

# Step-by-Step: A mobile mental health app for Syrian refugees

## Information for experts in Sweden

August 2020

### Content of this document:

- I. STRENGTHS Project Background
- II. The Step-by-Step self-help intervention
- III. Current status of STRENGTHS studies on SbS in Sweden
- IV. SbS Feature overview with screenshots

#### Contact:

Sebastian Burchert  
Freie Universität Berlin, Division of Clinical Psychological Intervention  
Tel: 0049 - (0) 30 - 838-57523  
Email: [s.burchert@fu-berlin.de](mailto:s.burchert@fu-berlin.de)

#### Test accounts:

If you want to try Step-by-Step, please contact us for a test account.

## I. STRENGTHS Project Background

### Summary:

The EU Horizon2020 STRENGTHS program is a joint effort by academic and research institutions from Europe, international agencies and humanitarian organizations to improve the responsiveness of mental health systems for Syrian refugees. With a strong focus on the implementation and evaluation of highly scalable solutions for refugee mental health care, STRENGTHS will—along with other approaches—investigate the potential of a smartphone-based self-help program called “Step-by-Step” (SbS). SbS was developed by the World Health Organization (WHO) in cooperation with the Lebanese Ministry of Public Health and the University of Zurich. It was adapted for smartphone implementation by Freie Universität Berlin.

### Principal investigators:

- **Dr. Marit Sijbrandij** at Vrije Universiteit Amsterdam is the principal investigator for the STRENGTHS consortium.
- **Prof. Christine Knaevelsrud** at Freie Universität Berlin is the principal investigator for the STRENGTHS trials on the Step-by-Step program.
- **Prof. Gerhard Andersson** at Linköping University is the local cooperation partner for the Step-by-Step trial in Sweden.

**Further information:**

- STRENGTHS project website: <http://strengths-project.eu/en/strengths-home/>
- Clinical trials register: <https://apps.who.int/trialsearch/Trial2.aspx?TrialID=DRKS00022144>

**List of publications on Step-by-Step and STRENGTHS:**

- Sijbrandij et al. (2017): <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5687806/>
- Carswell et al. (2018): <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6131163/>
- Abi Ramia et al. (2018): <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6315334/>
- Burchert et al. (2019): <https://www.frontiersin.org/articles/10.3389/fpsy.2018.00663/full>

## II. The Step-by-Step self-help intervention

**Theoretical background:**

SbS utilizes evidence-based cognitive behavioral techniques including behavioral activation, psychoeducation, stress management, increasing social support, positive self-talk and relapse prevention.

**Content:**

The self-help intervention consists of 5 weekly sessions that tell a continuous story through illustrated educative narratives. Within these narratives, interactive exercises (e.g. breathing exercise for stress management; activity planner for behavioral activation) are embedded. Users are instructed to plan and practice these between sessions. All texts are available in Levantine Arabic dialect and in English. The app is fully audio supported for illiterate users. The illustrations and Arabic texts were culturally adapted for Syrian, Lebanese and Palestinian populations. The content of Step-by-Step was developed with experts in psychological care, e-mental health and global mental health. It has gone through extensive peer-review, with over 30 external experts reviewing the intervention.

**Guidance model:**

In STRENGTHS, SbS is intended for fully self-guided administration in order to maximize the scalability of the intervention. However, contact is provided on-demand by trained and supervised non-specialist research assistants called “e-helpers”, using the in-app messaging system. The e-helper team is located in Berlin, Germany. It consists of Syrian Arabic-native speakers with a background in psychology or associated disciplines (e.g. psychology students or trained psychosocial workers) who reply to questions regarding the study, the SbS program or technical issues. E-helpers have a background in psychology or social care and are trained as well as supervised by experienced mental health practitioners using specifically developed training materials. E-helpers operate within the standardized framework of a decision tree expert system. Topics not covered by this system are forwarded to the clinical supervisor.

**Delivery model:**

The intervention is available in the form of a mobile app for iOS and Android as well as in the form of a mobile-optimized website for use with standard web browsers on mobile devices, laptops and desktop computers. The app versions can be downloaded directly from the Google Play Store or the

Apple App Store and will have extensive offline capabilities. They can therefore be used without stable access to the internet.

The software created for the project is equipped with a content management system that allows the cost- and time-efficient creation of new language versions, new content sections as well as whole new interventions with a similar set of features.

