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	Robyn Vanherle (https://orcid.org/0000-0003-2324-2785)
Contributor name(s) (+ ORCID) & roles	Kathleen Beullens (https://orcid.org/0000-0002-0530-7947), supervisor
Project number ¹ & title	1223625N, Unraveling the impact of online peer interactions on youth's peer relationship quality and mental health
Funder(s) GrantID ²	3H240157
Affiliation(s)	□ KU Leuven
	☐ Universiteit Antwerpen
	☐ Universiteit Gent
	☐ Universiteit Hasselt
	☐ Vrije Universiteit Brussel
	□ Other:
	ROR identifier KU Leuven: 05f950310
Please provide a short project description	Research has shown that youth nowadays increasingly turn to social networking sites to formulate and maintain peer relationships. These online interactions, however, look quite different from offline interactions (e.g., absence of visual cues), thereby raising the question of whether this is beneficial or detrimental to youth's peer relationships. This is an important question because peer interactions have been proven to serve as a buffer (when being high quality) or risk factor (when being low quality) for youth's mental health. The aim of the current project is therefore to 1) grasp how the use of social networking sites transforms peer relationships, 2) examine under which conditions these transformations are positive or negative for youth's peer relationships and mental health, and 3) unravel developmental differences in these associations (adolescents vs. emerging adults). These aims will be reached by implementing a mixed-method design, consisting of qualitative focus group interviews and a quantitative experience sampling study.

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.

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	ONLY FOR DIGITAL	ONLY FOR DIGITAL	ONLY FOR PHYSICAL
				DATA	DATA	DATA	DATA
Dataset Name Focus group	Description Focus group	New or Reused Senerate new	Digital or Physical	Digital Data Type	Digital Data Format Sound: Interview	Digital Data Volume (MB, GB, TB) □ < 1 GB	Physical Volume
interviews	interviews will be conducted among early-middle adolescents (12–14 years old), middle-late adolescents (15–17 years old), and emerging adults (18–25 years old). For each age group, I will conduct focus groups until the point of	data □ Reuse existing data	□ Physical	□ Images ☑ Sound □ Numerical ☑ Textual □ Model ☑ Software □ Other: Sound: The focus groups will be recorded in order to make data transcription possible. These recordings will be deleted after the interviews have	recordings will consist of audio recordings in MP3 format. Textual: The interviews will be transcribed in Word format. Software: an Nvivo project will be created (.nvp).	■ < 100 GB □ < 1 TB □ < 5 TB □ > 5 TB □ NA Sound: We expect to collect max 21 interviews of 1 hour (+- 6 interviews per age group). This will result in a volume of audio recordings below 1GB Textual: The Word forms of the	

³ Add rows for each dataset you want to describe.

	saturation is reached. This is expected to be about six to seven focus groups per age category, as three to six focus groups are advised to identify 90% of the research themes of interest.			been transcribed and no identifying data will be included in the focus group transcripts.		transcribed interviews are expected to be below 1GB. Software: The Nvivo project is expected to be below 1GB.	
Experience sampling method (ESM) study	A 14-day ESM study will be conducted among a representative sample of Flemish early-middle adolescents (12–14 years old), middle-late adolescents (15–17 years old), and emerging adults	☑ Generate new data	☑ Digital □ Physical	□ Audiovisual □ Images □ Sound □ Numerical ☑ Textual □ Model ☑ Software □ Other: Textual: Participants will receive 1 background survey and 4 daily surveys each day.	Textual: The surveys and informed consents will be in Word/PDF format. Software: Data will be downloaded and implemented in R in .csv format.	□ < 1 GB ■ < 100 GB □ < 1 TB □ < 5 TB □ > 5 TB □ NA Textual: The surveys and informed consents are expected to be below 1GB. Software: The data file of the ESM study (.csv) is	

(18–25 years	These surveys will	expected to be
old). We expect	initially be	between 1 and 5
to recruit 90	formulated in	GB.
participants per	Word but will be	
age group.	sent out using	
Participants will	specific software	
receive 1	(see below). At	
background	the beginning of	
survey at the	the background	
beginning,	survey,	
followed by 4	participants will	
daily surveys	have to fill in an	
during the 14-	online informed	
day study.	consent form.	
	The parents of	
	the participants	
	will receive the	
	(passive/active)	
	informed consent	
	form via mail	
	(PDF).	
	Software : The	
	surveys will be	
	sent out using m-	
	Path, an app that	
	allows real-time	
	monitoring of	
	participants and	
	follows the GDPR	

		protocols. After data collection,			
		data will be			
		downloaded from			
		the m-Path app			
		and analysed			
		using R.			
GUIDANCE: The data description forms the basis of whole spectrum ranging from raw data management because they are valuab include your own manuscripts, theses documentation/metadata. RDM Guidance on data	a to processed and analysed data in the, difficult to replace and/or ethica	ncluding analysis scrip al issues are associated	nts and code. Physico d. Materials that are	al data are all materia e not considered data	ls that need proper
If you reuse existing data, please speci source, preferably by using a persisten identifier (e.g. DOI, Handle, URL etc.) p dataset or data type.	nt	previous projects will	be used.		
Are there any ethical issues concerning creation and/or use of the data (e.g. experiments on humans or anima use)? If so, refer to specific datasets or types when appropriate and provide the relevant ethical approval number.	☐ Yes, animal data; postals, dual ☐ Yes, dual use; provi	rovide ECD reference ide approval number: n: Data will be collected lata will be collected.	number: ed among young ind d and special attention	ividuals aged 12 to 25	. No special

