

3ie Research Transparency Policy Initial version: April 2018¹

1. Background

The International Initiative for Impact Evaluation (3ie) has emphasised principles of research transparency since its establishment in 2008. Our grants require that data collected with 3ie funding be made public in the 3ie data repository. Our Registry for International Development Impact Evaluations (RIDIE) ensures that all development-related impact evaluations conducted in low- and middle-income countries, including those using quasi-experimental designs, have a place to preregister. Finally, we have a replication programme focused on improving the reliability of impact evaluation results used for evidence-informed development policymaking and programme design.

In recent years, there has been a strong movement in the research community towards improving the standards for research transparency. By research transparency, 3ie refers to posting research preregistrations, developing pre-analysis plans, creating replication files, reporting adequate information, ensuring complete citations and publishing open research. In June 2015, *Science* published a statement from 39 academics and research funders, led by Brian Nosek of the Center for Open Science, calling for journals and funders to require increased research transparency. This group published Guidelines for Transparency and Openness Promotion for direct adoption and use by journals and funders. Moreover, key funders of international development research, including major funders such as the UK Department for International Development (DFID), the Bill & Melinda Gates Foundation, and the William and Flora Hewlett Foundation, have all enacted policies related to timely and free public access to data and research.

We fully embrace the movement towards improved research transparency. 3ie produces research – whether in-house or through grants or contracts – that clearly and precisely documents the data and methods used in the analysis and the materials used to conduct the study. In this policy document, we articulate our commitment to research transparency and align our policy with the transparency policies of our key funders, such as DFID.

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¹ We welcome your feedback on this policy. Please send your comments to <u>3ie@3ieimpact.org</u>, with 'RTP feedback' in the subject line.

In summary, the 3ie Research and Transparency Policy requires 3ie researchers to take the following actions:

- Preregister their studies in the appropriate registry for instance, impact evaluations must be registered in RIDIE;
- Develop a pre-analysis plan before starting the study;
- Ensure all materials supporting the claims made in reports, publications or other communication are available for purposes of replication, including push button replication (PBR) by 3ie, and reuse of data;
- Provide a comprehensive and transparent description of study context, design, analysis methods and results in study reports to ensure studies are reproducible and useful;
- Adhere to appropriate citation of any data, programme code and other methods; and
- Provide unrestricted access to and reuse of all published research funded, in whole or in part, by 3ie.

2. Overview of the policy

Sections 1–6 below follow closely the Center for Open Science's Guidelines for Transparency and Openness Promotion. One exception is that we use the description '3iefunded researchers' and '3ie researchers' instead of 'grantees' to make clear that these policies apply to any work that we may fund through contracts, as well as to our own inhouse research, regardless of the funder or funding mechanism. When 3ie funds an evaluation through a grant, the lead researcher's institution assumes the liability for following 3ie's transparency policy. Another exception is that the section on the timing of making data and research materials available has been revised to be consistent with those of 3ie key funders, namely DFID, the Gates Foundation and the Hewlett Foundation.²

In cases in which 3ie-funded researchers are subject to additional data or research transparency policies – for example, from other funders or from journals – the more stringent of the policies will apply.

3. Preregistration of studies

*Sie requires all Sie-funded research to be preregistered and publicly available. Sie-funded impact evaluations must be preregistered in RIDIE. Researchers may also register their study in other registries, as long as it is also in RIDIE. Other Sie-funded research that does not qualify to be in RIDIE should be preregistered in a relevant registry.*³

Preregistration of studies involves describing the study design (including sample size), outcome variables, treatment conditions, and any predictor or control variables before conducting the research (Open Science Framework). In cases in which research is already ongoing (prior to receiving 3ie funding) and is preregistered in a different registry, 3ie-funded researchers may submit proof of this preregistration for 3ie review and approval for use for 3ie-funded work.

² The policies in section 7 below follow the Bill & Melinda Gates Foundation's Open Data policies. ³ Here are examples of other institutional registries for different types of research: ClinicalTrials.gov, the American Economic Association's RCT Registry, Open Science Framework and EGAP registration.

Researchers will have to provide evidence of preregistration as a condition for the release of payment. Researchers must also confirm that the preregistration will adhere to the RIDIE disclosure requirements or those required for the preregistered badge maintained by the Center for Open Science.

