

# Mobile Apps: Motivational Influencers

*Emergent Research Forum Paper*

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## Abstract

Today's mobile device users demand mobile apps in order to maintain online social ties, to remain up-to-date with weather and new events, to be entertained, and to be productive in their professional and personal lives, no matter where they are. This emergent research study examines the perceptions of individuals regarding the motivational power of mobile apps post-adoption. A survey of college-age individuals is being performed beginning the spring of 2017, and among the findings expected is a positive confirmation that mobile apps are motivational influencers toward education, entertainment, communication, social, and other purposes.

## Keywords

Mobile apps, Smart phones, Motivation, Influence, Education, Entertainment, Communication, Social.

## Introduction

Applications optimized for mobile devices, or mobile apps, have proliferated due to the increasing demands from mobile device users to communicate, work, and play all while remaining on the go. As of June of 2016, there were in excess of 2 million mobile apps available for download through the top app stores (Statista 2016) and predictions are that worldwide mobile app downloads will reach 268.69 billion in 2017 (Statista 2017).

The mobile app stream of research includes studies seeking to better understand the adoption, usage, and success of mobile apps (Chen et al. 2012; Duarte and Picoto 2016; Han et al. 2016; Jain and Viswanathan 2015; Liang et al. 2016; Taylor and Levin 2014; Xu et al. 2015). The current study is also concerned with motivations; however, the position of interest is that of post-adoption, and from that perspective asks the question "Are mobile apps motivational influencers?" Does the usage of mobile apps impact our lives in ways that motivate us to learn, to communicate, to enjoy ourselves, and to increase our social bonds?

The presentation of this research-in-progress begins with the current status of mobile apps, followed by a literature review of mobile app and their use. A discussion of the proposed research method and the measures is presented next, and this paper concludes with the projected completion timeframe.

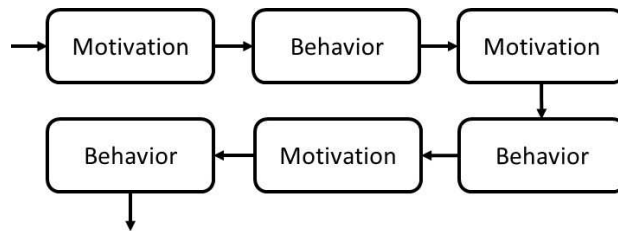
## Current Status and Overview of Mobile Apps

While mobile computing devices have been around since the 1990s, true mobile apps didn't become a reality until the release of the Apple iPhone in 2007 and the Apple App Store in 2008 (Strain 2015). Since then, the smart phone market has exploded. According to a recent study by comScore (2016), individuals in 2016 increased their time spent on digital media by 53% over that in 2013, and much of that usage was via mobile devices. The apps with usage rates most quickly on the rise are those that support typical daily activities such as exercising, dating, and communicating. Such usefulness of mobile apps is important, but is it possible that our favorite mobile apps motivate us as well?

## Literature Review

The mobile app stream of research is growing and includes studies examining phenomenon commonly found in IS research such as identifying influences of app adoption (Jain and Viswanathan 2015; Liang et al. 2016) or app use and continuance (Chen et al. 2012; Han et al. 2016; Taylor and Levin 2014), and

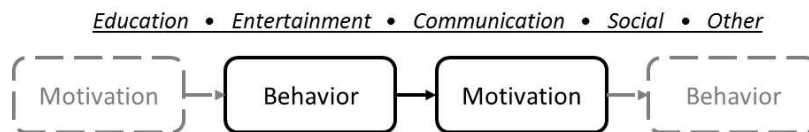
understanding success factors of apps (Duarte and Picoto 2016). Studies are also examining issues specific to mobile apps such as measuring the usability of an app (Hoehle and Venkatesh 2015), exploring how perceptions of value and satisfaction of an app lead to recommending the app to others (Xu et al. 2015), and the relationship between app quality and app sales (Lee and Raghu 2016). The current study is exploring whether the use of mobile apps results in motivating the app users. Numerous theories on motivation have emerged over the years (for summaries see Locke and Latham 2004; Ramlall 2004), but a constant throughout is the relationship between motivation and behavior. The literature on information technology (IT) usage has found that motivations are among the strongest influences on intent, and subsequently on behavior (Venkatesh et al. 2012). When considering continuation behaviors, intent is simply the motivation to continue to perform the behavior (Kim and Malhotra 2005; Ortiz de Guinea and Markus 2009). These rationales along with a systems thinking standpoint results in a simple process model illustrating the cyclical relationship between motivations and behaviors as shown in Figure 1.



