Uses of cellphone texting: An integration of motivations, usage patterns, and psychological outcomes

Namkee Park [a, *], Seungyoon Lee [b], Jae Eun Chung [c]

[a] Department of Communication, Yonsei University, 50 Yonsei-ro, Seodaemun-gu, Seoul 120-749, South Korea
[b] Brian Lamb School of Communication, Purdue University, West Lafayette, IN 47907, USA
[c] School of Communications, Howard University, Washington, DC 20059, USA

ABSTRACT

This study suggests an integrated model that explains the associations among motivations for using cellphone texting, usage patterns, and psychological consequences. Using data from an online survey ($N = 335$), the study identified motivations of communication with strong ties and weak ties, which were found to be associated with different usage patterns of cellphone texting. Further, time spent on cellphone texting was negatively associated with relationship satisfaction, while the number of text messages sent and received was associated with reduced feelings of loneliness through higher levels of perceived intimacy and relationship satisfaction.

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1. Introduction

Cellphone texting has become one of the primary communication activities for relationship maintenance in recent years. As of May 2013, 81% of cellphone owners reported sending or receiving text messages, and this proportion reached up to 94–97% for younger adults aged between 18 and 49 (Duggan, 2013). Teens who texted often were more likely to own a smartphone as opposed to a regular cellphone compared to those who texted less often (Pew Research Center, 2012). Given that 83% of people in the age group of 18–29 own a smartphone as of January 2014 (Pew Research Center, 2014), which provides an easy and convenient interface for typing, the use of texting can be expected to continue to be a prevalent communication activity.

In accordance with the widespread use of cellphone texting, an ample body of research on cellphone texting and its social and psychological consequences has been accumulated. For instance, early this century, Palen (2002) suggested that mobile technology would revolutionize the ways in which people maintain their social networks. As such, Hall and Baym (2011) found that using mobile phone—including both calling and texting—in close relationships

enhanced expectations of relationship maintenance, which in turn increased relationship satisfaction. Pierce (2009) discovered that cellphone texting played an essential role in maintaining social contacts among adolescents who suffered from various forms of social anxiety. In another vein, numerous studies have investigated the motivations for using cellphone texting. For example, Reid and Reid (2007) found that anxious people preferred texting to calling in communicating with expressive and intimate contacts. Cacioppo et al. (2006) demonstrated that shy people used text messaging more than non-shy people in order to meet their need for meaningful social interaction. In the realm of the uses and gratifications (U&G) approach (Katz, Blumler, & Gurevitch, 1974), Leung (2007) discovered that college students used texting with the motivations of entertainment, affection, fashion, escape, convenient and low cost, and coordination. Similarly, Jin and Park (2010) showed that interpersonal motives such as affection and inclusion led to frequent uses of cellphone texting. Further, Grellhesl and Punyanunt-Carter (2012) found that there were sex differences among specific motivations for cellphone texting.

Although these studies uncovered various ways in which cellphone texting is embedded in and affects our communication practices, the links among motivations, usage patterns, and psychological outcomes of cellphone texting have been understudied. These variables have been largely examined in isolation, typically within the U&G framework or the media effects paradigm. Upon this understanding, the current study follows Park and Lee's (2014)

* Corresponding author.
E-mail addresses: npark@yonsei.ac.kr (N. Park), seungyoon@purdue.edu (S. Lee), jaeeun.chung@howard.edu (J.E. Chung).

claim that these three components—motivations, usage, and psychological outcomes—are interrelated and thus could reveal a deeper understanding of media use when examined in an integrative manner. Therefore, the main goal of the current study is to comprehend how motivations for using cellphone texting are associated with usage patterns, and how the usage patterns, in turn, influence psychological outcomes.

In the present study, three psychological consequences are examined: intimacy, relationship satisfaction, and loneliness. Intimacy has been widely studied as a consequence of interpersonal communication via communication technologies (e.g., Hian, Chuan, Trevor, & Detenber, 2004; Park, Jin, & Jin, 2011). Relationship satisfaction, which has been documented particularly in the context of romantic relationships (e.g., Anderson & Emmers-Sommer, 2006; Meeks, Hendrick, & Hendrick, 1998), can be expected to exert influence on general satisfaction in relationships between communication partners as well. Lastly, a significant number of studies have investigated the effect of using communication technologies or media on loneliness (e.g., Jin & Park, 2013; Sum, Mathews, Hughes, & Campbell, 2008). Given that cellphone use, including texting, has become an integral part of our daily communication, it is worthwhile to examine how different texting usages are associated with these psychological outcomes.

In sum, the present study aims to contribute to the current literature by suggesting a theoretical model that integrates motivations for using cellphone texting, usage patterns, and psychological consequences. By so doing, the current study illuminates ways in which cellphone texting is embedded in our communication practices, which further account for our relational and psychological well-being.

2. Literature review

2.1. Motivations for cellphone texting and usage patterns

As described earlier, research on the motivations for cellphone texting has been conducted largely within the U&G framework. