Request for Proposals for Research on Social Media and Youth Well-being Using Instagram Data

Overview

Meta is partnering with the Center for Open Science (COS) on a pilot program to share certain Instagram data with a select group of academic researchers to study topics related to the social and emotional health of teens and young adults. This request for proposals (RFP) provides: 1) background on the program; 2) program eligibility requirements; 3) submission and evaluation processes; and 4) anticipated timeline. The purpose of this pilot program is to test novel data request and access procedures that support research in a privacy-protective manner. As a pilot program, the number of proposals accepted will be limited (approximately 5 to 7 accepted), and some types of data will be unavailable for request.

Please review this RFP in full in addition to the <u>User Guide</u> that Meta has provided to determine whether your research questions could be investigated productively before preparing a pre-proposal submission. The <u>pre-proposal portal</u> is now open. The deadline for pre-proposal submissions is September 5, 2024. See the anticipated timeline in this RFP for more details.

Program Description

There have been a number of calls for social media and other technology companies to share data with researchers for a wide variety of scholarly purposes. In particular, there is interest among researchers, policy makers, and the general public in how social media data can improve scholarly understanding of well-being. While social media data is typically logged for the purposes of providing digital services and not for the purposes of scholarly research, social media data has the potential to contribute to understanding of well-being when combined with other sources of data such as from surveys or other behavioral studies. This pilot program aims to share certain Instagram data with independent academic researchers to use in conjunction with their own study data on social or emotional health. This pilot program will allow selected academic researchers to obtain consent from their study participants to share select data from their Instagram account(s). While this pilot is focused on teens and young adults, study designs may also include older adults among their study participants.

This pilot program will enable rigorous, transparent, and ethical research on the social and emotional health of teens and young adults. Researchers will be required to obtain informed participant consent, and both their project proposals and final reports will undergo third party peer review. The submission and review processes will be administered by COS with the substantive peer review managed by an academic Editorial Board convened by COS. Meta will not evaluate or be involved in the selection of submissions at any step in the process, except to respond to the data requests.

The review process will follow a version of the Registered Reports publishing model. Recent literature suggests that the Registered Reports publishing model is associated with less publication bias, particularly through reporting null results (<u>Scheel et al., 2021</u>; <u>Wiseman et al., 2019</u>), and higher rigor and quality of research and reporting (<u>Soderberg et al., 2021</u> see <u>Chambers and Tzavella, 2022</u> for a review).

Registered Reports have two stages of peer review:

- 1. The first stage of peer review occurs prior to conducting the research. During Stage 1, research questions and designs are evaluated on potential to advance current scientific understanding of social and emotional health of teens and young adults, as well as the quality of the study design. Feedback from peer reviewers can be incorporated to improve the research question and design, as opposed to the standard peer review process which is limited to pointing out strengths and flaws of completed work. Accepted submissions receive an in-principle commitment to publish the results regardless of outcome to combat publication bias and promote transparency of all conducted research.
- 2. The second stage of review occurs after the research is conducted and the final report is written. During Stage 2, final reports are evaluated on whether analyses were conducted and reported in a way that aligns with what was described in the submission that was accepted at the first stage.

There will also be a "**pre-proposal step**" for this pilot program in which the Editorial Board will evaluate pre-proposal submissions and invite 5 to 7 of them to submit a Stage 1 Registered Report.

In this pilot program, the Registered Reports publishing model will be implemented in COS's *Lifecycle Journals* project which promotes transparency of the full research lifecycle and diversification in the evaluation of scholarly research. Project proposals, peer reviews, outputs, and outcomes will be transparently, publicly reported to the extent possible. Access to any Instagram data shared by Meta during the pilot will be limited to the researchers selected for the pilot by COS and the Editorial Board. After the Stage 2 Registered Reports are published, other researchers with ethical approval (e.g., institutional review board [IRB]) may request access to the data to reproduce the results of any of the published Stage 2 Registered Reports. Reproduction refers to obtaining the same results for the same research questions and hypotheses using the same input data, methodological procedures and computations steps, and conditions of analysis (National Academies of Sciences, Engineering, and Medicine, 2019).

Eligibility Requirements

Research Design

The pilot program welcomes proposals that investigate mechanisms of, and comparative differences in, positive and negative associations between social media and the social and emotional health of teens and young adults. The recent National Academies of Sciences (2024) Consensus Study Report on *Social Media and Adolescent Health* calls for more research on such mechanisms and differences in them, including more research on the potential causal direction of any observed associations. To advance this area of research and to assess the feasibility of this novel model of data sharing, proposals for this pilot must:

- 1. Pose research questions that address one or more of the research topics listed below.
- 2. Employ privacy-preserving procedures in recruiting and collecting data from samples of study participants. Meta will provide the functionality to allow researchers to link Instagram data shared by Meta with the data researchers collect from consenting study participants. Researchers must have approval from an Institutional Review Board (IRB) or an equivalent ethics review body and follow all applicable laws and regulations in the relevant jurisdictions to conduct the proposed research.
- 3. Employ rigorous methods of statistical inference, research designs with well-justified sampling designs, and established, validated measurements of social or emotional health. All proposals must express clear hypotheses or research questions that are motivated by the literature and articulate how the operationalization of the model(s) and all variables are related to testing those hypotheses and research questions. Ideal proposals will provide research designs that enable evaluation of competing hypotheses.
- 4. Propose a research design with data collection that could be completed in approximately 6 months or less, ideally within the time listed under "Anticipated Timeline."

Research Topics

A proposal must fit into one or more of the following research areas to be considered for the pilot:

- 1. Strength Comparisons. Studies investigating or comparing differences in potential positive and negative associations of Instagram use with other potential correlates of the social or emotional health of teens. For example, other digital factors such as use of other social media apps or consumption of other digital media (e.g., gaming, TV or streaming) as well as other non-digital factors, such as factors related to their in-person relationships, households, schools, workplaces, neighborhoods, or larger communities. Studies might approach this using a multivariate, observational research design or they might approach this using an experimental design involving randomization to multiple treatment groups varying Instagram use with other digital and non-digital factors.
- 2. **National or Regional Comparisons.** Studies investigating or comparing differences across countries or regions of the world in potential positive or negative associations of

- Instagram and other social media use with the social or emotional health of teens and young adults.
- 3. Social, Cultural, and Contextual Understanding. Studies comparing differences across other large population groups in potential positive or negative associations of Instagram and other social media use with the social or emotional health of teens or young adults. In particular, these studies should compare social, cultural or contextual reasons that such group differences might exist. Studies might approach this using an observational research design or an experimental design randomizing social media use and comparing treatment effects across groups.
- 4. Explanations for Observed Associations. Studies investigating why statistical relationships between Instagram and social or emotional health of teens or young adults might be observed. For example, examining whether people's pre-existing beliefs about social media influence measured associations of Instagram and other social media use with the social or emotional health of teens or young adults.

Researchers

Researcher requirements to participate in the pilot include:

- Researchers must be affiliated with an academic university or institution that is
 accredited, dedicated to the pursuit of education and research, and qualified to grant
 academic degrees. The primary researcher (or "Principal Investigator") on any proposal
 must have a PhD or other terminal degree. The primary researcher must be a
 corresponding author for the proposal and report but need not be the first author.
- 2. Researchers must commit to using any data shared by Meta only for non-commercial academic research in the public interest.
- 3. Researchers must comply with all applicable laws, policies, rules and regulations related to their participation in the pilot program. In addition, researchers will need to execute a data sharing agreement with Meta.
- 4. Researchers, and their affiliated academic university or institution, must not be in a jurisdiction that is the target of sanctions including those imposed by the United States, United Kingdom, European Union, or United Nations.
- 5. Researchers must be free from any conflicts of interest. A conflict of interest exists when a researcher's personal, financial, or professional interests could potentially influence their judgment, objectivity, or decision-making in their acts or omissions as participants in this Registered Reports pilot. Conflicts of interest may include, but are not limited to:
 - a. Financial interests, including a personal financial interest in the subject matter, or receiving funding, payment for services, consulting fees, etc. from any party with vested interest in the subject matter.
 - Non-financial interests, such as ideological, professional or non-profit memberships, or political affiliations, that may bias the researcher's perspective or interpretation of results.
 - c. Personal relationships with stakeholders or those with a Financial or Non-financial interest in the subject matter, including family members, close

friends, or professional colleagues, which could unduly influence process or outcomes.

COS will evaluate researcher eligibility and communicate researcher eligibility decisions to the Editorial Board. Researchers must maintain compliance with this eligibility policy throughout the duration of their participation with the Registered Reports pilot. Researchers must also disclose any new potential conflicts of interest that may develop over the course of the program to COS. Failure to disclose conflicts of interest or comply with the eligibility policy may result in disqualification from participation in the program.

Instagram Data

Researchers who receive in-principle acceptance from COS and the Editorial Board for their Stage 1 Registered Report will need to recruit their own study sample, collect appropriate consent from each participant, and create a unique identifier for each participant. Researchers will share those participant identifiers with Meta via an inbound URL for each participant who consented to share their Instagram data so that the researchers can later merge their Instagram data with the other study data they collect. Additional details about this process will be included in the forthcoming *User Guide*, which will be released with sufficient time for interested researchers to consult the *User Guide* when preparing the Pre-Proposal Forms. For more details about the submission process and in-principle acceptance, see the Submission and Evaluation Process below.

The forthcoming *User Guide* will also provide a list of data that can be made available as part of this pilot program. In the list of data, Meta may include: information about how many accounts participants follow; how many accounts follow them; their account settings; and how they use Instagram, including how much and when they use Instagram, how much content and when they post or share, and what features they use to interact with other users or content and when. Meta plans to make certain time-stamped variables part of the available data. Certain data types are *not* eligible for sharing as part of this pilot program, including but not limited to profile or account names, demographic information, user generated content such as the textual or visual content of posts, comments, or messages, or any inferred metrics. Study participants living in 24 countries may consent to linking their Instagram data for this pilot program: Argentina, Australia, Brazil, Canada, Chile, Colombia, Egypt, Germany, France, India, Indonesia, Italy, Japan, Mexico, Nigeria, Peru, the Philippines, Poland, South Africa, Spain, Turkey, the United Kingdom, the United States, and Vietnam. Researchers may request up to 30 days of either retrospective or prospective data for each instance of participant authorization. That is, up to 30 days of data from before or after the date on which each study participant authorized Meta to share data from their account(s). For longer or longitudinal studies, researchers will need to recontact participants to obtain authorization for sharing additional period(s) of either retrospective or prospective Instagram data.

As detailed in Submission and Evaluation Processes, researchers will request the specific Instagram data they believe are needed to conduct their proposed study using a Data Request Form that will be provided by Meta alongside the forthcoming *User Guide*.

Relationship of the Parties

The Registered Reports review process will be administered by COS and the academic Editorial Board that was selected and recruited by COS for their substantive and methodological expertise and editorial experience. The Editorial Board members are contributing in-kind service to COS for this role:

- <u>Katherine Keyes</u>, Professor of Epidemiology, Columbia University Mailman School of Public Health
- 2. Matti Vuorre, Assistant Professor of Psychology, Tilburg University
- 3. Andrew Przybylski, Professor of Human Behaviour and Technology, University of Oxford
- 4. Jessica Piotrowski, Professor of Communication, University of Amsterdam

Editorial Board members selected by COS have received no compensation from Meta or COS, and their in-kind agreement to provide this academic service is with COS. The Editorial Board members have partnered with COS to provide this service and have no direct relationship with Meta in relation to this project. Meta provided COS a grant to support implementation of this pilot. The Grant Agreement between Meta and COS contains confidentiality provisions that align with COS's <u>partnership framework</u>. See the Summary of Reporting Expectations below that have been agreed to maintain transparency for the pilot program.

Submission and Evaluation Processes

There will be four main steps in the Registered Reports submission and evaluation process for this pilot program. This section of the RFP first illustrates these four steps in the figure below, then briefly summarizes each step, and then describes the submission instructions and evaluation criteria for each step in more detail.

