Paper examining prevalence and perceived utility of mHealth tech among RIHA

Descriptive analysis

Brad Cannell

Updated: date

|  |  |  |
| --- | --- | --- |
| **Variable type** | **Variable** | **Survey item or notes if unclear from variable** |
| Predictors | Age |  |
|  | Gender |  |
|  | Hispanic Ethnicity |  |
|  | Race | What’s best way to do this? Dichotomize as AA vs other? Or Dummy code with AA vs non-White and AA vs White? Presumably AA should be referent condition. |
|  | Have GED or HS diploma |  |
|  | Employment status |  |
|  | Lifetime total time homeless (months) |  |
|  | Lifetime total time in jail or prison (years) |  |
|  | Current mental health treatment | “Currently receiving treatment for mental health problems” |
|  | General health |  |
|  | Have a cell phone |  |
|  | Data plan | “Does your phone service include a data plan?” |
| Outcome 1 | Prevalence | “Ever used smartphone app to manage one or more health-related issues” |
| Outcome 2 | Perceived utility | “Smartphone app can help you to change your actions or behavior” |

In the current study, we did not seek to test a specific hypothesis. Rather, we were interested in descriptively exploring the relationships between using a smartphone app to manage health-related uses and each of the following: sociodemographic background, lifetime homelessness, lifetime incarceration, physical and mental health, and access to a mobile phone and data plan. We similarly explored the relationships between the various participant characteristics listed above and the participant’s beliefs about whether a smartphone app can help them change their actions and behaviors.

We calculated descriptive point estimates (i.e., means and frequencies) and interval estimates (i.e., 95% confidence intervals) for each of the relationships listed above. Statistical analyses were conducted using R version 4.1.0 (R Core Team, 2021) in RStudio version 1.4.1717 (RStudio Team, 2021) with the following packages: tidyverse (Wickham et al., 2019), freqtables (Cannell, 2020), meantables (Cannell, 2020).

**Table 1**. Characteristics of participants who completed the Link2Care baseline assessments (n = n\_baseline).

<bm> table\_baseline\_characteristics <bm>

# 2022-12-12 R&R for Journal of Technology in Behavioral Science

**Figure X.** Percentage of participants who reported using a smartphone app to manage each of the following types of issues.

fig\_app\_health\_issue

1. Only asked of participants who reported managing *any* issues with a smartphone app (n = 81).

2. Percentages sum to >100% because participants could select more than one response option.

**Figure X.** The total number of issues managed using a smartphone app by participants – among the 9 options supplied (see Figure X).

fig\_app\_issues\_total

1. Only asked of participants who reported managing *any* issues with a smartphone app (n = 81).

**Figure X.** The total number of issues managed using a smartphone app by participants – among the 9 options supplied (see Figure X).

fig\_app\_issues\_total\_zero

## Crosstabs

The comments on the R&R indicated the need for us to create a few more crosstabs. I’ve tried my best to create what I think was requested below. These are basically raw output from R because I wanted to get them to you as soon as possible. I can clean them up later if you would like me to.

**Table X.** Access to internet by phone ownership

table\_internet\_by\_phone

**Table X.** Any social media use by phone ownership

table\_sm\_by\_phone

**Table 2**. Characteristics of participants who completed the Link2Care baseline assessments (n = n\_baseline) by phone ownership.

table\_1\_by\_phone

References:

R Core Team (2021). R: A language and environment for statistical computing. R Foundation for Statistical Computing, Vienna, Austria. <https://www.R-project.org/>.

RStudio Team (2021). RStudio: Integrated Development Environment for R. RStudio, PBC, Boston, MA. <http://www.rstudio.com/>.

Brad Cannell (2020). freqtables: Make Quick Descriptive Tables for Categorical Variables. R package version 0.1.0. <https://CRAN.R-project.org/package=freqtables>.

Brad Cannell (2020). meantables: Make Quick Descriptive Tables for Continuous Variables. R package version 0.1.0. <https://CRAN.R-project.org/package=meantables>.