### 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	Jantine Spilt 0000-0002-3863-9868	
Contributor name(s) (+ ORCID) & roles	Hilde Colpin http://orcid.org/0000-0003-3712-2709 Karine Verschueren http://orcid.org/0000-0003-2172-1424	
Project number <sup>1</sup> & title	Supportive Teacher-Student Relationships to Promote Adolescent Wellbeing	
Funder(s) GrantID <sup>2</sup>	G036323N	
Affiliation(s)	x KU Leuven	
	☐ Universiteit Antwerpen	
	☐ Universiteit Gent	
	☐ Universiteit Hasselt	
	☐ Vrije Universiteit Brussel	
	□ Other:	
	ROR identifier KU Leuven: 05f950310	

<sup>&</sup>lt;sup>1</sup> "Project number" refers to the institutional project number. This question is optional. Applicants can only provide one project number.

<sup>&</sup>lt;sup>2</sup> 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	Please	provide a	short p	oroiect	description
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There is ample scientific research that shows that supportive teacherstudent relationships contribute to adolescents' learning, mental health, and resiliency. Yet we know little of how teachers build relationships with students in secondary education. Guided by an ecological perspective on resiliency that emphasizes strong adultchild relationships, this mixed-method research project aims to develop knowledge that can guide the development of interventions that support wellbeing at school through teachers' relationship building practices in everyday teaching. In the first steps, a student questionnaire to assess teacher relationship practices will be constructed and examined to identify potentially "high yield" practices. In the next steps, potentially "high yield" practices will be examined in an intervention study. The intervention consists of a databank of micro-interventions that support relationship building practices and which can be easily implemented in everyday teaching. In addition, participating school teams will receive school-tailored expert training. Intervention effects on teacher-student relationship quality and on the wellbeing of adolescents and their teachers will be examined. The implementation process will be examined through focus-group interviews with teachers.

#### 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 <sup>3</sup>.

				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,	Physical Volume
						TB)	
1.1 Focus	Interviews with	⊠ Generate new	□ Digital	☐ Audiovisual	.m4a or	⊠ < 1 GB	
group	groups of	data	☐ Physical	☐ Images	.mp3 or	□ < 100 GB	
students	students	☐ Reuse existing		⊠ Sound	.wav	□ < 1 TB	
		data		☐ Numerical		□ < 5 TB	
				☐ Textual		□ > 5 TB	
				☐ Model		□NA	
				☐ Software			
				☐ Other:			
1.2 survey data A	Student questionnaires about teacher- student relationships and wellbeing (online)	⊠ Generate new data	⊠ Digital	Survey; numerical	.csv or .sav	⊠ < 1 GB	
2.1 survey data B	Student questionnaires about teacher- student relationships	⊠ Generate new data	⊠ Digital	Survey; numerical	.csv or .sav	⊠ < 1 GB	

<sup>&</sup>lt;sup>3</sup> Add rows for each dataset you want to describe.

2.2 Focus group teachers	and wellbeing + teacher questionnaires (online) Interviews with groups of teachers	⊠ Generate r data □ Reuse exist data		Digital Physical	☐ Audiovisual ☐ Images ☑ Sound ☐ Numerical ☐ Textual ☐ Model ☐ Software ☐ Other:	.m4a or .mp3 or .wav	
					Utilet.		
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	☐ Yes, human subject data; provide SMEC or EC approval number: SMEC application in preparation
creation and/or use of the data	☐ Yes, animal data; provide ECD reference number:
(e.g. experiments on humans or animals, dual	☐ Yes, dual use; provide approval number:
use)? If so, refer to specific datasets or data	□ No
types when appropriate and provide the	Additional information:
relevant ethical approval number.	
	All datasets contain human subject data (interviews, online surveys)
Will you process personal data <sup>4</sup> ? If so, please	☐ Yes (provide PRET G-number or EC S-number below)
refer to specific datasets or data types when	□ No
appropriate and provide the KU Leuven or UZ	Additional information:
Leuven privacy register number (G or S number).	PRET application in preparation
Does your work have potential for commercial	☐ Yes
valorization (e.g. tech transfer, for example spin-	⊠ No
offs, commercial exploitation,)?	If yes, please comment:
If so, please comment per dataset or data type	
where appropriate.	
Do existing 3rd party agreements restrict	☐ Yes
exploitation or dissemination of the data you	⊠ No
(re)use (e.g. Material/Data transfer agreements,	If yes, please explain:
research collaboration agreements)?	
If so, please explain to what data they relate and	
what restrictions are in place.	
Are there any other legal issues, such as	☐ Yes
intellectual property rights and ownership, to be	⊠ No
managed related to the data you (re)use?	If yes, please explain:
If so, please explain to what data they relate and	
which restrictions will be asserted.	

<sup>&</sup>lt;sup>4</sup> 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	Codebook will be developed for each dataset (with explanation of concepts, names, variables, abbreviations)
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).	ps. General information regarding the study design, methodology and sample will be documented in the SMEC application.
RDM guidance on documentation and metadata.	
Will a metadata standard be used to make it easier to find and reuse the data?	☐ Yes ☐ No
If so, please specify which metadata standard will be used. If not, please specify which	If yes, please specify (where appropriate per dataset or data type) which metadata standard will be used:
metadata will be created to make the data easier to find and reuse.	If no, please specify (where appropriate per dataset or data type) which metadata will be created:
REPOSITORIES COULD ASK TO DELIVER METADATA IN A CERTAIN FORMAT, WITH SPECIFIED ONTOLOGIES AND VOCABULARIES, I.E. STANDARD LISTS WITH UNIQUE IDENTIFIERS.	This will be considered at the start of the project (1 september 2023).