Pre-Proposal Form	Stage 1 Registered Report and Data Request Form	Data Collection	Stage 2 Registered Report
Invitation to Submit from Center for Open Science and Editorial Board	Editor In-Principle Acceptance	Meta Data Sharing Agreement Executed and Consented Instagram Data Shared	Editor Recommendation
Pre-Proposal Form and Editor Decision	Stage 1 Registered Report, Peer Reviews, Editor Decision, Lifecycle Journals Experimental Evaluation Services, Data Request Form and Meta Reply, and University Ethics Approval	Data Sharing Agreement, Data Collection Materials, Code, and Survey Data Note: Instagram user data may be made available through restricted access for reproduction purposes only.	Stage 2 Registered Report, Peer Reviews, Editor Decision, and <i>Lifecycle Journals</i> Experimental Evaluation Services
Registered Reports Pilot Step Positive Outcome for Each Step Materials Made Open via Center for Open Science Lifecycle Journals Project			

Pre-Proposal Step. During this step, researchers will prepare and submit a Pre-Proposal Form provided by COS. COS will review proposals for eligibility, and the Editorial Board will review for substance. Proposals passing eligibility criteria and baseline interest ratings by the Editorial Board will be entered into a lottery for selection (see Evaluation Criteria for details). Approximately 5 to 7 proposals will be invited by COS and the Editorial Board to submit a Stage 1 Registered Report. The Pre-Proposal Form and the Editorial Board's decision on the Pre-Proposal Form will be made public as part of COS's *Lifecycle Journals* if the Stage 1 Registered Report is later accepted.

Stage 1 Registered Report and Data Request Form Step. During this step, invited researchers will prepare and submit their Stage 1 Registered Report and a Data Request Form provided by Meta. The forthcoming *User Guide* provided by Meta will include a list of Instagram data that can be made available to researchers. In parallel to researchers preparing their Stage 1 Registered Report, Meta will review the feasibility of the Data Request Form, which will be blinded to researcher identities and the substance of the research. In parallel, the Editorial Board will recruit independent peer reviewers to evaluate the quality of the Stage 1 Registered Reports, aggregate the review feedback, and issue editorial decisions accepting, requiring revisions, or rejecting the Stage 1 Registered Reports. At the end of this step, Stage 1 Registered Reports will either be rejected by the Editorial Board or will receive in-principle acceptance. If the Stage 1 Registered Report is accepted, the researcher will coordinate with Meta for data access. Their Stage 1 Registered Report, peer reviews, editorial decision, Data Request Form, and Meta's response to the data request will be made public as part of COS's Lifecycle Journals, with Editor-approved exceptions or embargos for ethical or proprietary concerns. If the Stage 1 Registered Report is rejected, the researcher will be withdrawn from the pilot program. After the Stage 1 Registered Report is published, it will be eligible for

evaluation by other experimental evaluation services to enhance scholarly engagement with the research as part of *Lifecycle Journals*. Feedback from other evaluation services will not alter decisions of Stage 1 in-principle acceptance. Details about *Lifecycle Journals* and evaluation services will be provided for authors invited to submit Stage 1 proposals.

Data Collection Step. During this step, researchers with an in-principle acceptance for their Stage 1 Registered Report and their institution will sign a data sharing agreement with Meta, which is a prerequisite before receiving access to Instagram data. Researchers will then recruit study participants and administer their study protocol using a tool provided by Meta to allow study participants to authorize Meta to share approved data from their Instagram account(s). At the end of this step, researchers will have the data needed to conduct the analyses described in their Stage 1 Registered Reports. Any costs associated with conducting the research are the responsibility of the authors. The data sharing agreement, data collection materials, researcher collected data, and analytic code will be made public as part of COS's *Lifecycle Journals*, with Editor-approved exceptions or embargos for ethical or proprietary concerns.

Stage 2 Registered Report Step. During this step, researchers who have finished collecting their study data will conduct their analysis and write the findings and conclusions for their Stage 2 Registered Report. The Editorial Board and peer reviewers will then evaluate the completed Stage 2 Registered Reports for considerations such as whether the author(s) adhered to the analysis plans laid out in their approved Stage 1 Registered Report and whether any unplanned deviations from their Stage 1 analysis plans are explicitly and clearly indicated and are justified. Author(s) should note that unplanned deviations from accepted plans can be the basis of Editors declining to recommend Stage 2 Registered Reports. When possible, the same Editorial Board members and independent peer reviewers will evaluate both the Stage 1 and Stage 2 Registered Reports. If the Stage 2 Registered Report is accepted, the Registered Report, peer reviews, and editorial decision will be made public as part of COS's Lifecycle Journals, with Editor-approved exceptions or embargos for ethical or proprietary concerns. The consented Instagram data will be made available through restricted access for other researchers who have ethical approval to reproduce the findings. Like the Stage 1 reports, the Stage 2 Registered Reports will be eligible for evaluation by other experimental evaluation services that will provide assessments of different aspects of the research projects and deepen scholarly engagement with the research such as reproducibility checks and quality assessments of documentation materials and code. Authors will have the option to assign a Version of Record (VOR) declaring the work completed and published in *Lifecycle Journals*; if they do not assign a VOR, they will have the option to submit the completed work elsewhere.