3ie, or an entity acting on behalf of 3ie, may verify that preregistration adheres to the specifications for preregistration and then provide certification of preregistration. Researchers are responsible for ensuring that their funded projects continue to meet these conditions.

4. Pre-analysis plan

Sie-funded researchers are required to develop a pre-analysis plan before starting data collection.

The pre-analysis plan must be published before the completion of the grant. It will be datestamped, and researchers are strongly encouraged to make it public immediately through RIDIE. When this is not possible, the document will be date-stamped and marked as private on the RIDIE system, with a publication date set for the closing of the grant. Studies initiated prior to receiving 3ie funding are exempt from this requirement.

The pre-analysis plan should describe the specification and sequence of all planned statistical analyses. It should also clearly describe primary and secondary outcomes and any planned subpopulation analysis. All written study reports should reference the pre-analysis plan, including a section describing and justifying any deviations from it. In developing their plans, researchers should consult the 3ie template and the Center for Open Science guidance on pre-analysis plans.⁴

Note that the requirement to develop a pre-analysis plan does not imply that researchers are prevented from conducting additional exploratory analyses. But if any post-hoc analyses are conducted, those results should be transparently reported as such in the study report and any additional associated publications.

5. Sharing data, statistical code and research materials

3ie requires that all materials supporting research findings in reports, publications or other communications should be available on the 3ie Dataverse for purposes of replicating the results and reusing these data.

The 3ie data repository – also referred to in this policy as the 3ie Dataverse – is hosted on the highly trusted Harvard Dataverse platform. It adheres to policies that make data discoverable, accessible and usable and ensure it will be preserved for the long term.

3ie maintains ethical standards in data archiving. Therefore, 3ie-funded researchers are required to ensure full de-identification of qualitative and quantitative data before their submission to 3ie. The 3ie data repository assigns unique and persistent identifiers and requires de-identification according to accepted best-practice guidelines.

⁴ Open Science Framework, (2016). Openness is a core value of scientific practice. Charlottesville: Center for Open Science. Available at: https://osf.io/tvyxz/wiki/home/ [Accessed 1 March 2018].

To allow for the replication of 3ie-funded research, 3ie requires the following:

- 1. 3ie-funded researchers <u>reusing data</u> available from public repositories must provide programme codes, scripts for statistical packages and other documentation sufficient to allow an informed researcher to reproduce all published results precisely.
- 2. 3ie-funded researchers <u>using original data</u> must take these actions:
 - a. Submit to 3ie the entire data set (paid for by 3ie funds), including data collected but not used in the analysis. 3ie expects researchers to budget to cover these costs.
 - b. Include all variables, treatment conditions and observations described in the final report to 3ie.
 - c. Ensure that the data are appropriately de-identified.⁵
 - d. Provide a full account of the protocols and tools used to collect, preprocess, clean or generate the data and metadata, including collecting agency, date and training provided to survey team.
- 3. Data (quantitative and qualitative),⁶ programme code, research materials and other documentation of the research process must be made available through the 3ie data repository.
 - a. These materials are to be submitted to 3ie before the payment of the final tranche of the grant or uploaded to 3ie's Dataverse. 3ie will make them publicly available on 3ie's Dataverse as early as possible, no later than 12 months after draft report submission or 6 months after publication of the final technical report on 3ie's website, whichever comes first. In exceptional cases, 3ie may allow researchers a grace period to publish their data. Regardless, the data must be uploaded to 3ie's Dataverse and they will automatically be made available at the end of this grace period.
 - b. All published results must include information on how to access original deidentified data sets as received by the researcher.
 - c. The above conditions need to be met before final reports are accepted and final tranches are paid. Researchers are responsible for ensuring that their funded projects continue to meet these conditions. Failure to do so may lead to exclusion from future 3ie funding.

5.1 Exceptions to sharing data and materials with 3ie

In cases in which 3ie funds impact evaluations jointly with other donors, decisions on intellectual property and data sharing will be agreed upon at the time of proposal approval. 3ie's executive director will review requests for exclusions to this policy only after a 3ie director and head of evaluation recommends such an exclusion.