**Data protection:**

The software is developed, hosted and maintained in Germany following German as well as European data protection laws including the EU General Data Protection Regulation (GDPR). In accordance with this legislation, Freie Universität Berlin warrants that personal data will only be processed to the extent that is necessary for the purposes of the EU H2020 STRENGTHS project. All personal data will be handled strictly confidential. Furthermore, appropriate technical, physical and organizational measures are implemented to ensure the security of personal data. These measures include protection against accidental or unlawful destruction, accidental loss or alteration, unauthorized or unlawful storage, processing, access or disclosure. The processing of personal data and the measures to ensure data security are documented in a written security policy. For the duration of the project, changing security requirements will constantly be monitored and updated.

**Participant safety:**

SbS is a low-intensity self-help intervention for Syrian refugees with increased psychological distress and reduced functioning. Prior to participation, applicants will be screened for plans to end their life. If a user confirms this, he or she will not be included in the study and will instead immediately be provided with general self-care tips as well as with details of services in Sweden that can help.

The intervention is based on evidence-based therapeutic techniques that have been found to be safe for use in a range of populations and the content has been rigorously tested in interviews and focus groups with the target population, therefore it is unlikely that distress will arise as a result of using the app. However, risks may result from the fact that the users are refugees and are—as members of this population—at risk of crisis or worsening of symptoms due to stressful or traumatic experiences in the past, due to information of a personal or political nature that are related to family members, friends or the situation in Syria or the host country in general as well as due to other forms of post-migration stressors. To address this, users of the app will be asked to regularly answer a short symptom screening questionnaire as well as to track their mood within the app. Based on this data, worsening of symptoms can be detected and users with such a pattern will be encouraged to seek additional help. The possibility of establishing a referral system within the app through cooperation with local implementation partners will be investigated.

**Ethical approval:**

The study protocol was approved by the Swedish Ethical Review Authority (2020-00261).

### III. STRENGTHS study in Sweden

**Stage 1: Formative research (completed)**

Between July and December 2017, we conducted free list interviews, key informant interviews and focus groups as part of a user-centered process. Using early prototyping, usability testing and

identification of barriers to implementation, the first stage of our research provided valuable information for the contextual adaptation to the needs and expectations of Syrian refugees as well as for the technical adaptation for use on smartphones. In Sweden, we conducted: 20 free list interviews, 23 key informant interviews and 4 focus groups. The results were published in January 2019: <https://www.frontiersin.org/articles/10.3389/fpsy.2018.00663/full>

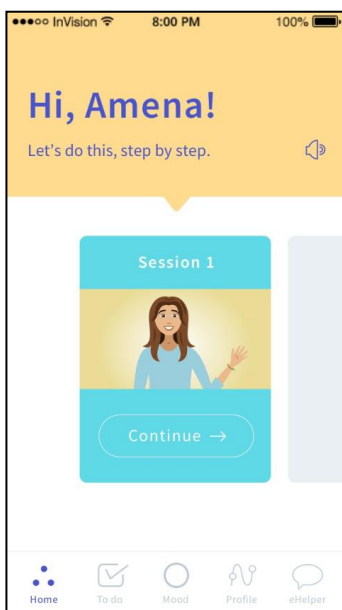
**Stage 2: Health systems analysis (ongoing)**

There is an ongoing process of identifying and approaching stakeholders in the Swedish health care system. Stakeholders are invited to participate in semi-structured interviews. The interviews focus on the description of the Swedish mental health system and the identification of bottlenecks. To this end, we aim to interview a mix of key informants (e.g. government and donor officials, health care workers or NGO workers) to gain a range of perspectives on the mental health system in Sweden. If you are interested in being interviewed, please send an email to: [s.burchert@fu-berlin.de](mailto:s.burchert@fu-berlin.de)

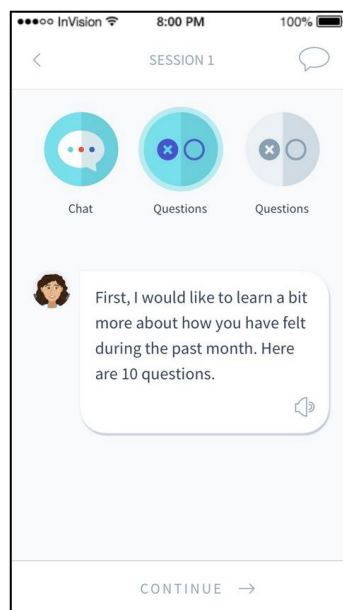
**Stage 3: Randomized controlled trial (ongoing)**

This study applies a single-blind, randomised, two-arm, control group design. N = 532 participants will be allocated to one of two conditions using a block randomization algorithm. *Group 1 (SbS + TAU)* has access to the full SbS self-help program with e-helper contact-on-demand and information on treatment-as-usual in Sweden. *Group 2 (TAU)* receives basic psychoeducation (based on the first session of SbS) and information on treatment-as usual in Sweden. Participants in both groups answer sets of questionnaires at the beginning of the study (T0), 6 weeks after starting the study (T1), 4.5 months after starting the study (T2) and 12 months after starting the study (T3). All assessments will be done online and are implemented in the SbS software.

