Research on Psychological Mechanism of Sharing Behavior—Take "Flower" APP as an Example*

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Keywords: Self; Extended Self; Sharing; App.

Abstract. With the rapid development of smart phone technology, people are becoming more and more addicted to mobile phones, which lead to depression and other undesirable social phenomena. The mobile app of Flower is such applications that can help people get rid of mobile phone addiction. The app's design is based on flow theory and tries to help people get rid of mobile addiction through sharing behavior. It uses the user's positive flow experience for app to replace the user's negative flow experience for mobile phone. Based on the technology acceptance theory, flow theory and extended-self theory, this paper explores the motivation and user’s acquisition of the sharing behavior in the use of the mobile app of Flower, and constructs a new model of internet sharing behavior. And the practical applications of app have proved that sharing behavior contributes to the solution of mobile phone addiction. We hope to be able to make a contribution to app designing and user behavior analysis.

1. Introduction

In modern society, there are more and more phubbers around us, that is, mobile phone addicts. The addiction to mobile phones can decrease the users’ work efficiency, and make the relationship with the real society become weaker and weaker. As a result, there are more social problems. The mobile app of Flower is such applications that can help people get rid of mobile phone addiction. According to flow theory, Firstly, it sets up a challenging task, which is to grow flowers in the software. But you can't move the mobile phone, otherwise the flowers will wither; Secondly, it allows users to make electronic greeting cards using the grown electronic flowers, and to share them with their friends to enhance the user's social support, as a feedback to the challenging task. With the help of these two above-mentioned points, the app helps users to get rid of mobile phone addiction through the user's flow experience for the app task. We all know that mobile phone addiction is actually a form of flow experience that just has a bad influence on the user. In the process of using the app, in addition to sharing the finished e-card, users also share the app's information with others and recommend it. So what motivates the sharing behavior and what does the sharer want to gain? We want to build a suitable sharing behavior model for this app and hopefully apply it to other apps' sharing behavior studies.

2. Theory Background

Csikszentmihalyi defines flow as a peculiar dynamic state-the holistic sensation that people feel when they act with total involvement [1]. Research from Huang suggests that flow is both cognitive and affective [2]. Generally speaking, flow is a state of effortless concentration and enjoyment. One characteristic of a person in flow is that he is in control of his actions and of the environment, but loses the sense of self and time. Now, people often find flow experience in their mobile phones, which supply more and more functions.

*This research is financially supported by National Natural Science Foundation of China (71502124, 71572006). Corresponding author is Tang Yao, yaot@buaa.edu.cn

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Sharing behavior is a basic human behavior. In previous studies, researchers believe that sharing behavior is a reciprocal behavior that is beneficial for integrating resources. Belk defines sharing as the act and process of distributing what is ours to others for their use and/or the act and process of receiving or taking something from others for our use [3]. However, internet sharing behavior (ISB) is not always mutually beneficial. When we share the help, advice, and information on the internet, we want to show others who we are, instead of asking the receiver to give us something in return. Therefore, we believe that internet sharing behavior is a kind of interpersonal interaction behavior. Whether or not the sharer desires to receive something in return and where the return comes from depends on their motivations and purposes. With the development of digital technology and the prosperity of the internet world, the study of internet sharing behavior is of great significance to the study of internet user behavior.

The concept of extended self was proposed by Belk in 1988. Belk summarized that “the major categories of extended self [are our] body, internal processes, ideas, and experiences, and those persons, places, and things to which one feels attached. In consumption area, the types of goods chosen by the consumers and brand preferences are in fact a manifestation of the consumer's self. The digital world opens a host of new means for self-extension. For example, the type of smart phone owned provides some valuable information about its owner [4]. The self can be further extended in the virtual world by means of information display and network behavior, which will be of great significance to the extension of self.

3. Theoretical Frameworks

3.1. Motivation for consumer internet sharing behavior

3.1.1 Interest (Int.)

Interest is defined as a content-specific motivational characteristic composed of intrinsic feeling-related and value-related valences. In fact, interest is an internal and enduring preference. According to former research achievements, interest can be an important and direct driver of behavior.