Pre-Proposal Form

Submission Instructions

To be considered for the pilot program, researchers will submit a Pre-Proposal Form with two components to be evaluated by COS and the Editorial Board:

- 1. **Responses to researcher eligibility questions**. For example, researchers must disclose any potential conflict of interests. The disclosure should include: (1) The nature of the conflict; (2) The individuals, organizations, or entities involved; and (3) Steps taken to mitigate or manage the conflict, if applicable. COS staff will review researcher eligibility on a pass/fail basis.
- 2. A one-page description of the research question and approach will be evaluated by the Editorial Board for alignment with the research design and research topics criteria specified in this RFP and initial quality assessment. The Editorial Board will be blind to researcher identities when conducting their review. This portion of the proposal should answer two questions: "What is the research question and how does it fit with the research topic eligibility requirements?" and "What is the research design?" When describing the design, researchers should emphasize features of research rigor described in the eligibility requirements and other study design features such as sampling strategy, sampling plan for precise estimation or generalizability, use of validated measures, features of comparative studies of samples and contexts, and primary outcome measures. It should also be clear how the researchers expect to use Instagram data in the proposed research. Alignment with research design and research topic requirements will be evaluated as pass/fail, but initial quality assessment will be graded on a 3-point scale: below standard (1); meets standard (2); exceeds standard (3).

The <u>Pre-Proposal Portal</u> is now open for accepting submissions. Please review the <u>User Guide</u> before submitting. The deadline for pre-proposal submissions is September 5, **2024. See Anticipated Timeline for submission and evaluation timelines.** Pre-proposals that are not selected could be reconsidered in the future if the project extends beyond the pilot period.

Evaluation Criteria

We expect 5 to 7 pre-proposals will be selected by the Editorial Board to move on to full Stage 1 Registered Report submissions. Pre-proposals that meet all pass/fail criteria and achieve a score of meets standard (2) or exceeds standard (3) on the initial quality assessment of the Pre-Proposal Form will be eligible for selection. If there are more eligible proposals than can be included in the pilot, then proposals will be selected by lottery. The lottery will include only proposals that received a quality score of exceeds standard (3) if there are more 3-rated proposals than can be included. Otherwise, all 3-rated proposals will be included, and the lottery will be conducted on proposals receiving a quality score of meets standard (2).

Data Request Form

Summary of Submission Instructions

Those researchers selected to prepare a Stage 1 Registered Report will have the opportunity to request data described in the *User Guide* using a Data Request Form that will be evaluated by Meta in parallel with the preparation and submission of the Stage 1 Registered Report. The purpose of this Data Request Form is for researchers to request specific Instagram data they

believe are needed to conduct their pilot study proposal. COS will remove identifying information such as name or email address before sharing the Data Request Form with Meta. When completing the Data Request Form, researchers should avoid including information about their identities or hypotheses so that Meta remains blind to those considerations when evaluating data availability requests. The Data Request Form will be made available alongside the forthcoming *User Guide*.

Evaluation Process

COS and the Editorial Board will ask Meta to evaluate the blinded Data Request Forms for those that were invited to submit a Stage 1 Registered Report. After completing its review, Meta will send a response to COS who will communicate this response to the Editorial Board and researcher. The response will specify which of the data requested can be shared for the purposes of the pilot study, and which of the data requested cannot be shared for the purposes of the pilot study, if any.

Stage 1 Registered Reports Submissions

Submission Instructions

Pre-proposals selected for the pilot will be invited to submit a Stage 1 Registered Report. An invitation to submit offers no guarantee of the outcome of the evaluation process for a full Stage 1 Registered Report. Stage 1 Registered Reports will be evaluated by the Editorial Board and peer reviewers they recruit using the same criteria as the Pre-Proposal Form. Editors will engage proposal authors with opportunities to revise and improve the proposal as appropriate.