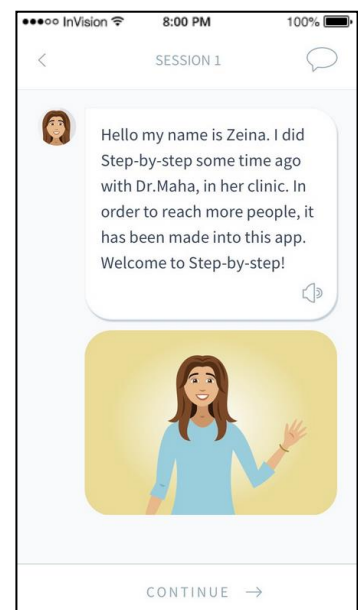
**IV. SbS Feature overview with screenshots**



[1] home screen with dashboard and tab bar



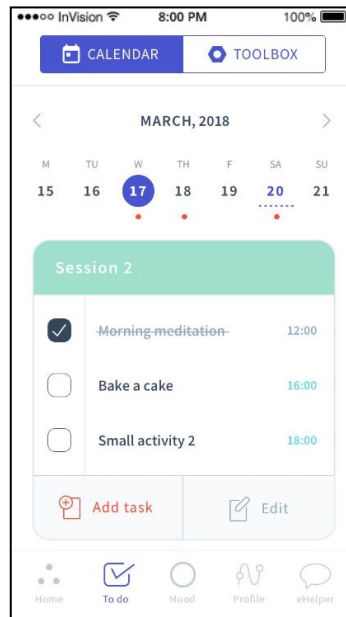
[2] session screen with session modules



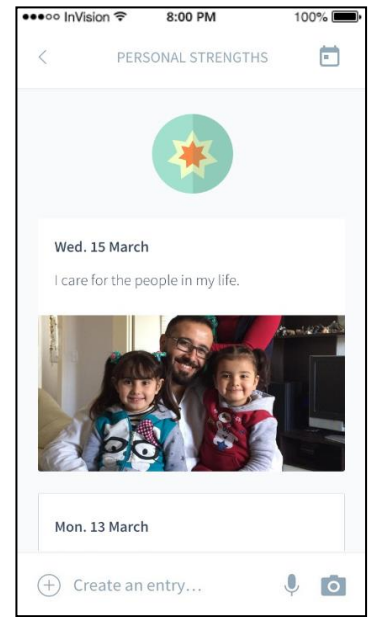
[3] illustrated narrative with audio recorded texts



[4] interactive exercises can be repeated at any time



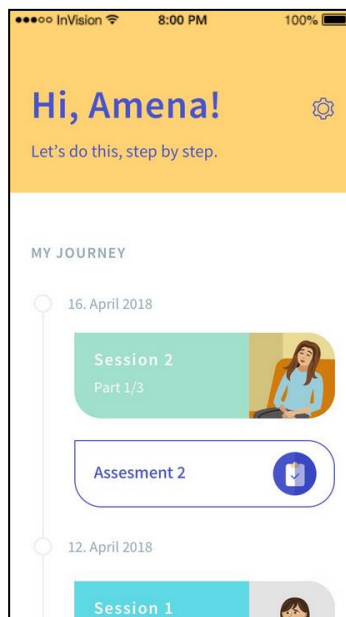
[5] activity planner with the option to receive reminders



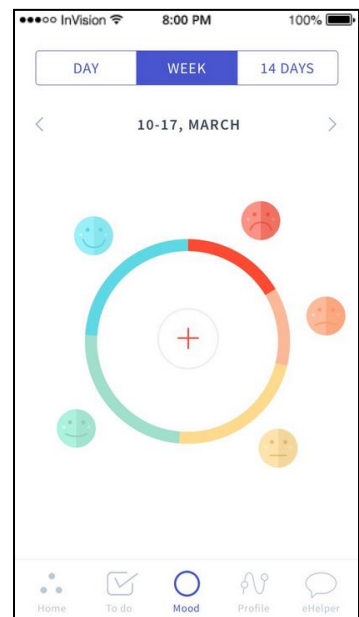
[6] exercise screen with text and alternative audio or picture input



[7] questionnaire screen with audio support



[8] summary screen of activities within the app



[9] mood tracking