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Perception of the Communication Campaign for @choum a Symptom Reporting App: Insights from Semi Structured Interviews

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Abstract. As an attempt to identify cluster of spread of COVID, we have developed the @choum functionality enabling individuals to signal when they perceived COVID-19 symptoms. The associated communication campaign did not encounter the expected success and only a limited amount of person did download the app. As an attempt to understand the barriers of use we have recruited a sample of general population to perform semi structured interview. Interview transcripts were analyzed using thematic analysis. Results highlight 3 profiles, engaged, critics and disengaged. We observe that these 3 profiles have different perception of the communication campaign, engaged participants being much more convinced by its message whereas disengaged people lack strongly of trust. This study helped us to identify what messages must be emphasized in order to attract critic people that may be convinced to use the tool.

Keywords. COVID, mobile app, epidemiology

1. Introduction

Digital technologies have played a central role to control the epidemic [1]. We have developed the @choum functionality embedded in the coronapp application, an app aiming at informing general population about COVID-19. It allows users to report when they notice symptom associated with COVID. All reports are processed by a cluster identification algorithm identifying clusters of possible Covid-19 outbreaks.

Several communication actions have been undertaken to promote the app. Among them flyers, targeted advertisements on social network and on the street as well as a promotional video. Beside the active communication, the app use statistics showed us a limited number of download and even more limited use of the functionality.

In order to understand the resistance factors among population to download and use the app we decided to perform interviews.

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2. Method

The perception of the communication campaign by the target population has been captured using semi structured interviews including sociodemographic questions as well as questions about the perception of the COVID-19 crisis. It then presented the different communication actions undertaken to collect users' feedback.

Results were analyzed using a thematic analysis methodology to identify patterns of emerging themes [2]. Similar profiles were regrouped based on their perception on the situation and further thematic were analyzed in regards with these profiles

3. Result

Interview took place between 31 august and 15 September 2021. 10 participants were recruited. We analyzed the data and identified 79 initial codes for each relevant piece of information. Following this initial review, we looked for thematic among the codes by grouping the codes regarding their similarity into potential common themes (21 thematic). At this point, we condensed further the codes, guided by our research questions to draw out 3 general themes each containing sub-themes.

Based on the attitude and opinion of the participants, we did a simple cluster analysis to classify the participants under 3 profiles, engaged, critic and disengaged. The comparison of our 3 profiles regarding the effectiveness of the communication campaign showed clearly a much higher acceptance of the engaged group. Whereas the critic group did some constructing comments on the structure of the communication material, the disengaged group did not find any communication material convincing.

Discussion around the perceived messages of the communication campaigned highlighted the importance of being transparent regarding data protection. This is especially important since it is the major barrier that is reported by our sample that can take over the other benefits of the solution. Also all participants were unanimous to express that insufficient information were given on the

4. Conclusion

Although most engaged profile are receptive to our communication campaign, our message must be improved, especially in matter of trust, if we want to be able to convinced more critical persons. The intention to install the app is linked to the trust in the institutions and in the recommendations provided by the government. All these insight will help us to redesign our communication campaign and hopefully attract additional user to use the application.

References

- [1] Vargo D, Zhu L, Benwell B, et al. Digital technology use during COVID-19 pandemic: A rapid review. *Hum Behav Emerg Technol* 2021; 3: 13–24.
- [2] Kiger ME, Varpio L. Thematic analysis of qualitative data: AMEE Guide No. 131. Med Teach 2020; 42: 846–854.