

Adjustment of a German questionnaire for assessing the therapeutic relationship in telerehabilitation

Submission date 01/05/2020	Recruitment status No longer recruiting	<input checked="" type="checkbox"/> Prospectively registered <input type="checkbox"/> Protocol
Registration date 02/05/2020	Overall study status Completed	<input type="checkbox"/> Statistical analysis plan <input checked="" type="checkbox"/> Results
Last Edited 15/05/2024	Condition category Other	<input type="checkbox"/> Individual participant data

Plain English summary of protocol

Background and study aims

Over the last twenty years, there has been a great increase in technological development and digitalization. This trend is being continued with rising demand for those devices also in the health care sector. Likewise, telerehabilitation is a relatively new development. Telerehabilitation is defined as the remote delivery of rehabilitation services using information and communication technologies. It is increasingly used as an add-on treatment or alternative strategy to conventional rehabilitation for people having limited access to rehabilitation services.

In any therapy setting, non-verbal communication and therapeutic touch are relevant factors. Even the physical presence of somebody to safeguard and support are important aspects of the relationship between therapists and their patients. Such a relationship and trust between patients and their therapists have been shown to improve motivation and therapy results and is also called the "therapeutic alliance". In the field of psychology, the effects of the therapeutic alliance have been widely researched. Research has shown that a strong therapeutic partnership has positive effects on therapy outcomes.

To be able to measure the therapeutic alliance between patients and their therapists, suitable measurement tools are necessary. These tools need to be precise, valid, and reliable. This means that the questionnaires are expected to measure what they are meant to measure and this measurement should be trustworthy. That refers also to subjective instruments such as questionnaires. Different questionnaires are used to measure the therapeutic alliance, of these the Working Alliance Inventory is the most often used. It has mainly been used in psychology and is already available in a German-language version. The WAI can be used to measure the patients' or therapists' or an observer's perception of their therapeutic relationship. As far as we know, a "WAI-Telerehabilitation" is missing, to assess the therapeutic alliance between therapists and their patients in the setting of telerehabilitation. Therefore, we plan to adapt the short German therapist WAI to the setting of telerehabilitation.

Who can participate?

Academic experts and telerehabilitation experts based in Austria, Germany, and Switzerland

What does the study involve?
The study consists of three phases.

Phase 1 is used to find out what aspects belong to the therapeutic alliance in telerehabilitation. Academic experts and telerehabilitation experts are asked for an interview (around 45 minutes) to learn from their knowledge. Based on that, a first adaptation of the therapist version of the German WAI will be done by the researchers (now called WAI-TeleRe).

Phase 2 of the study involves another interview with the same experts after 3-6 weeks. Participants are asked to complete the first version of the WAI-TeleRe and talk about the easiness to understand the questions. All participants receive the same questionnaire and are asked general questions and questions specific to their area of expertise during the interview. The specific questions depend on the experts' field of expertise in relation to the therapeutic alliance. Based on that, the second adaption of the therapist version of the WAI-TeleRe will be done by the researchers.

Phase 3 of the study includes an online survey using the software Survey Monkey in 30 clinical telerehabilitation experts. They will be asked to complete the second version of the WAI-TeleRe. At the bottom of the questionnaire will be questions about the wording of the questionnaire. Based on this, the prefinal version of the therapist version of the WAI-TeleRe will be created by the researchers.

What are the possible benefits and risks of participating?
It is expected that there are no risks related to this study as only experts will participate. Moreover, there is no intervention. It is expected that later there will be an indirect benefit for patients undergoing telerehabilitation. This is because only if the therapeutic relationship can be measured properly, problems can be spotted and dealt with.

Where is the study run from?
The study is run from VASCage GmbH (Austria) and the SRH Hochschule Heidelberg (Germany)

When is the study starting and how long is it expected to run for?
April 2020 to October 2020

Who is funding the study?
VASCage GmbH (Austria)

Who is the main contact?
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Contact information

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Scientific

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Additional identifiers**Clinical Trials Information System (CTIS)**

Nil known

ClinicalTrials.gov (NCT)

Nil known

Protocol serial number

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Study information**Scientific Title**

Adaptation of the German language Working Alliance Inventory to the telerehabilitation setting:
German WAI-TeleRe

Acronym

German WAI-TeleRe

Study objectives

Can the wording of the German version of the WAI-TeleRe be adequately adapted to the interprofessional telerehabilitation setting, and does it show adequate face and content validity, as evaluated by qualitative semi-structured interviews of academic experts and telerehabilitation experts?

Ethics approval required

Old ethics approval format

Ethics approval(s)

This study does not require ethics approval as only academic experts, telerehabilitation experts and selected clinical experts working in the field of telerehabilitation are involved.

All experts will be informed in writing about the study and any further questions will be fully answered.

For Phases 1 and 2, written informed consent for study participation will be obtained from the experts before the first interview. A separate written informed consent to the audio recording of the interviews will be obtained. It will be clearly stated that the consent can be withdrawn at any time without any negative consequences.