## 4. Data Storage & Back-up during the Research Project

Where will the data be stored?	
	☐ Personal network drive (I-drive)
Consult the interactive KU Leuven storage guide to	☐ OneDrive (KU Leuven)
find the most suitable storage solution for your data.	☐ Sharepoint online
	☐ Sharepoint on-premis
	☐ Large Volume Storage
	☐ Digital Vault
	☐ Other:
How will the data be backed up?	☑ Standard back-up provided by KU Leuven ICTS for my storage solution
	☐ Personal back-ups I make (specify)
WHAT STORAGE AND BACKUP PROCEDURES WILL BE IN PLACE TO	☐ Other (specify)
PREVENT DATA LOSS?	
Is there currently sufficient storage & backup	
capacity during the project? If yes, specify	□ No
concisely. If no or insufficient storage or backup	
capacities are available, then explain how this	If no, please specify:
will be taken care of.	

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

Personal information of participants will be saved separately from other data. Both datasets can, if needed, be linked using codes, which are again saved in a separate file. Technical and organizational controls are in place to protect these files that contain mappings between pseudonyms and the original personally identifiable information (CODES). At KU Leuven Faculty of Psychology and Educational Sciences (PPW), a CODES share for each research unit is available on the J: network drive. These shares are not exposed to the internet. Only data managers of the respective research unit have read/write access to the CODES share. This allows research groups to isolate codes from researchers where needed. To enable the use of network shares for this purpose, the faculty's IT service organizes the raw network storage it procures from central ICT services in such a way that access permissions are limited, fixed, delegated to and audited by data managers who do not need to have an IT background. In combination with the hard disk encryption standards and other security controls at the faculty, this approach mitigates the majority of technical risks targeted by the GDPR.

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

€ 1200.00. costs are covered by the project budget
This includes the storage up to ten years.
Original audio recordings will only be stored for a period of 5 years after the end of the project.

### 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	<ul> <li>✓ All data will be preserved for 10 years according to KU Leuven RDM policy</li> <li>☐ 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</li> <li>☐ Certain data cannot be kept for 10 years (explain)</li> </ul>
Where will these data be archived (stored and	⊠ KU Leuven RDR
curated for the long-term)?	☐ Large Volume Storage (longterm for large volumes)
	□ Shared network drive (J-drive) (up to 10 years)
<u>Dedicated data repositories</u> are often the best place	☐ Other (specifiy):
to preserve your data. Data not suitable for	
preservation in a repository can be stored using a KU	
Leuven storage solution, consult the <u>interactive KU</u>	
<u>Leuven storage guide</u> .	
What are the expected costs for data	€ 1200.00. costs are covered by the project budget
preservation during the expected retention period? How will these costs be covered?	Original audio recordings will only be stored for a period of 5 years after the end of the
	project.

# 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	<ul> <li>Yes, as open data</li> <li>✓ Yes, as embargoed data (temporary restriction)</li> <li>□ Yes, as restricted data (upon approval, or institutional access only)</li> <li>□ No (closed access)</li> <li>□ Other, please specify:</li> </ul>
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/#INF OEUREPO-AccessRights	All (anonymized) datasets can be shared with other researchers after publication (an embargo may be installed for fairness towards publisher to provide them an advantage as the exclusive first deliverers of knowledge.)
If access is restricted, please specify who will be able to access the data and under what conditions.	Postdoc researcher (yet unknown) and supervisor (J.Spilt)
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.	<ul> <li>Yes, privacy aspects</li> <li>Yes, intellectual property rights</li> <li>Yes, ethical aspects</li> <li>Yes, aspects of dual use</li> <li>Yes, other</li> <li>No</li> <li>If yes, please specify:</li> </ul>
Where will the data be made available? If already known, please provide a repository per dataset or data type.	<ul><li> ☑ KU Leuven RDR</li><li>☐ Other data repository (specify)</li><li>☐ Other (specify)</li></ul>

When will the data be made available?	<ul> <li>☑ Upon publication of research results</li> <li>☐ Specific date (specify)</li> <li>☐ Other (specify)</li> </ul>
Which data usage licenses are you going to	⊠ CC-BY 4.0 (data)
provide? If none, please explain why.	☐ Data Transfer Agreement (restricted data)
	☐ MIT licence (code)
A DATA USAGE LICENSE INDICATES WHETHER THE DATA CAN BE REUSED OR NOT AND UNDER WHAT CONDITIONS. IF NO LICENCE IS	☐ GNU GPL-3.0 (code)
GRANTED, THE DATA ARE IN A GREY ZONE AND CANNOT BE LEGALLY	☐ Other (specify)
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 quidance on licences for data and software sources code or consult the License selector tool to help you choose.	Default licence
Do you intend to add a PID/DOI/accession	
number to your dataset(s)? If already available,	☐ My dataset already has a PID
please provide it here.	□ No
INDICATE WHETHER YOU INTEND TO ADD A PERSISTENT AND UNIQUE IDENTIFIER IN ORDER TO IDENTIFY AND RETRIEVE THE DATA.	
What are the expected costs for data sharing? How will these costs be covered?	No costs. Every researcher can store 50 GB per year for free.

	7. Responsibilities
Who will manage data documentation and	Postdoc researcher (yet unknown)
metadata during the research project?	

Who will manage data storage and backup	Postdoc researcher (yet unknown)
during the research project?	
Who will manage data preservation and	Postdoc researcher (yet unknown) and supervisor (J.L. Spilt)
sharing?	
Who will update and implement this DMP?	Postdoc researcher (yet unknown)