Supplemental Digital Appendix 1

Matrix of All the Data Sources and Our Analysis Approach for Each

Because of the limitation on this type submission, we were not able to analyze all the data and report in this study. Below, there is a list of multiple sources of data that we benefit to improve and to ensure our intervention.

Platform	Types of Data	Analysis	Pros/Cons
YouTube	1. Livestream Data *LiveStream Concurrent viewers at each minute of the event* 2. Watch Analytics *LiveStream vs. One week watch history for unique users, number of views* 3. Gender, and traffic source estimation data	Descriptive statistics of YouTube analytics results including the following metrics: ● Average concurrent users after trimming fir and last ten minutes of the data because of the outliers. ● Descriptive analysis for number of views, users. ● Traffic sources metrics from YouTube dashboard ● Estimated gender percentage metric from YouTube dashboard	**Pro:** Minute by minute analysis can provide hot spots on your videos and streams. **Con:** YouTube analytics report estimated data on gender, traffic source, and geo location, and does not reveal if the numbers are not on a certain threshold.
Slack	1. User lists 2. Channel lists 3. Channel message logs 4. Message reaction logs Slack exports all data in JavaScript Object Notation (JSON) format. We exported all data from public channels which collect participants' identification, time, content of messages, and other data. We then parsed the JSON files, and converted to Microsoft Excel format using Python.	● Data organization and conversion to comma separated values (CSV) file type with Python ● Graphical representation with Excel ● Emoji cloud based on reaction data using Python *Potentially could have conducted thematic analyses of the types of comments within this experience, but we did not do this within this iteration of our program evaluation.*	**Pro:** Data collected in Slack is very detailed since it tracks every digital footprint of a user, and many analyses can be conducted using Slack data. **Con:** To analyze the Slack data, need for high end data manipulation as Slack only exports the data in JSON format.
Google Forms - Feedback From for Residents	Categorical and numerical data ○ Participating in live event and Slack ○ Overall experience and Slack experience Open-ended questions	● Paired samples t-test with SPSS for retrospective pre- and post- comparison ● Independent samples t-test with SPSS for between group comparisons ● Qualitative data - simple thematic analysis, grouping comments by common theme.	**Pro:** Resident feedback form provided anonymous feedback data apart from identified Slack user feedback. **Con:** There are multiple feedback to the program when use different source of feedback (i.e. Google Form and Slack Feedback channel). If the results of the two analyses are contradicted, the researchers need to be cautious how to report it.
Google Forms - Feedback From for Program Directors	Categorical and numerical data ○ Number of residents enrolled in the program Open-ended questions	● Paired samples t-test with SPSS for pre and post comparison ● Independent samples t-test with SPSS for group comparison ● Qualitative data - simple thematic analysis, grouping comments by common theme.	**Pro:** Slack may not have all residents who registered and used it. But the anonymous form from the program directors can support and reveal different numbers. **Con:** Reaching out the program directors to have them fill the form may result in less data collection once the event is finished.