Stage 1 submissions must include an abstract, introduction, hypotheses/questions, methods section, references, and any figures or tables. The abstract should be brief and will be revised at Stage 2 submission to include results and conclusions. The introduction should state the research question(s) and summarize how the study will advance current scientific knowledge. The introduction should cite any relevant studies or literature and should cite the available evidence both for and against the author(s) research questions and hypotheses. The methods section should include information about the study design, including sampling, measurement, and analysis plans. The methods section should be written with a sufficient degree of clarity and detail such that other researchers could reproduce the procedure and analysis. The methods section should also address any anticipated sensitivity analyses and robustness checks.

The methods section should conclude with a study design table clearly articulating the link between the research question(s), hypothes(es), sampling plan(s), analysis plan(s), and anticipated interpretation given different outcomes. The table should use the template here. See an example table here. Aside from the study design table template, there are no word limits or required formatting specifications.

Stage 1 submissions should be accompanied by a cover letter that confirms that all necessary resources and approvals are in place for the proposed research, provides an anticipated

timeline for completing the study if accepted, and discloses any new or continuing potential conflicts of interest. Researchers must also submit evidence of approval by a university ethics committee or institutional review board (IRB) before in-principle acceptance is confirmed.

Evaluation Criteria

Stage 1 Registered Reports will be reviewed by peer reviewers recruited by the Editorial Board to align their subject matter and methodological expertise with the submitted Pre-Proposal Form. Stage 1 Registered Reports can be declined for substantive considerations about the question and methodology, or practical considerations related to data availability. As described in the pre-proposal evaluation process, these assessments are made independently of each other and only the academic Editorial Board and reviewers managed by COS will assess the substantive questions and methods. In addition to evaluating the quality of the measures and methodology in general, peer reviewers will be tasked by Editors to consider the following questions:

- 1. What are the research questions? Does the focus of the submission adhere to the design features and topics enumerated in the RFP?
- 2. How important is the proposed research for the advancement of scientific inquiry?
- 3. Is there a clear mapping between the research question(s), hypothes(es), sampling plan(s), analysis plan(s), and anticipated interpretation given different outcomes? Does the submission explain precisely what would confirm or disconfirm the hypothes(es)?
- 4. Are the scientific questions and hypotheses clearly motivated, and will the proposed study design adequately test each?
- 5. Does the submission prespecify sensitivity analyses or robustness or data quality checks? If the submission includes prospective data collection as in an experiment, does the submission prespecify checks or corrections for potential so-called demand characteristics of the study design (i.e., characteristics that could cue participants to the goals of the study, which might lead them to consciously or subconsciously alter their behavior)?
- 6. Does the submission demonstrate that their sample size will be sufficient to provide informative results? If the submission includes a power analysis, does it justify the anticipated effect size?
- 7. Is the submission sufficiently detailed to enable reproduction of the Stage 2 results?
- 8. Are the measures of social or emotional health validated and appropriately cited? If using self-reported survey measures across multiple countries, does the submission prespecify how measurement invariance will be tested and if not, why such checks are infeasible or unnecessary?

After the peer reviewers complete their reviews, the Editor assigned to the submission will issue a decision of in-principle acceptance or rejection. When appropriate, the Editor will coordinate a revision and resubmission process. Accepted Stage 1 Registered Reports will be published in *Lifecycle Journals*, after which authors can proceed with their data collection and direct coordination with Meta for data access.

After the Stage 1 Registered Report is published, it will be open for evaluation by experimental evaluation services as part of *Lifecycle Journals*. For example, a service like the <u>Social Science Prediction Platform</u> might engage other social scientists to register their predictions of what will be observed based on the Stage 1 Registered Report. These evaluations will enhance scholarly engagement with the research.

Stage 2 Registered Reports

Summary of Submission Instructions

Stage 2 Registered Report submissions include the results and conclusions from the research. Analyses for results reported in Stage 2 submissions should adhere as closely as possible to the analysis plans in the accepted Stage 1 Registered Report. Deviations from accepted Stage 1 Registered Report analysis plans can be the basis of Editors declining to recommend Stage 2 Registered Reports. If there are any deviations from the accepted analysis plans, the authors should consult the Editorial Board for advice as soon as possible. If there are any deviations, then results should appear in two sections: Planned and Unplanned.

