*Exploratory Reports* is a format for empirical submissions outside of the hypothetico-deductive framework. These studies are inductive/hypothesis-generating, and tend to address relatively open research questions, without strong *a priori* predictions. The range of possible data types (quantitative or qualitative) is broad, and each submission will be assessed on its own merits. These guidelines are indicative only, and the criteria for publication may be weighted differently in different cases. The **main criteria** for evaluation by reviewers are:

1) Scientific excellence and rigour.

2) Importance and originality of the research question.

3) Clarity and completeness of data presentation.

4) Likely value of the shared dataset to others.

5) Quality and appropriateness of theoretical interpretation.

6) Generation of specific testable predictions likely to lead to subsequent confirmatory studies.

Articles will typically follow the format of a standard research report, but with an emphasis on data presentation and discussion. The **Introduction** should establish the purpose of the study succinctly, and the **Methods** should be sufficient to enable direct replication. The quality of data exploration and presentation of **Results** is central to this format. Some relevant considerations are as follows:

- Authors should present their data fully, giving consideration to the most effective and comprehensive means of data visualisation.
- Authors should present their data openly, including apparent anomalies, and explore the robustness and limits of the main patterns of interest.
- Parameter estimation rather than hypothesis-testing, whether Bayesian or frequentist, is encouraged.
- Confidence or credibility intervals are encouraged, but should not be used to support binary existential claims. Such intervals can instead support estimates of roughly how much there is of something. The use of raw effect sizes, instead of or in addition to standardised effect sizes, is encouraged, to inform interpretation.
- Reporting of results may have a narrative component, including an account of how the data analysis developed, and/or an initial interpretation of the data.

The **Discussion** should focus on theoretical interpretation of the data, taking account of the exploratory context. Conclusions may be tentative, but the *potential* significance should be clear. The Discussion should be generative, framing new hypotheses on the basis of the data presented, and making testable predictions for subsequent confirmatory research.

**Cover letter:** Authors should specify that they wish to submit their work as an *Exploratory Report*, and explain why they believe it is suited to this format. They must confirm that they have uploaded their full data sufficient to reproduce the reported analyses, ideally with the analysis code. They must confirm that they will share these openly if the article is accepted for publication, in accordance with [Transparency and Openness Promotion](#) Standard #2, Level 2 (see next page).

If you are unsure whether your work would be appropriate as an *Exploratory Report*, then a **pre-submission enquiry**, describing the study and the nature of data, may be sent to Rob McIntosh <r.d.mcintosh@ed.ac.uk>.

: **Data Transparency (Standard #2, Level 2)[1]**

The policy of *Cortex Exploratory Reports* is to publish papers only if the data used in the analysis are clearly and precisely documented and are maximally available to any researcher for purposes of reproducing the results.

1. Authors using original data must
   a. make appropriately anonymised data available within a trusted digital repository OR provide a statement in the TOP submission checklist explaining why data are not publicly archived and how data can otherwise be accessed (Note: If all data required to reproduce the reported analyses appears in the article text, tables, and figures then it does not also need to be posted to a repository.)
   b. include all variables, treatment conditions, and observations described in the manuscript.
   c. provide a full account of the procedures used to collect, preprocess, clean, or generate the data.

2. In some cases, some or all data cannot be shared for legal or ethical reasons. For example, in some studies, patient data can be impossible to fully anonymise, or authors may lack ethical permission to archive even fully anonymised data. The journal will grant exceptions to data access requirements provided authors:
   a. as outlined above, explain the restrictions on the data or code and how they preclude public access.
   b. provide a public description of the steps others should follow to request access to the data or code – e.g. through direct contact with authors, the relevant ethics committee or other external authority.
   c. provide access to all data for which the constraints do not apply.

3. Where shared publicly, any data, code, and other documentation of the research process should be made available through a trusted digital repository. Trusted repositories adhere to policies that make data discoverable, accessible, usable, and preserved for the long term. Trusted repositories also assign unique and persistent identifiers. Author maintained websites are not compliant with this requirement.
   a. Dissemination of these materials may be delayed until publication. Under exceptional circumstances, editors may grant an embargo of the public release of data for at most one year after publication.
   b. Articles accepted for publication will not be assigned a publication date until the above conditions have been met. Authors are responsible for ensuring that their articles continue to meet these conditions. Failure to do so may lead to an editorial expression of concern or retraction of the article.

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[1] This text is edited from the Level 2 Standards for Data, Analytic Methods (Code), and Research Materials Transparency, to isolate the required transparency standards for data. Authors are also encouraged, but not required, to meet the corresponding Level 2 Standards for Analytic Methods (Code) and Research Materials, as stated fully in the [TOP guidelines](#).