



# Investigating Health Self-Management among Different Generation Immigrant College Students with Depression



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## Motivation

58% of 1604 mobile phone users use mobile apps.

Digital Tools

72% of young adults (ages 18-25) look up health information online.

Depression

Immigrants

30.5% (Average) of university students deal with depression 1990-2010.

24% of college students are 1<sup>st</sup> or 2<sup>nd</sup> generation immigrants.

Do college students use digital tools to manage their depression?

## Research Questions

**RQ1:** What health indicators are college students with depression from different immigrant generations already tracking?

**RQ2a:** Are college students with depression from different immigrant generations using digital tools (mobile apps, online resources) to help with depression?

**RQ2b:** What types of digital tools are they using?

## Methodology Survey

1. Beck's Depression Inventory (BDI-II)
2. Immigrant status\*
3. Gender identification, age, etc.
4. Questions related to health tracking and digital tool usage.

**Analysis**  Used Excel

1. Quantitative
  - Descriptive using JASP.
2. Qualitative
  - Thematic Analysis.

## Results

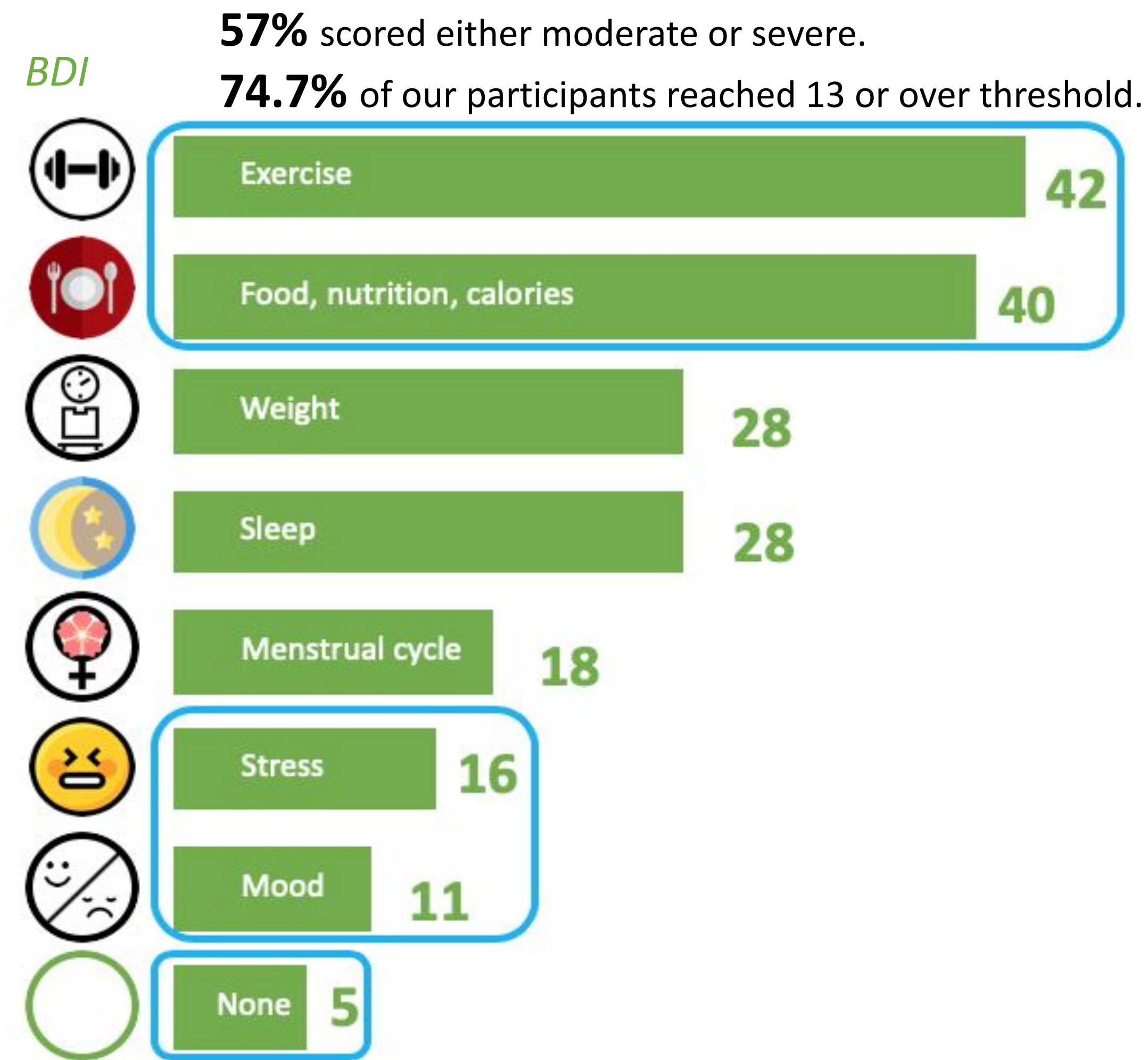
1. Gender
  - 33 females; 50 males
2. Immigration Status
  - 42 non US-born; 41 US-born.
3. Diagnosis
  - 64 – not clinically diagnosed/sought professional treatment.

