# Background

The mobile application (app) market is very active and offers many apps that attempt to improve some aspect of a person’s life. Since the market is mainly driven by commercial development rather than academic, there is not much research done in proving the efficacy of these apps. Many studies have highlighted the lack of randomized controlled studies (RCTs) performed on the developed mobile interventions. This results in vague research outcomes, or apps that do not yield the desired outcome.

# Purpose

To perform RCTs a study needs to follow certain guidelines and it may be time-consuming or challenging to implement app interventions for research or commercial use in a way that would facilitate an RCT. This research aims to create an open-source tool that will enable researchers to deliver mobile app RCTs.

# Method

The tool provides two interfaces -- one for the researcher to configure their trial features, groups, and questionnaires, and the other for the participants to communicate with the platform and receive info about the trial, enable or disable features in their apps, and deliver questionnaires to collect survey responses. This allows the researcher to perform A/B testing and collect data on the efficacy of specific intervention features to compare them against a control group.

# Target Audience

This work could be used by any branch of research to develop and test mobile app interventions or even by commercial developers for creating prototypes and testing features before taking the final product to market. The results of such studies could be used to prove effectiveness, engagement, and usability of mobile app interventions across many different disciplines. By making the tool easy to use, open-source, and flexible this research hopes to encourage, facilitate, and possibly standardize mobile intervention RCT data collection.

BIO:

Mikhail is on the thesis track for his MScIS and is currently in the implementation stage. He is carrying out a mobile randomized controlled trial using the proposed tool. His areas of interest include cloud technologies, mobile apps, and mental health.