will be collected via the IMEC Chillband+. A detailed codebook is created explaining the meaning and value of each variable.

Will a metadata standard be used to make it easier to **find and reuse the data**? If so, please specify which metadata standard will be used. If not, please specify which metadata will be created to make the data easier to find and reuse. *REPOSITORIES COULD ASK TO DELIVER METADATA IN A CERTAIN FORMAT, WITH SPECIFIED ONTOLOGIES AND VOCABULARIES, I.E. STANDARD LISTS WITH UNIQUE IDENTIFIERS.*	☐ Yes ☒ No If yes, please specify (where appropriate per dataset or data type) which metadata standard will be used: For dataset 3) EXPERIMENTAL TASKS, the anonymized dataset and the syntax files for the main data analyses will be stored and shared on the Open Science Framework (OSF) platform, using the **OSF meta data application profile (MAP)** (https://osf.io/8yczr/). If no, please specify (where appropriate per dataset or data type) which metadata will be created:

4. Data Storage & Back-up during the Research Project	
Where will the data be stored? *Consult the interactive KU Leuven storage guide to find the most suitable storage solution for your data.*	☐ Shared network drive (J-drive) ☐ Personal network drive (I-drive) ☒ OneDrive (KU Leuven) ☐ Sharepoint online ☐ Sharepoint on-premis ☐ Large Volume Storage ☐ Digital Vault ☐ Other:

How will the data be backed up? *WHAT STORAGE AND BACKUP PROCEDURES WILL BE IN PLACE TO PREVENT DATA LOSS?*	☒ Standard back-up provided by KU Leuven ICTS for my storage solution ☒ Personal back-ups I make (specify): Bitlocker-encrypted and password protected harddrives for regular physical back-up, harddrives are stored in a locked archive closet ☐ Other (specify)
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. OneDrive has a storage capacity of max 2TB, we will need less than 10GB. ☐ No If no, please specify:
How will you ensure that the data are securely stored and not accessed or modified by unauthorized persons? *CLEARLY DESCRIBE THE MEASURES (IN TERMS OF PHYSICAL SECURITY, NETWORK SECURITY, AND SECURITY OF COMPUTER SYSTEMS AND FILES) THAT WILL BE TAKEN TO ENSURE THAT STORED AND TRANSFERRED DATA ARE SAFE.* *Guidance on security for research data*	- The data is accessed via KU Leuven password-protected and Bitlocker-**encrypted** laptops - Access is **restricted** to the PhD student who collects the data, and the postdoctoral researcher (celine.demeulemeester@kuleuven.be) and the PI (Patrick.luyten@kuleuven.be) who oversee the research. The data is shared among these three researchers via OneDrive. - All data is stored on OneDrive, using **multifactor authentication** via the KU Leuven Authenticator App - All data is **pseudonymized**, meaning that all personally identifiable information is removed and replaced by a unique study identifier. The link between the person and the study identifier is stored securely in a separate document, and is removed at the end of the project - Physical data (e.g. informed consent forms) will be stored in a locked archive closet
What are the expected costs for data storage and backup during the research project? How will these costs be covered?	OneDrive is free for KU Leuven personnel. A physical harddrive costs for back-up costs around €200. The costs will be covered by the FWO projects' bench fee.

5. Data Preservation after the end of the Research Project

Which data will be retained for at least five years (or longer, in agreement with other retention policies that are applicable) after the end of the project? In case some data cannot be preserved, clearly state the reasons for this (e.g. legal or contractual restrictions, storage/budget issues, institutional policies...). *Guidance on data preservation*	☒ All data will be preserved for 10 years according to KU Leuven RDM policy ☐ All data will be preserved for 25 years according to CTC recommendations for clinical trials with medicinal products for human use and for clinical experiments on humans ☐ Certain data cannot be kept for 10 years (explain) In line with the regulations of KU Leuven, the anonymized master file of the data will be preserved for 10 years after the end of the study. The link between the participant's name and contact information and the participant study ID will be destroyed at the end of the study.
Where will these data be archived (stored and curated for the long-term)? *Dedicated data repositories are often the best place to preserve your data. Data not suitable for preservation in a repository can be stored using a KU Leuven storage solution, consult the interactive KU Leuven storage guide.*	☒ KU Leuven RDR ☐ Large Volume Storage (longterm for large volumes) ☐ Shared network drive (J-drive) ☒ Other (specifiy): Open Science Framework (OSF) platform The anonymized master file of the data will be stored on in the KU Leuven RDR Research Data Repository for at least 10 years, conform the KU Leuven RDM policy. Anonymized datasets upon which publications are based will also be stored on the Open Science Framework (OSF) for use by other researchers.
What are the expected costs for data preservation during the expected retention period? How will these costs be covered?	Both the RDR and the OSF data repositories are free of charge so no costs are involved in data preservation.