## Responses

1. Total participants left for analysis: **83**.
  - a. 56 removed because of incompleteness and quality checks.

## Findings

*RQ1: Health Tracking*

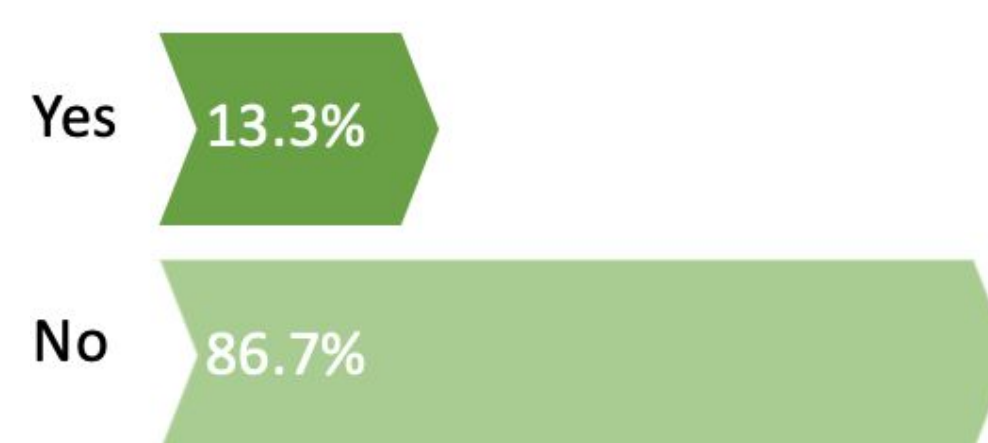


*RQ2a: Digital Tools for Depression*

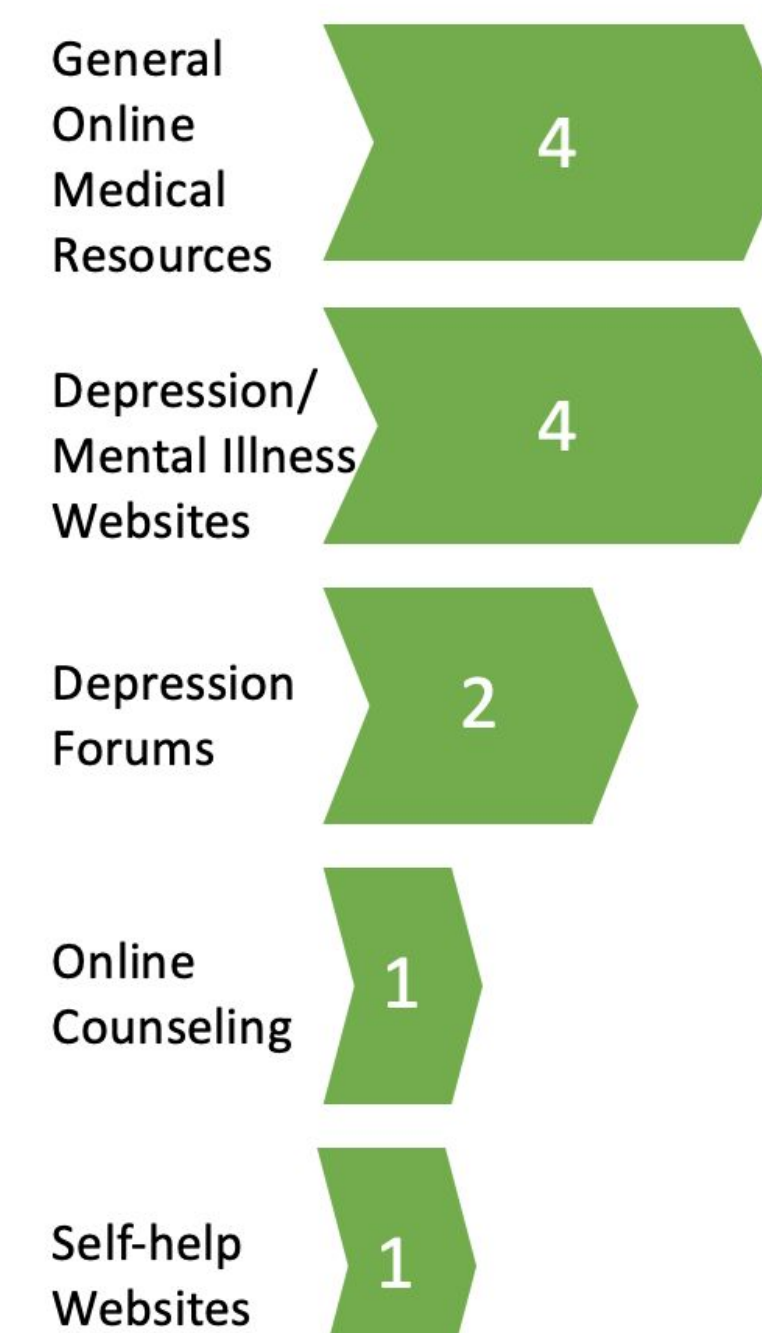
i. Mobile App Use



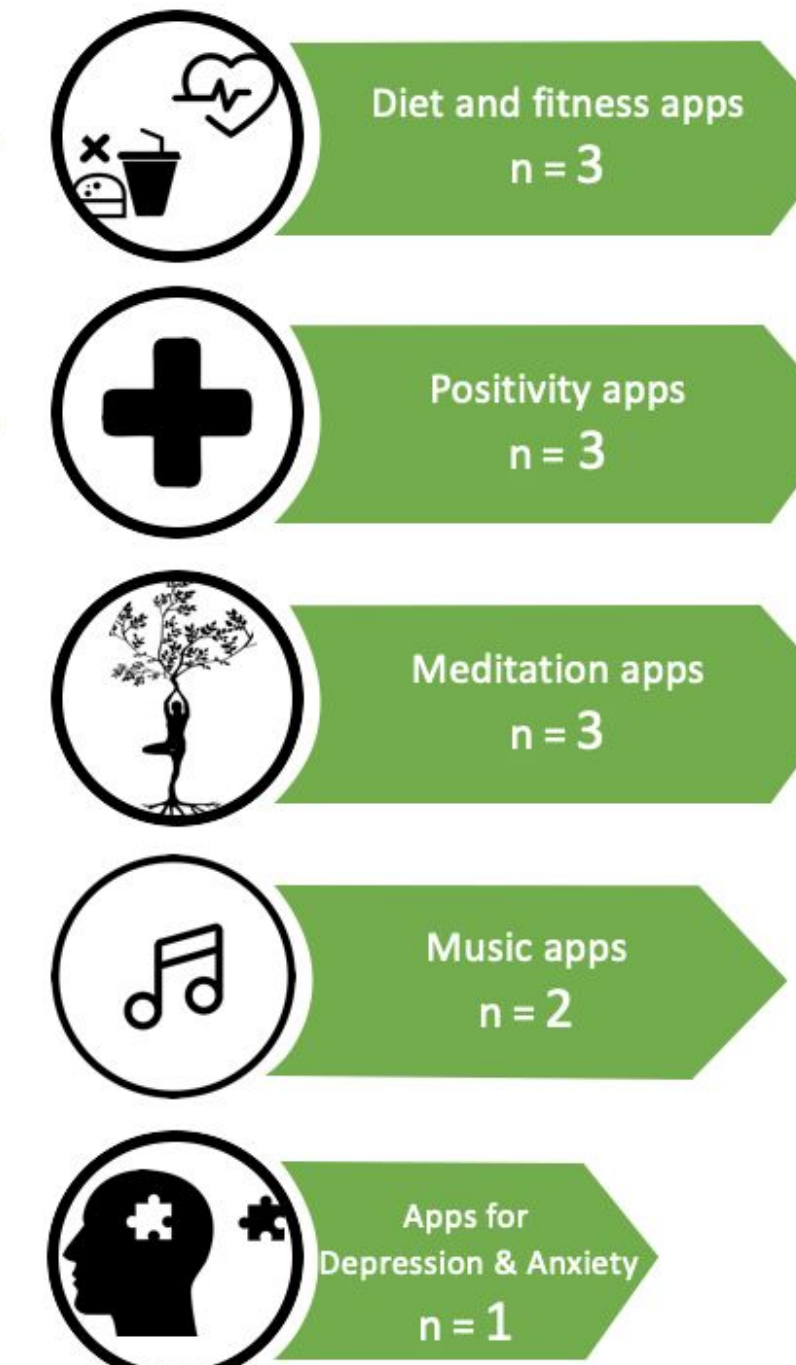
ii. Online Resource Use



*RQ2b: Web-based platform types*



*RQ2b: App Types*



## Discussion

1. Low engagement with apps/online resources

2. Disconnection between resources and lifestyle

3. Many resources available

## Limitations and Future Work

- Exploratory and part of a larger project.
- Focused on one subgroup of college students
- Only a first look at what this population does: Did not answer how or why.
- Gathering detailed information about college students in relation to digital tools used to manage depression could potentially allow us to get deeper insights on how to promote good practices on mobile devices.

## Summary

- Students with depression use tools to monitor their health like weight, exercise, and food intake.
- Online resources or apps to track or manage their depression were under utilized.
- More work is needed to understand what tools are used by whom and how they are used in depression management.

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\*1 = moved to US after age 17; 1.25 = moved to US between ages 13-17; 1.5 = moved to US between ages 6-12; 1.75 = moved to US before age 6; 2 = born in US & both parents born outside US.