A web-based Training Program in multi-center, international psychosis research

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INTRODUCTION

Quality of research depends on the quality of the data. Working with numerous researchers from different disciplines and countries, and using a wide array of instruments, is challenging. To generalize and compare findings across centers and countries, a key issue in multi-center research is the absolute need for uniformity in experimental procedures and experimenter behavior. To this means, we construed an extensive, repetitious training procedure and reliability check based on a web-based training program.

PROJECTS

An essential part of the activities of the training work package was the development of the enclosed, and official web based training area of the EU-GEI website: **GET-THERE (Gene Environment Tools - Training Home Education Reliability Europe).**
The website was intended to provide all EU-GEI researchers/assessors with information and training for the instruments to be assessed in the EU-GEI project. Apart from training documentation, manuals, instruments, score sheets and frequently updated questions and answers on procedures or inclusion criteria, it presents audiovisual material presenting how to use instruments that were used in the EU-GEI project.

GET-THERE includes information on:
1. Manuals and guidelines for all instruments
2. Instruction videos
3. Lectures on Gene x Environment interactions in schizophrenia
4. Background information on the instruments,

5. Training videos of most instruments

6. Inter-Rater Reliability-measurement videos

7. Answers to Frequently Asked Questions,

8. Written practice exercises.

9. Recruitment procedures

Training development process

Because of the multidisciplinary and cross-culture nature of EU-GEI, training guidelines were formed in collaboration with EU-GEI members from different nations and disciplines, including epidemiologists, psychologists, psychiatrists and website developers. All members were given the opportunity to raise questions and give recommendations about how to establish the most feasible and reliable training program.

What have we learned?

Overall, our training platform has led to positive feedback from– and reliable real-life assessments by its users. However, over the years feedback from users of the platform has informed us about several important issues that need to be considered when applying similar future training –based programs:

First, the rapidly growing cross-cultural research programs merit specific attention with regard to <u>language</u> and <u>adaptation of questionnaires</u>. For example, even though the official language used and mastered by almost all researchers is English, we experienced that not everyone is familiar with the use of English subtitles, and subtitles are not always well understood. In addition, while it may seem that certain questions are appropriate for use across the world (e.g. questions with regard to ethnical background, social class, and the assessment of someone's social environment), this has not always proven to be true. For example, the presence of graffiti or litter in one country may represent a lower-socio economic environment, while this may not be the case in others.

Second, training of researchers can be a time-consuming process. We learned that when guidelines need to be designed to apply to trainees of various experiences levels and disciplines

(some working as part time clinician on the side), busy work schedules should be taken into account. Making use of <u>brief videos and interesting case examples</u>, setting clear deadlines about when to watch and rate the training videos well in advance, and prompting the researchers again when the deadline is approaching has proven to yield best response. To increase reliable assessment ratings, we complemented brief web-based videos by longer interactive discussions during yearly real-life meetings, where we could go over all questionnaires and answer all questions that came up during the real- life assessments.

Third, researchers from different disciplines can approach the same interview from a different angle. For example, while psychiatrists with 10-years experience would rate a certain characteristic as deviant from the norms, the exact same situation might be considered 'normal' by a young recently graduated doctoral psychology student. <u>Direct individual feedback</u> after each short video fragment, explaining why a certain rating fitted the situation best was discovered the best approach to reach consensus, reflected by the growing consensus among researchers during the 'real life' training sessions.

General recommendations for future multi-center training-programs

To the developers:

- Make use of a web-based training platform. In large scale multi-centered studies like EU-GEI, this is the most feasible and cost-effective approach to train for reliable research
- Collaborate with other researchers from different disciplines
- Involve web design experts in the development of a training website
- Be aware of cross-cultural differences by having all questions examined by an expert in the field in each participating countries and by running through the scales at onsite meetings
- Training should be easy to follow by researchers and clinicians from different disciplines and levels of experience. Keep it easy!
- Keep the training videos short (maximum +/- 20 minutes) and interesting
- Prefer the use of English speaking actors over subtitles

- Complement online training by the planning of regular meetings with the site coordinators & the research team to update knowledge on the instruments

- Upload interesting lectures about the topic of research to keep assessors involved and aware of the potential impact of their work

- Be sure to answer all questions about the training promptly and circulate responses between all researchers in the field, so everyone is being kept informed. All feedback should be uploaded on the website and available to everyone in the field

- Make clear appointments about finishing rating videos. E.g. set deadlines about when videos need to be rated, and prompt researchers as deadline is approaching

- Provide direct individual feedback after each short video fragment, explaining why a certain rating fitted the situation/person best.

- Create a 'Golden Standard' scores of the training videos by discussion between (interdisciplinary) experts in the field

- Update the website regularly by uploading yearly Inter Rater Reliability videos.

To site coordinators
- Create an atmosphere in which the rating of real-life clinical assessments can be discussed

- Monitor the training progress of assessors closely. Has the assessor followed all necessary training? Did (s) he pass all training videos? Is the assessor making good progress?

- Attend the first few real-life assessments, and provide direct feedback to the (future) assessor

To assessors/researchers
- Ask for clarification. To establish uniformity in ratings across sites it is of great

importance to ask as soon as anything is only slightly unclear. There are no stupid questions!

- Follow the online training and watch the Inter Rater reliability videos. This is an open door, but without the active participation of the assessors, there is no use in setting up an online training program
- Provide feedback to the training-developers. What part of the training is useful? Which parts of the training were least helpful or too time consuming?

<u>Other recommendations for future research</u>

Future research projects dedicated to psychotic disorders could benefit from using a website such as GET-THERE. The template of GET-THERE is available to inform their own website upon request, by contacting EU-GEI research coordinator Karin Quanten or the Mediamens web designers (Karin.quanten@Maastrichtuniversity.nl; daan@mediamens.nl).

The GET-THERE website is available to researchers working within official health care research institutes within projects approved by Medical Ethical Committees.