

GLOHRA Academy Innovative Training Offer

Training Report

Training Program: Applied Implementation Science Research in Global Healthcare, Systems, and Policy Settings

Program Coordinators: Kavita Singh (HIGH, Heidelberg) and Sarah Forberger (BIPS, Bremen)

Date: 07 – 11 October 2024

Location: Hybrid (In-person at Heidelberg Institute of Global Health, Heidelberg University, Germany and Online)

I. Introduction

The Implementation Science Research Training Program was designed to equip early and mid-career researchers with the theoretical and practical knowledge required for conducting



high-quality implementation research in low- and middle-income countries. With an emphasis on foundational and advanced techniques, the program aimed to deepen participants' understanding of implementation research design, theories, models and frameworks, measurement of implementation outcomes, stakeholder engagement, cultural adaptations of implementation strategies and key ingredients for writing a successful implementation research grant application.

II. Program Structure and Participation

Format and Attendance:

- **In-person:** 25 participants attended the program at Guest House Seminar Room, Heidelberg University, Germany

- **Online:** 66 participants joined via Zoom

Participant Profile:

The attendees included doctoral and postdoctoral researchers from various institutions who brought diverse expertise in the social sciences, health sciences, psychology, education, and public health (see the enclosed list of participants).

Faculty: Till Bärnighausen (Germany), Michel Wensing (Germany), Brian Oldenburg (Australia), Mark Huffman (USA), Leslie Johnson (USA), Dorairaj Prabhakaran (India) and Manuela De Allegri (Germany)

III. Training Agenda Summary

The training covered a comprehensive agenda tailored to address the specific needs of early and mid-career researchers in implementation research, including:

- **Introduction to the basic concepts of Implementation Science Research:** Brian Oldenburg presented an overview of key principles, frameworks, and methodologies in implementation science, emphasizing how these apply to real-world research and policy contexts.
- **Framing an important implementation research question and Study Design:** Focused on designing robust implementation studies, covering quantitative, qualitative, and mixed methods approaches, as well as innovative designs like hybrid implementation trial designs and SMART (Sequential multiple assignment randomized trial) were presented by Kavita Singh
- **Theories, Models and Frameworks used in Implementation Research:** Leslie Johnson presented practical guidance on deterministic and explanatory theories, models and frameworks using case studies, as well as discussed, the importance of cultural adaptations of implementation strategies in diverse healthcare contexts
- **Measuring implementation outcomes:** Sarah Forberger and Mark Huffman illustrated the use of NOMAD and policy benchmarking framework to assess implementation outcomes.
- **Writing a successful implementation science research proposal:** Implementation science grant opportunities from the European funders and the US NIH funding perspectives were presented by two experts (Mark Huffman and Manuela De Allegri).
- **Dissemination and Knowledge Translation:** Michel Wensing presented strategies for effective dissemination and engagement with stakeholders, emphasizing translating research findings into practice and policy recommendations.
- **Capacity Building in Implementation Research:** Discussion of research capacity strengthening and opportunities to build a research career in implementation science.



IV. Engagement and Interactive Components

To foster engagement across in-person and online formats, the program included the following:

- **Case Studies:** Real-world case studies illustrated challenges and solutions in implementation research, with facilitators encouraging participants to share insights and perspectives.
- **Q&A Sessions:** Dedicated time was allocated for participants to engage with facilitators and guest speakers, addressing specific research challenges.
- **Panel Discussion:** The panel discussion allowed asking the experts and getting insights and tips to thrive in Implementations Research (following Mark Huffman's support: "You can do this!"). Topics included effective stakeholder engagement, utilising storytelling for complex data, and building partnerships to ensure research findings reach policy and practice.
- **Group Work and Presentations:** During the whole week, participants, guided by experts, collaborated in small groups on research design, implementation strategies, and stakeholder engagement, applying the skills they learned to their own hypothetical projects. Each group presented its findings, encouraging peer feedback and reinforcing practical skills.

V. Participant Feedback and Evaluation

Overall, feedback from participants was positive, with high ratings for session relevance and interactivity. Key takeaways from the evaluations include:

- **Content Relevance:** Most participants rated the content highly relevant to their research objectives.
- **Networking Opportunities:** Many participants valued the networking opportunities afforded by the hybrid format. Daily networking sessions, including "clue card" introductions and a "speed dating" round, fostered connections among participants, encouraging collaboration across varied research backgrounds. Experts participated actively, enhancing the networking experience for all attendees.

VI. Recommendations and Future Directions

Based on participant feedback and facilitator observations, the following recommendations are proposed for future iterations of the program:

1. **Additional Sessions to discuss individual participant projects:** Some participants expressed interest in presenting their individual research projects to the larger group and soliciting review comments from Faculty and other participants.
2. **Enhanced Online Engagement Tools:** Implementing additional digital engagement tools could improve the experience for online participants, fostering greater interactivity.

VII. Conclusion

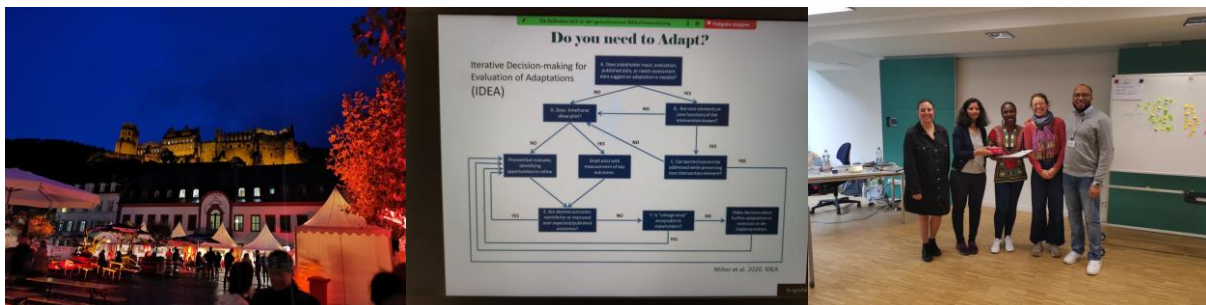
The Implementation Research Training Program successfully met its objective of equipping early-career researchers with critical skills and knowledge for conducting effective implementation research. The hybrid format proved advantageous, accommodating many participants and fostering an inclusive learning environment. This training marks a positive step

in developing the next generation of implementation researchers, with a lasting impact anticipated on their future research endeavours.

Participants acquired essential skills across several areas crucial to implementation science. They learned to formulate research questions that are both relevant and applicable to real-world contexts, selecting study designs tailored to the complexities of public health. By understanding and applying theoretical frameworks and measurement models, participants developed an ability to structure and analyse their projects more effectively. The training, led by experienced mentors, emphasised integrating quantitative and qualitative methods, a skill vital for capturing the intricacies of healthcare systems.

The Implementation Science Research Training provided an invaluable experience for participants, enhancing their skills to conduct, translate, and apply research findings effectively. With a comprehensive curriculum that covers theoretical models, practical methods, and international networking, the training is expected to contribute significantly to advancing health policies, particularly in resource-limited settings. The program's emphasis on interdisciplinary collaboration and integrating online participation options underscored its adaptability and global outlook, paving the way for future research collaborations.

Report Prepared by: Sarah Forberger and Kavita Singh



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