The Planned section must report all outcomes of pre-registered hypotheses and must adhere to the analysis plan as specified from the Stage 1 Registered Report. However, if an aspect of the analysis plan in the Stage 1 Registered Report is later found to be inappropriate (e.g., logically flawed or unfounded), then the Editorial Board, with input from reviewers, must agree that the analysis is inappropriate, and the results can be omitted from the Stage 2 Registered Report. Though, the analysis plan should still be included in the methods section with a justification for why the results have been omitted.

The Unplanned section must report any analyses that deviate from the Stage 1 analysis plan. Unplanned analyses should be clearly described and justified. Justified deviations could include, for example, transforming variables in a new manner, or changing the statistical model used, only if the observed data distributions require such changes to fulfill statistical assumptions. Researchers must appropriately calibrate the uncertainty of any unplanned analyses. Researchers must also appropriately caveat unplanned analyses as preliminary and inconclusive. Unplanned analyses should not appear in the abstract or conclusions except where permitted by exception by the Editorial Board. Unplanned analyses must address the same research topic and questions and the same outcome measurements as those specified in the Stage 1 Registered Report.

Evaluation Criteria

Stage 2 Registered Reports will also be published in *Lifecycle Journals*. They will be reviewed for their adherence to the Stage 1 Registered Report plan, and their responsible and transparent reporting of any deviations from the planned research. Peer reviewers will be tasked with evaluating questions such as the following:

1. Did the authors adhere to the research design approved in the Stage 1 submission?

- 2. Are any deviations from the approved research design clearly documented and justified?
- 3. Are the findings interpreted according to the anticipated research design and Stage 1 specification for what outcomes would confirm or disconfirm the Stage 1 hypotheses? If not, have the authors clearly documented and justified why not?

After Editors have made a final recommendation for the Stage 2 Registered Report, authors will have the option to assign a Version of Record (VOR) to their report making *Lifecycle Journals* the final publication outlet for the project. Alternatively, authors could refrain from assigning a VOR and submit the Stage 2 Registered Report to another journal.

After the Stage 2 Registered Report is published, it will be open for evaluation by experimental evaluation services as part of *Lifecycle Journals*. For example, a service like <u>FAIRsharing</u> might provide authors with guidance on how to document data and materials to ensure it has been formatted with appropriate community-defined standards. A service like the <u>Institute 4</u> Replication might assess the reproducibility of the Stage 2 Registered Report findings by gaining approval to access the data and rerun the analytic code. The full array of evaluation services will diversify assessment and increase engagement with the quality of the scholarly work submitted through the *Lifecycle Journals* project.

Anticipated Timeline

Meta and COS are working towards the following timeline. Dates are subject to change. If you have not already, <u>sign-up for alerts</u> about this pilot program to receive updates.

Anticipated Dates	Milestone Description	Assumptions Underlying Anticipated Dates
September 5, 2024	Deadline for authors to submit Pre-Proposal Forms	 Approximately 7 weeks for researchers to read and respond to RFP Minimum of 2-3 weeks for researchers to read the <i>User Guide</i> and data-sharing agreement and prepare their Pre-Proposal Forms
September 26, 2024	Editors invite selected authors to submit a Stage 1 Registered Report	 Approximately 2 weeks for Editors to review and rate Pre-Proposal forms Approximately 1 week for Editors to discuss and select Pre-Proposal Forms using lottery described in the RFP
October 10, 2024	Selected authors submit Data Request Forms	 Approximately 2 weeks to formulate Data Request Form after invitation to submit Time needed for Meta review before submission of Stage 1 Registered Report

Anticipated Dates	Milestone Description	Assumptions Underlying Anticipated Dates
December 10, 2024	Meta responds to the Data Request Forms	 Time needed for Meta review before submission of Stage 1 Registered Report
January 9, 2025 at the latest	Stage 1 Registered Report submitted	A minimum of 4 weeks for researchers to revise Stage 1 Registered Report if any requested data is not available
February 20, 2025 at the latest	Editors and reviewers evaluate Stage 1 Registered Report	Approximately 4 weeks for review and 2 weeks for Editor deliberation
February to August 2025	Authors coordinate with Meta for data collection	 Data collection starts after the winter holidays Researchers will need to sign a data sharing agreement with Meta Approximately 6 months for data collection
September to October 2025	Authors submit Stage 2 Registered Report	Analysis and drafting can be conducted as soon as data collection is completed and data is delivered, which may vary across projects
October to December 2025	Editors and reviewers evaluate Stage 2 Registered Report	Approximately 4 weeks for review and 2 weeks for Editor deliberation

