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## **IMPACTS OF TECHNO-DEPENDENCE IN THE MOBILE INSTANT MESSAGING ENVIRONMENT**

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### **ABSTRACT**

Mobile Instant Messaging (MIM) services such as LINE, WhatsApp, Facebook Messenger and WeChat have already established a mobile communication environment that extends beyond words and sounds. As MIM provides an effective way to communicate, it can improve workplace efficiency, whether within an organization or among offices spread around the world. Nowadays, MIM has been widely accepted as both a social and work tool. The social interaction overload generated by SNSs contributes to emotional exhaustion. Emotional exhaustion, on the other hand, leads to dissatisfaction and discontinuous usage intentions. In the context of MIMs (since they are relative new apps), users whether are likely to experience emotional exhaustion that is generated by social interaction overload, and therefore discontinue their use of MIMs. In contrast to traditional research on IS continued use in the past which defines dependence as a routine and unconscious usage pattern. MIMs offer a communication method that is faster and easier than phone calls or SMS. It is possible that MIMs bring people closer by allowing their users to understand more of the situational matters related to their friends or family, without being limited by distance. Specifically, social-group functions offered by LINE can encourage users to join certain social groups (for instance, family, colleagues, classmates, or friends). Group members can not only discuss common topics, they can also share their "photo albums," enabling members to enhance their sense of belonging. At the same time, they have the opportunity to feel a sense of being valued, loved, and needed. Although the mobility and accessibility of mobile devices allow users to instantly contact each other on MIMs and on real-time basis, excessive use of MIMs, or MIM techno-dependence, is likely to generate social-related stress among their users. Therefore, this research attempts to explore the possibility that MIM techno-dependency can have non-detrimental effects, and considers the positive and healthy results from MIM techno-dependency due to an increased sense of belonging.

The questions explored include: do MIMs users develop a positive techno-dependence? Does this positive emotional reaction encourage MIMs users to continue their use of MIMs? Since LINE is a relative newcomer to MIM, there is still a dearth of research needed to explore issues related to using MIM as a research tool. This study considers how LINE combines a diverse range of communication approaches—such as voice, texts, maps, pictures, photos, locations, video, and audio—with a variety of community groups such as friends chat, group chat, dynamic news, and official accounts. It seems worthwhile to study characteristics of LINE's users in order to further explore the issues related to MIM. Through the hypotheses development and a survey research on 685 LINE users, this study inferred that users make frequent use of LINE in the long-term mainly because of four kinds of techno-dependence: people, fun, information, and work. Such techno-dependence generates positive and negative consequences concurrently. On the one hand, because the user's dependence on LINE enhances his or her belongingness through friends, colleagues, and family, this positive social and emotional reaction will make users satisfied with LINE, and thus increase continuous usage intention for LINE. On the other hand, the user's dependence on LINE means that they experience social interaction overload resulting in emotional exhaustion.

Dependence on LINE leads to users experiencing pressure from both social message overload and social demand overload, resulting in social interaction overload. This negative social and emotional reaction will cause a decrease in user satisfaction with LINE, thereby reducing the continuous usage intention of LINE. Based on these findings, we suggest that LINE-related techno-dependence can enable users to increase their sense of positive social belongingness, but can also cause negative social interaction overload. It is concluded that the consequences of techno-dependence are characterized by both positive and negative emotions. Users' evaluations of LINE are simultaneously affected by positive and negative social and emotional factors.

*Keywords:* Belongingness, continuous usage intention, emotional exhaustion, mobile instant messaging service, satisfaction, social interaction overload, techno-dependence.