For Phase 3, written informed consent will be obtained online, as interested experts will be informed that with their completion of the questionnaire and questions at its bottom they explicitly consent to participate in this study.

Study design

An observation study with three adaptation and evaluation phases.

Primary study design

Observational

Study type(s)

Other

Health condition(s) or problem(s) studied

Healthcare provision, rehabilitation services

Interventions

The validated German therapist WAI-SF version from (Kervern 2018) will be adapted to the interprofessional setting of telerehabilitation. The intervention of this study will consist of two qualitative interviews and an online survey.

Phase 1: Construct of the therapeutic alliance

Semi-structured qualitative interviews with 8-12 experts from academia and telerehabilitation setting will be performed, in order to collect information about the construct of the therapeutic alliance in general and of telerehabilitation in specific. The interview duration will be around 45 minutes. The semi-structured interview guide will be created a priori, according to the literature and individually adjusted to the experts, depending on the field they are working in. Written informed consent provided, the interviews will be audio recorded. The interviews will be transcribed. Data analysis will be done using coding and categorising of themes and subthemes. The results of Phase 1 will be used to adapt the German WAI to the German WAI-TeleRe.

Phase 2: Comprehensibility testing of the German WAI-TeleRe

Individual cognitive semi-structured interviews of the same experts will be performed (45 minutes). The wording, response categories and instructions of the German WAI-TeleRe will be discussed. The data analysis will consist of a summary of comments concerning potential changes to items and instructions, as well as item deletions together with reasons. This

procedure will be followed by a data synthesis and conception of a second version of the therapist version of the German WAI-TeleRe.

Phase 3: Pilot testing and creation of pre-final version of German WAI-TeleRe

An online survey using the software Survey Monkey will be conducted for a pilot testing of the second version of the preliminary German WAI-TeleRe. A total of 30 clinical experts working in the field of telerehabilitation will be purposively selected and asked to complete the adapted questionnaire. A link to the online questionnaire will be posted in social media to access as many experts as possible. At the bottom of the online WAI-TeleRe there will be open and closed questions related to the questionnaire item content, response options and understandability. Analyses of these comments will be performed to allow a third adaption, resulting in the prefinal German WAI-TeleRe. The further aims of this phase are to evaluate face and content validity of the third version of the therapist version of the German WAI-TeleRe. Based on that further phases will be planned, but these are beyond the scope of the current study, which is part of a Master's degree study in Therapeutic Sciences of a physiotherapist.

Intervention Type

Other

Primary outcome(s)

Face validity and content validity of the preliminary German WAI-TeleRe measured by a semi-structured interview (Qualitative Content Analysis) at baseline

Key secondary outcome(s)

1. Adapted wording of the German version of the WAI-TeleRe, evaluated by qualitative semi-structured interviews of academic experts and telerehabilitation experts at Phase 1 and 2 baseline
2. Demographic data (gender: female, male; age) collected either during a semi-structured interview (Phases 1 and 2) or from an online survey (Phase 3) at baseline
3. Professional data (field of expertise, professional experience) collected either during a semi-structured interview (Phases 1 and 2) or from an online survey (Phase 3) at baseline

Completion date

31/10/2020

Eligibility

Key inclusion criteria

Phases 1 and 2

At least one expert who holds a degree in, and is professionally active in, the following fields will be contacted:

1. Psychologist and physiotherapist (in one person)
2. Psychologist and academic occupational therapist (in one person)
3. Speech and language therapist and telerehabilitation expert (in one person)
4. Medical clinician and software producer for telerehabilitation (in one person)
5. Methodologist and physiotherapist (in one person)
6. Telerehabilitation expert and physiotherapist (in one person)
7. Designer and producer of exergames and therapy games
8. Academic occupational therapist

- 9. Academic physiotherapist
- 10. Academic speech and language therapist
- 11. Sports scientist & scientific coordinator of therapy games and telerehabilitation software

Phase 3

Clinical experts working in the field of telerehabilitation such as physiotherapists, occupational therapists, and speech and language therapists

Participant type(s)

Mixed

Healthy volunteers allowed

No

Age group

Adult

Sex

All

Total final enrolment

51

Key exclusion criteria

- 1. Professional inactivity
- 2. Retirement
- 3. Does not provide written informed consent to participate in the study

Date of first enrolment

06/05/2020

Date of final enrolment

31/07/2020

Locations

Countries of recruitment

Austria

Germany

Switzerland

Study participating centre

VASCage GmbH

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Study participating centre
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Sponsor information

Organisation
VASCage GmbH

Funder(s)

Funder type
Research organisation

Funder Name
VASCage GmbH

Results and Publications

Individual participant data (IPD) sharing plan

Data generated by this research that support any publications will be made available upon reasonable request as soon as possible. In addition, meaningful data from this research will be made available publically as soon as possible, wherever legally and ethically possible.

IPD sharing plan summary

Available on request

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article	Phase 1	08/03/2024	15/05/2024	Yes	No
Participant information sheet	Participant information sheet	11/11/2025	11/11/2025	No	Yes