Summary of Reporting Expectations

Stage 1 Registered Report (RR) Reporting Expectations

Object	Status if Rejected	Status if In-Principle Accepted
Pre-Proposal Form	Closed by default; Author decision to Open	Open by default; Closed with Editor-approved exceptions or embargos
Data Request Form and Meta's Response	Closed by default; Author decision to Open	Open by default; Closed with Editor-approved exceptions or embargos
Stage 1 RR paper (original and revised, if applicable)	Closed by default; Author decision to Open	Open by default; Closed with Editor-approved exceptions or embargos
Stage 1 RR reviews	Closed by default; Author decision to Open	Open by default; Closed with Editor-approved

Object	Status if Rejected	Status if In-Principle Accepted
		exceptions or embargos
Stage 1 RR author response to reviews	Closed by default; Author decision to Open	Open by default; Closed with Editor-approved exceptions or embargos
Stage 1 Editor decision	Closed by default; Author decision to Open	Open by default; Closed with Editor-approved exceptions or embargos
Stage 1 <i>Lifecycle Journals</i> experimental evaluation services	Closed by default; Author decision to Open	Open by default; Closed with Editor-approved exceptions or embargos
University ethics approval, research materials, etc.	Closed by default; Author decision to Open	Open by default; Closed with Editor-approved exceptions or embargos

Stage 2 Registered Report (RR) Reporting Expectations

Object	Status if Rejected	Status if Accepted
Stage 2 RR paper (original and revised, if applicable)	Open by default upon Editor decision	Open by default upon Editor decision
Stage 2 RR reviews	Open by default upon Editor decision	Open by default upon Editor decision
Stage 2 RR author response to reviews	Open by default upon Editor decision	Open by default upon Editor decision
Stage 2 Editor decision	Open by default upon Editor decision	Open by default upon Editor decision
Stage 2 <i>Lifecycle Journals</i> experimental evaluation services	Open by default upon completion, pending Editor decision	Open by default upon completion, pending Editor decision
Metadata, code, research materials, etc.	Open by default upon Editor decision	Open by default upon Editor decision
Researcher's data	Open by default; Closed if required, but with a path for restricted data access disclosed for reproduction purposes	Open by default; Closed if required, but with a path for restricted data access disclosed for reproduction purposes
Consented Instagram data whether standalone or when combined with other data	Closed by default with path for restricted data access for reproduction purposes	Closed by default with path for restricted data access for reproduction purposes

References

Chambers, C. D., & Tzavella, L. (2022). The past, present and future of Registered Reports. Nature Human Behaviour, 6(1), 29–42. https://doi.org/10.1038/s41562-021-01193-7

National Academies of Sciences, Engineering, and Medicine. (2024). Social Media and Adolescent Health. The National Academies Press. https://doi.org/10.17226/27396

National Academies of Sciences, Engineering, and Medicine. (2019). Reproducibility and Replicability in Science. The National Academies Press. https://doi.org/10.17226/25303

Scheel, A. M., Schijen, M. R. M. J., & Lakens, D. (2021). An Excess of Positive Results: Comparing the Standard Psychology Literature With Registered Reports. Advances in Methods and Practices in Psychological Science, 4(2), 25152459211007467. https://doi.org/10.1177/25152459211007467

Soderberg, C. K., Errington, T. M., Schiavone, S. R., Bottesini, J., Thorn, F. S., Vazire, S., Esterling, K. M., & Nosek, B. A. (2021). Initial evidence of research quality of Registered Reports compared with the standard publishing model. Nature Human Behaviour, 5(8), 990–997. https://doi.org/10.1038/s41562-021-01142-4

Wiseman, R., Watt, C., & Kornbrot, D. (2019). Registered Reports: An early example and analysis. PeerJ, 7, e6232. https://doi.org/10.7717/peerj.6232