

Innovative Research Program on Suicide Countermeasures in FY2021: Report on Commissioned Research Results

Field 3: Developing new policy areas

Topic number : 3-1

Research topic:

Research on Suicide Countermeasures Using Social Media

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Summary:

The purpose of this research project was to explore the relationship between social media usage and mental health. To gather objective evidence, we developed a smartphone application that collects log data on smartphone usage. Three studies were conducted.

Study 1: A study on the relationship between smartphone operating systems and users' psychosocial characteristics

Due to technical limitations, log data collection in this study was limited to smartphones with the Android OS. Therefore, we conducted a web survey of 400 university students (200 each from Android and iOS, 50 from each of the four grades, 138 males and 262 females) registered with a research company, with the aim of exploratory clarifying differences in the socioeconomic status, mental health status, etc. of smartphone users depending on their smartphone OS (2021). The survey was conducted from September 30 to October 4, 2021. The results revealed that there were differences in socioeconomic status and length of time spent on social media depending on the OS used.

Studies 2 and 3: Relationship between social media usage and mental health

Studies 2 and 3 consisted of an observational study (Empirical Sampling Method) using a smartphone application (SML) and a web survey at two-time points before and after the observation period. The participants of the study were university students registered with a research firm and using the Android operating system. A total of 200 participants were recruited, 25 from each of the eight categories of grade (4 grades) × gender (male/female), and 174 participants (86 males and 88 females) cooperated in the study. In the observational study, participants installed an application (SML) on their smartphones, and data on start and end times of use were collected for each SM type. Participants also completed daily self-monitoring items related to mood and emotion. The observational study lasted 19 days (December 6-24, 2021), and Web surveys were conducted at two-time points before and after the observational study (T1: November 29-December 3, 2021; T2: December 25, 2021-January 6, 2022). Study 2 used web survey data from two-time points, and Study 3 used log data to examine the association between social media use and mental health. It was found that the relationship between

usage and mental health differed depending on the type of social media.