Call for Collaborators:

Practical Guidance for Promoting Open Science in Developing Countries

Drafted by: Hu Chuan-Peng (Ph.D.) Nanjing Normal University, Nanjing, Jiangsu Province, China

Open science is growing as the mainstream in developed countries and is <u>promoted by UNESCO</u>. However, Open Science still needs to achieve its diversity, equity, and inclusivity (DEI) goals; indeed, the movement needs to catch up in the developing world. Recently, researchers from developing countries have started to make their voices heard, calling for a re-design of open science to suit developing countries (<u>Onie, 2022, Nature</u>), support for grassroots open science networks (<u>Jin et al., in press, AMPPS</u>), and to avoid potential harm (<u>Ross-Hellauer, 2022, Nature</u>).

Although these arguments may attract some attention to Open Science in developing countries, without actions, there will be no changes. Actions need practical guidance and examples, especially for early career researchers. Here, we are calling for co-authors for an invited paper that will be published in *Advances in Methods and Practices in Psychological Science*, a leading outlet focused on promoting open science methods and practices. Specifically, we are seeking co-authors for a paper that can **provide practical guidance/examples for actions to promote open science in developing countries**. We emphasize practical solutions and examples that are feasible and within reach of researchers in developing countries. Thus, we invite colleagues from different regions/countries to share their experiences, examples, and practical suggestions specific to their sociocultural backgrounds.

This paper will collect practical solutions for researchers in different developing countries, with both a global view and fine-grained granularity to specific countries. It will provide a practical guide for researchers who hope to promote open science and DEI, as well as insights for policymakers, funders, and other stakeholders interested in promoting open science practices in their respective regions or countries.

Scope of the Paper

The paper is preliminarily structured as follows:

- An introduction to Open Science and recommended practices ("Best practices").
- An overview of common barriers, opportunities, & pitfalls across different developing countries.
- Practical solutions, suggestions, and good examples for promoting open science in specific regions/countries with respect to one or more aspects of these topics (supplementary information is encouraged for detailed guidance or examples):
 - Open access
 - Open research practices (open data, open code, open materials, etc)
 - Transparent practices (preprint, preregistration, etc)
 - Reproducible practices (replication study, verification analysis)
 - Meta-research

- Citizen/crowdsourcing science
- Methods or practices that can increase generalizability and DEI:
 - Beyond the hypothetico-deductive reasoning and positivist
 - Small-scale infrastructures
 - Training/education
 - Open-source software and tools (psychological tests).
- Overall recommendations for policymakers, funders, researchers, and other stakeholders interested in promoting open science in developing countries as a whole.

Responsibilities of the Co-Authors

Collaborators will be responsible for contributing to one section of the paper, sharing their own experiences in their own region or society. Collaborators will also participate in regular virtual meetings to discuss progress, provide feedback, and make decisions about the content and direction of the paper. All collaborators who contribute time and content to the paper will be included as co-authors. We make no guarantees in advance about co-authorship roles (e.g., being a 2nd... or last author). The authorship position will be determined based on content contributions and the amount of overall work on the collaborative process according to best practices in the field.

Time Needed

The expected time commitment for collaborators will be approximately 3-4 months, with a total time commitment of approximately 30-40 hours per collaborator/team. This includes time for conducting literature reviews, attending virtual meetings, and drafting sections of the paper.

How to join

If you are interested in collaborating on this paper and are based in a developing country or have a strong connection with a developing country, please send a brief expression of interest, including your areas of expertise and a brief summary of your relevant experience, to Dr. Hu Chuan-Peng: hcp4715@gmail.com. We welcome collaborators from different fields of psychology, as well as other disciplines, including but not limited to: science and technology studies, development studies, public policy, and library and information science.