6. Data Sharing and Reuse	
Will the data (or part of the data) be made available for reuse after/during the project? Please explain per dataset or data type which data will be made available. *NOTE THAT 'AVAILABLE' DOES NOT NECESSARILY MEAN THAT THE DATA SET BECOMES OPENLY AVAILABLE, CONDITIONS FOR ACCESS AND USE MAY APPLY. AVAILABILITY IN THIS QUESTION THUS ENTAILS BOTH OPEN & RESTRICTED ACCESS. FOR MORE INFORMATION: HTTPS://WIKI.SURFNET.NL/DISPLAY/STANDARDS/INFO-EU-REPO/#INFOEUREPO-ACCESSRIGHTS*	☒ Yes, as open data ☐ Yes, as embargoed data (temporary restriction) ☒ Yes, as restricted data (upon approval, or institutional access only) ☐ No (closed access) ☐ Other, please specify: The **anonymized** datasets and the syntax files that form the basis for journal publications will be shared openly on the Open Science Framework (OSF) platform once the research paper has been accepted for publication. This applies only to dataset 3) EXPERIMENTAL TASKS, and not the personal data that is created in datsets 1), 2), 4) and 5). Access to pseudonymized personal health data (e.g. scores on questionnaires on mental health, diagnostic information) will be restricted and only shared with other researchers upon reasonable request.
If access is restricted, please specify who will be able to access the data and under what conditions.	Access to pseudonymized personal health data (e.g. scores on questionnaires on mental health, diagnostic inforamtion) will be restricted and only shared with other researchers upon reasonable request. Access will be considered after a request is submitted explaining the planned reuse. Only uses for research purposes will be allowed that are in line with the explained purpose of the study and commercial reuse will be excluded.

Are there any factors that restrict or prevent the sharing of (some of) the data (e.g. as defined in an agreement with a 3rd party, legal restrictions)? Please explain per dataset or data type where appropriate.	☒ Yes, privacy aspects ☐ Yes, intellectual property rights ☒ Yes, ethical aspects ☐ Yes, aspects of dual use ☐ Yes, other ☐ No If yes, please specify: Personal health data are collected from vulnerable individuals (i.e. patients with borderline personality disorder). It would be unethical to make this information publicly available and the privacy of this data needs to be strictly protected following the GDPR legislation. Therefore only anonymized data (e.g. scores on experimental tasks) can be openly shared, and access to personal health data (e.g. diagnostic information, information on mental health) is restricted.
Where will the data be made available? If already known, please provide a repository per dataset or data type.	☒ KU Leuven RDR ☐ Other data repository (specify) ☒ Other (specify): Open Science Framework (OSF) The anonymized master file of the data will be stored on in the KU Leuven RDR Research Data Repository for at least 10 years, conform the KU Leuven RDM policy. Anonymized datasets upon which publications are based will also be stored openly on the Open Science Framework (OSF) for use by other researchers.
When will the data be made available?	☒ Upon publication of research results ☐ Specific date (specify) ☐ Other (specify)

Which data usage licenses are you going to provide? If none, please explain why. *A DATA USAGE LICENSE INDICATES WHETHER THE DATA CAN BE REUSED OR NOT AND UNDER WHAT CONDITIONS. IF NO LICENCE IS GRANTED, THE DATA ARE IN A GREY ZONE AND CANNOT BE LEGALLY REUSED. DO NOTE THAT YOU MAY ONLY RELEASE DATA UNDER A LICENCE CHOSEN BY YOURSELF IF IT DOES NOT ALREADY FALL UNDER ANOTHER LICENCE THAT MIGHT PROHIBIT THAT.* *Check the RDR guidance on licences for data and software sources code or consult the License selector tool to help you choose.*	☒ CC-BY 4.0 (data) ☐ Data Transfer Agreement (restricted data) ☐ MIT licence (code) ☒ GNU GPL-3.0 (code) ☐ Other (specify)
Do you intend to add a PID/DOI/accession number to your dataset(s)? If already available, please provide it here. *INDICATE WHETHER YOU INTEND TO ADD A PERSISTENT AND UNIQUE IDENTIFIER IN ORDER TO IDENTIFY AND RETRIEVE THE DATA.*	☒ Yes, a PID will be added upon deposit in a data repository ☐ My dataset already has a PID ☐ No
What are the expected costs for data sharing? How will these costs be covered?	No extra costs for data sharing are needed.

7. Responsibilities	
Who will manage data documentation and metadata during the research project?	**Celine De Meulemeester (celine.demeulemeester@kuleuven.be)**
Who will manage data storage and backup during the research project?	**Celine De Meulemeester (celine.demeulemeester@kuleuven.be)**
Who will manage data preservation and sharing?	**Celine De Meulemeester (celine.demeulemeester@kuleuven.be)**
Who will update and implement this DMP?	**Celine De Meulemeester (celine.demeulemeester@kuleuven.be)**