**Figure 1. Behaviors and Motivations Process Model**

The “personalization” of consumer products is a current trend that is considered a major driver for mobile apps development. The addition of human characteristics, known as anthropomorphism (Fogg 2003; Wang 2017), is a form of product personalization, examples of which include Apple’s Siri, Amazon’s Alexa, Microsoft’s Cortana, and most recently, Google’s Assistant (Better 2016). Another interesting trend in product development is positive computing which is based on the premise that technologies should be developed with the goal of improving users’ lives (Calvo and Peters 2012; Pawlowski et al. 2015). Mobile apps can be a positive enabler of socially responsible behaviors (Kugler 2016), can help in the treatment of anxiety and depression (East and Havard 2015), assist in the remote monitoring and management of health conditions (Wickramasinghe et al. 2015), improve social capital and reduce social isolation (Cho 2015), and improve psychological well-being (Chittaro and Vianello 2016; Wang and Hsu 2016). Another concept of interest is a category of value creation known as value-in-use which occurs when a consumer’s actual use creates the value they perceive from the product (Bruns and Jacob 2014). This study proposes that the use of mobile apps may result in motivating the users, and is exploring the relationship between the behavior of mobile app use and the proposed motivation resulting from the use of the app. The following hypothesis as illustrated by Figure 2 is being tested:

H1: A(n) [education, entertainment, communication, social, other] mobile app used by an individual will motivate the individual toward [education, entertainment, communication, social, other] purposes.



**Figure 2. Behavior to Motivation Research Model**

## Planned Research Method

The purpose of this research-in-progress study is to explore individual's perceptions regarding the motivating benefits provided by mobile apps. This study is an initial exploration and because persons of college age are known to be early adopters of technology including mobile apps, they are the target

population being surveyed. The survey is being administered to business students enrolled in a major southeastern university beginning the spring of 2017. This study takes a post-adoption perspective and the motivations perceived by individuals regarding their mobile apps are being measured. The categories of apps include education, entertainment, communication, social, and also a category for other. The instrument includes items to collect details about each respondent's current mobile apps usage. The measurement of their perceptions regarding the motivational influence of their mobile apps follows. Both new and modified reflective scales, validated in prior studies (Wei and Lo 2006; Wei 2008), are included in the instrument (only the reflective scale items are presented in the Appendix). The questionnaire consists of 5-point Likert-scale items, which have 1 as "Strongly Disagree" and 5 as "Strongly Agree". The collected data will be entered into a computer-aided statistical program to obtain insights. Once the validity and reliability of the reflective scales is confirmed, the data analyses will primarily focus on an examination of the descriptive, correlation, and comparison statistics to support the exploratory nature of the study and inform future studies.

## Expected Findings and Discussion

It is expected that the findings of this study will lend support to the proposition that mobile apps are motivators for education, entertainment, communication and social purposes. A complete set of interesting and informative findings will be presented at the 2017 Americas Conference on Information Systems (AMCIS) in Boston, Massachusetts.

## Conclusion and Implications for Future Study

The research-in-progress study examines the motivating influences of mobile apps toward education, entertainment, communication, and social purposes are explored. College students are known to be heavy users of mobile apps and are therefore the population of interest in this exploratory study. Future research may delve into the influences of the motivations such as the personalization or positive computing development trends, or of the value-in-use concept. The results found will contribute to the growing stream of research on mobile apps.

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## Appendix

Thinking about the mobile apps you currently use, please answer the following questions. Please indicate your answers by choosing from 1 to 5 where 1 is “Strongly Disagree (SD)” and 5 is “Strongly Agree (SA)”

My mobile apps motivate me . . .

*Scales modified from Wei and Lo (2006)*

*Information-seeking*

- To seek traffic updates
- To keep up-to-date with social events
- To check news headlines
- To check weather updates
- To find out consumer information
- To find out entertainment information

*Social utility*

- To relieve boredom by contacting people
- To gossip or chat
- To enjoy communicating with others
- To relax (and destress)

*Accessibility*

- To be accessible to others anywhere and anytime
- To be always accessible to anyone no matter where I am
- To be available to the ill or aged members of the family

*Affection*

- To improve relations with family
- To feel closer to family members
- To let others know I care for them
- To get a feeling that people care about me
- To say hi to people who care about me

*New scale*

*Learning Motivation*

- To learn about new things
- To increase my familiarity with concepts
- To improve my understanding of topics
- To broaden my overall knowledge

*Scales modified from Wei (2008)*

*Instrumentality*

- To seek information about products or services
- To schedule appointments
- To order things
- To go places I’ve never been before (new item)

*Communication facilitation*

- To get news and information
- To stay informed and in touch anywhere and any time
- To multitask

*Pass time*

- To keep from being bored
- To be entertained
- To have fun (and play games)
- To pass the time

*Sociability*

- To let others know I care for them
- To stay in touch with people I don’t see often
- To keep up-to-date on people and events
- To feel involved with what’s going on with others