After younger people’s negative smartphone usage attracted worries, this study explores the effects of personality traits on smartphone dependency (behavioral symptoms) and loneliness (psychological symptoms). Students’ self-perception of Instant Messaging and email dependency are composed of three factors present in research by Igarashi et al.: perception of excessive use, emotional reaction, and relationship maintenance. However, there is a strong contradiction between the results of a questionnaire of the self-perception of excessive use of smartphones and current research.

Extensive research has concluded that young people overwhelmingly prefer text messages over other communication media, due to factors such as immediacy and a slew of functions and features that enable dependency. The factor of emotional reaction is a reason for such, as users have a strong urge to receive immediate text responses, and other functions allow users to know when their recipient reads their message also play a big role in influencing students to become dependent. Shy-sociable people, in particular, have motivation to develop smartphone dependency, since they desire to be with other people while avoiding in-person contact due to a lack of self-confidence in their ability to properly handle non-verbal cues.

Levin and Stokes (1986) introduced two processes that help explain why loneliness occurs. One suggests that certain personality traits inhibit the ability for some people to make and maintain social relationships easily. The other process involves the notion that negative perceptions toward the self and others discourages people’s confidence in their social networks, thus producing loneliness no matter the actual state of their social networks. Ye believes that relationship maintenance led to loneliness – regardless of gender – because text messaging/IM allows the potential for constant contact with another person, so it reinforces interpersonal dependency (loneliness).