The main features of Flower App are: (1) Fresh and simple style. The Flower App’s the first impression is that its hand-painted interface with color pencils, where the design is simple and lines are soft; (2) New method of interaction. The users of the Flower App grow flowers in the software and make electronic greeting cards using the grown electronic flowers, and share them with their friends, which is a new way of interaction; (3) Sustained innovation mechanism. When in the process of using the Flower App, there are many surprises whose trigger conditions are needed to be found by the users and it is beneficial to maintain the user's interest in the app. Compared to the existing apps, the Flower App is an app that keeps people interested in it for a long time. As for the App, on the one hand, when the app users think it is an interesting app, sharing behavior occurs spontaneously, on the other hand, one important function of the app is to allow users to share electronic greeting cards and then users will produce passive sharing behavior. Therefore, we propose:

H1: Interest will positively influence consumer internet sharing behavior.

3.1.2 Altruism (Altr.)

Altruism is a willingness to act in the consideration of the interests of other persons, without the need of ulterior motives [5]. Similarly, the internet altruistic behavior refers to voluntary behavior that occurs in a network environment and benefits others without having obvious selfish motives. As a result of cheap cost, internet altruistic behavior is more than in real life, and people are more willing to help others online than in real life. Reciprocal altruism can work as a motivation for sharing.

For the Flower App users, they know that mobile phone addiction has harmful effects on the addicts. As a result, they expect other mobile phone addicts to get rid of mobile phone addiction and
share their own resources with them. Then, users of the Flower App share the software to other users who need it and help them get rid of mobile phone addiction. Therefore, we propose:

H2: Altruism will positively influence consumer internet sharing behavior.

3.1.3 Perceived Usefulness (PU)
Perceived usefulness is the degree to which a person believes that using a particular system would enhance his or her job performance. Perceived usefulness derives from technology acceptance theory and is widely used in product user experience research and user behavior research. In current research, perceived usefulness has a significant impact on user behavior in the process of using related products. For example, as for the internet, perceived usefulness has a significant impact on students' continuance intention of using the internet [6].

When using the Flower App, the user feels that the app has good effect on getting rid of mobile phone addiction to some extent. It means that the app has perceived usefulness. And perceived usefulness can be one of the user's extrinsic motivations [7]. Therefore, we propose:

H3: Perceived usefulness will positively influence consumer internet sharing behavior.

3.2. Extended-Self (ES)
Belk’s (1988) formulation of the extended self is an influential conceptualization of the relation between people and possessions. Now, on the internet, internet users build virtual selves through web names, personal information, avatars, etc.[8] The virtual self can be seen as an extension of the actual self.

The user's behavior on the internet can also serve as an extension of self. And then, the special behavior of app users can also be seen as a form of extension of self. By sharing behavior about the Flower App, users display their own preferences about software to others, for example, the fresh and simple style of software. Furthermore sharing e-cards tell others that they are friendly. Therefore, we propose:

H4: Internet sharing behavior will positively influence extended-self construction.

3.3. Self-Control (SC)
Self-control refers to the capacity for altering one’s own responses, especially to bring them into line with standards such as ideals, values, morals, and social expectations, and to support the pursuit of long-term goals. Self-control, which can trigger or stop specific behaviors, such as inhibiting impulsive behavior, resisting temptation, delaying gratification, formulating and completing behavior plans, and adapting to social situations

App users want to use the app to get out of the flow experience of mobile phones and focus their attention on real life. When the user is accustomed to being out of the mobile phone addiction and using good habits to replace bad habits, users obtain adequate control of their behaviors. Therefore, we propose:

H5: Internet sharing behavior will positively influence self-control.

According the hypothesis above, we construct the conceptual model of the research which could be seen in the fig. 1.
4. Summary

Researchers have become more and more interested in the psychological drivers of internet sharing behavior. For the Flower App, we built a sharing behavior model and explored how sharing behavior helps people get rid of mobile phone addiction.

This study extends prior research on drivers of internet sharing behavior. First, it extends the research of mobile app sharing behavior, and has some significance on improving the design of mobile app. Second, it discusses the sharer's acquisition of internet sharing behavior. So, what do they want to achieve in sharing process? Third, it provides a way to help people get rid of mobile phone addiction.

However, there are some shortcomings. First of all, the sharing behavior model is proposed according to the practical application of Flower App, it may be tested by other mobile App. Secondly, the impact of gender differences and age differences on internet sharing behavior have not been considered. Finally, the influence of user's personality difference on internet sharing behavior has not been considered, because individuals with different personality may have different motivations and expectations for sharing behaviors.

5. Acknowledgment

This research is financially supported by National Natural Science Foundation of China (71502124, 71572006).

6. References