

Digital interventions for depression in countries with different income levels (#101857)

Created: 07/06/2022 04:55 AM (PT)

Public: 08/01/2022 09:17 AM (PT)

Author(s)

Anna-Lena Leimberger (German Depression Foundation) - anna_lena.leimberger@deutsche-depressionshilfe.de
Hanna Reich (Frankfurt) - hanna.reich_de_paredes@deutsche-depressionshilfe.de

1) Have any data been collected for this study already?

No, no data have been collected for this study yet.

2) What's the main question being asked or hypothesis being tested in this study?

The aim of this study is to explore perspectives of health care practitioners in primary care (general practitioners, family doctors, and psychologists) on the implementation of digital interventions for depression in high-income countries (HICs), upper-middle-income countries (UMICs), and lower-middle-income countries (LMICs) using a mixed-methods approach with qualitative and quantitative assessment to:

1. To determine the most important barriers to implementing digital interventions for depression in HICs, UMICs, and LMICs from the perspective of health care practitioners; and
2. To determine how the perspectives of health care practitioners on the implementation of digital interventions for depression differ between HICs, UMICs, and LMICs.

3) Describe the key dependent variable(s) specifying how they will be measured.

For the quantitative assessment, primary target variables are potential barriers (and facilitators) to implementing digital interventions for depression and attitudes of health care practitioners toward digital interventions for depression assessed by the Attitudes Toward Internet Interventions Survey (ATIIS, Mendes-Santos et al., 2020). For the qualitative assessment, primary target variables are as well the three most important barriers to (and facilitators of) digital interventions for depression assessed by two open ended questions and health care practitioners' perspective on the implementation of digital interventions for depression assessed by a semi-structured interview developed using the Theoretical Domains Framework (TDF, Atkins et al., 2017).

4) How many and which conditions will participants be assigned to?

The participants will not be assigned to any condition.

5) Specify exactly which analyses you will conduct to examine the main question/hypothesis.

First, from demographic and background characteristics, descriptive statistics such as frequency distributions, measures of variability, and measures of central tendency will be calculated. For the primary target variables, i.e., potential barriers to implementing digital interventions, frequencies from the ATIIS (Mendes-Santos et al., 2020) and from the two open ended questions in the interview will be counted and compared between HICs, UMICs, and LMICs using descriptive statistics. Further, health care practitioners' attitudes toward digital interventions will be compared with one-factorial ANOVA between HICs, UMICs, and LMICs, if the requirements are met. If the omnibus test of the ANOVA/ANCOVA is significant, we will do post-hoc tests to evaluate which group of health care practitioners from HICs, UMICs, and LMICs differ statistically significant from each other in their attitudes toward digital interventions. Alternatively, we will use equivalent nonparametric statistical methods. For qualitative data, a Directed Content Analysis (deductive approach, Atkins et al., 2017) will be performed using the TDF. Within each domain, a Thematic Analysis (inductive approach, Braun & Clarke, 2006) will be conducted to identify themes within data of respondents from HICs, UMICs, and LMICs. The answers from HICs, UMICs, and LMICs will then be compared with each other on each domain. As recommended in the TDF-guide (Atkins et al., 2017), the analysis will be carried out independently by two persons. The interrater reliability will be assessed. Differences will be discussed until consensus is achieved. We aim to integrate the results of the quantitative and qualitative assessment in joint displays (McCrudden et al., 2021).

6) Describe exactly how outliers will be defined and handled, and your precise rule(s) for excluding observations.

For the analysis of practitioners' attitudes toward digital interventions, sum scores that are more than three times the standard deviations from the mean are defined as outliers.

7) How many observations will be collected or what will determine sample size? No need to justify decision, but be precise about exactly how the number will be determined.

For the quantitative assessment, i.e., attitudes toward digital interventions, with a medium effect size of $f^2 = .06$ (Cohen, 1988) and a power of .9 we calculated the required sample size of 69 persons per income group (HICs, UMICs, LMICs), based on the income group of each country (in total $n = 207$) for a significant result with one-way ANOVA ($\alpha = .05$). For qualitative assessment, we follow the recommendation of at least 10 interviews for an initial analysis and three further interviews with no new themes emerging (stopping criteria) (Francis et al., 2009). Therefore, we plan to conduct min. 13 interviews in HICs, UMICs, and LMICs, respectively ($n = 39$).

8) Anything else you would like to pre-register? (e.g., secondary analyses, variables collected for exploratory purposes, unusual analyses planned?)

No, nothing else.