Will you process personal data ⁴ ? 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: We will work with pseudonymised/anonymized data and have received ethical
Leuven privacy register number (G or S number).	approval for this via the PRET platform (G-2023-6844-R6(AMD)). In this approval application, we
	thoroughly explain how we will pseudonymise the data and which particular safety measures will be
	taken.
	Focus group interviews: The focus group interviews will be recorded in order to make transcription and
	data analysis possible. Whilst transcribing these recordings, we will anonymize them right away (only
	fictive name, gender, and age will be kept). To create the fictional name, we will store participants' names
	in a separate, password protected file. This file can only be accessed by the researchers working on this project and will not be distributed to third parties. When the interviews are transcribed, this file will be
	deleted.
	ucicicu.
	ESM study : We will provide each participant with a unique identification code to link the background
	questionnaire to the daily dairy checklists. The identification codes will only be used by the researchers
	and solely for the purpose of linking participants' data over different data collection points. All information
	that allows identification of the participants (e.g., email address) will be kept in a separate data file that
	will be encrypted and can only be accessed by a password known by the primary researcher. Furthermore,
	this file will be deleted as soon as the research project is completed.
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.	

⁴ See Glossary Flemish Standard Data Management Plan

Do existing 3rd party agreements restrict	□ Yes
exploitation or dissemination of the data you	☑ No
(re)use (e.g. Material/Data transfer agreements, research collaboration agreements)?	If yes, please explain:
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.	

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.

Focus group interviews:

- We will provide Word documents with the meaning of the codes.
- We will make use of an Nvivo project to generate documentation and metadata.
- We will follow the guidelines as described in the following link ->
 https://dam.ukdataservice.ac.uk/media/622387/ukda-datamanagement-nvivo.pdf

ESM study:

- We will provide a codebook with the naming of the variables, the meaning of the values, and the labels in order to interpret the dataset. This will be generated using SPSS.
- R code to analyse our data will be stored in specific R scripts.

For both studies, we will publish our materials within our organisation via the shared drive and outside our organization by making use of the Open Science Framework (OSF). We will develop our documents with a special eye for transparency and reproducibility.

Will a metadata standard be used to make it □ Yes easier to find and reuse the data? **⋈** No If yes, please specify (where appropriate per dataset or data type) which metadata standard will be used: If so, please specify which metadata standard will be used. If not, please specify which metadata will be created to make the data If no, please specify (where appropriate per dataset or data type) which metadata will be created: easier to find and reuse. We will make use of the personal (I-drive), shared KU Leuven drive (J-drive) and KU Leuven Onedrive to REPOSITORIES COULD ASK TO DELIVER METADATA IN A make our research project visible within our organization. In addition, the Open Science Framework (OSF) CERTAIN FORMAT, WITH SPECIFIED ONTOLOGIES AND will be used as a repository for all materials that can be publicly shared, including code books, anonymized **VOCABULARIES, I.E. STANDARD LISTS WITH UNIQUE** data, and code for analyses. IDENTIFIERS.

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

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) □ 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.	☐ 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	All data will be encrypted and can only be accessed by a password known by the researchers working on the project. Data will be stored on the networks provided by KU Leuven, which provide high security.
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	
What are the expected costs for data storage and backup during the research project? How will these costs be covered?	No expected costs.

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).	 ☑ 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) The recordings from the focus groups will be deleted as soon as all interviews are transcribed.
<u>Guidance on data preservation</u>	
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):
What are the expected costs for data preservation during the expected retention period? How will these costs be covered?	No expected costs.

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-	 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:
EU-REPO/#INFOEUREPO-ACCESSRIGHTS	
If access is restricted, please specify who will be able to access the data and under what conditions.	Fully anonymized data will be provided on the Open Science Framework to encourage open science practices.
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: All data will be fully anonymized before making this available. No identifying information will be kept and the demographic variables (gender, age, student status) will not be sufficient to identify the respondents should anyone try to do so.

Where will the data be made available? If already known, please provide a repository per dataset or data type.	 IX KU Leuven RDR IX Other data repository (specify) □ Other (specify) □ Open Science Framework (OSF) for both the transcripts of the focus group interviews and the data derived from the ESM study.
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) We will make use of the following license (https://creativecommons.org/licenses/by-nc-nd/4.0/legalcode.en). CC BY-NC-ND 4.0 only allows people to download and share our work for no commercial gain and for no other purposes.

Do you intend to add a PID/DOI/accession number to your dataset(s)? If already available, please provide it here.	✓ Yes, a PID will be added upon deposit in a data repository☐ My dataset already has a PID☐ No
INDICATE WHETHER YOU INTEND TO ADD A PERSISTENT AND UNIQUE IDENTIFIER IN ORDER TO IDENTIFY AND RETRIEVE THE DATA.	A DOI will be attached to our data once collected and made available.
What are the expected costs for data sharing? How will these costs be covered?	No costs are expected for sharing as both KU Leuven RDR and OSF are free.

7. Responsibilities	
Who will manage data documentation and metadata during the research project?	The Postdoctoral researcher (Robyn Vanherle) will be responsible for data documentation and metadata, under supervision of Prof. Dr. Kathleen Beullens (Supervisor of the project).
Who will manage data storage and backup during the research project?	The data storage and backup will be managed by Robyn Vanherle (postdoctoral researcher on this project).
Who will manage data preservation and sharing?	Data preservation and sharing will be managed by Robyn Vanherle (postdoctoral researcher on this project).
Who will update and implement this DMP?	The postdoctoral researcher of this project, named Robyn Vanherle, will update and implement this DMP.