3ie recognises that in rare cases, despite researchers' best efforts, some or all data cannot be shared for legal or ethical reasons (for example, when data cannot be de-identified). In such cases, the researchers must inform 3ie at the time of proposal submission. This will be taken into account during the review process. Researchers should anticipate data and material sharing at the beginning of their study design to provide for these circumstances.

 ⁵ Here are a few suggested resources: (a) ICPSR Guide to Social Science Data Preparation and Archiving; Dryad Human Subjects Data; (c) AJPS Guidelines for Preparing Replication Files.
⁶ For a list of qualitative data types, click here.

Nevertheless, in some cases, it may be necessary to provide access under restrictions to protect confidential or proprietary information.

3ie may make exceptions to data and material access requirements, provided the researchers adhere to the following conditions. They must:

- Explain the restrictions on the data set or materials and how they preclude public access;
- Provide a public description of the steps others should follow to request access to the data or materials;
- Publicly post statistical code and other documentation that will precisely reproduce all published results; and
- Provide access to all data and materials for which the constraints do not apply.

5.2 Push button replication

3ie intends to push-button-replicate all 3ie-funded impact evaluation research as a condition of final payment. In the PBR, 3ie will attempt to reproduce the study results using the data and statistical code the researchers provide. 3ie will only conduct minor troubleshooting of the code during the PBR (for example, changing the file path in the scripts), with the expectation that the researchers will provide adequate materials to replicate their findings.⁷ Results that cannot be replicated will be returned to researchers with a requirement that they provide additional materials or revise their report so that the PBR results match the study and report.

6. Transparent reporting of study design, analysis methods and results

3ie requires funded researchers to provide a comprehensive and transparent description of the study context, design, analysis methods and results in study reports to ensure studies are reproducible and useful.

Transparency and reproducibility are cornerstones of science. 3ie requires authors to follow standards for disclosing key aspects of their research to ensure studies are reproducible and useful. Highly structured study reports using standardised headings and terminology will enhance the discoverability of studies and data, increasing the potential for automatic indexing and data extraction in the future. 3ie provides researchers with templates for study reports, which have been developed to be consistent with best-practice reporting standards published by the Equator Network.⁸

3ie-funded researchers are encouraged to review these standards. During proposal and report submission stages, researchers should confirm that they have reviewed the standards; report whether any standards are relevant for the research application; and confirm that they will follow (at proposal stage) or have followed (when reporting) those standards in the draft final report. 3ie is currently reviewing these standards and will give additional guidance in the near future.

⁷ 3ie draft protocol for push button replication.

⁸ The following reporting standards are particularly relevant: Describing interventions in sufficient detail to allow their replication, Reporting of pragmatic trials in healthcare, Cluster randomised trials and Reporting of intervention effects in randomised trials where health equity is relevant.

7. Citation standards

All 3ie-funded study reports must adhere to appropriate citation referencing of any data, programme code and other methods.

Data, programme code and other methods materials are recognised as original intellectual contributions, which should be cited in the text and listed in the references. References for data sets and programme code must include a persistent identifier, such as a digital object identifier (DOI). Persistent identifiers ensure future access to unique published digital objects, such as a text or data set. Persistent identifiers are assigned to data sets by digital archives, such as institutional repositories and partners in the Data Preservation Alliance for the Social Sciences (Data-PASS).

Here is an example of an appropriate data set citation using 3ie-compliant Harvard referencing:

Campbell, A and Kahn, RL, 1999. *American national election study*, *1948.* ICPSR-7218-v4. Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributor]. Available at: https://doi.org/10.3886/ICPSR07218.v4> [Accessed 13 April 2018].

8. Open access for 3ie publications and journal articles

The policy of 3ie is to ensure unrestricted access to and reuse of all 3ie-published research funded, in whole or in part, by 3ie.

3ie will always publish the final approved technical report from 3ie grants and contracts on our website, which may include being published in one of 3ie's publication series. These publications comply with Creative Commons Attribution-Non-commercial 4.0 International (CC BY NC 4.0).

In addition, 3ie-funded researchers are encouraged to publish in recognised peer-reviewed journals. We strongly encourage researchers to publish in open access publications.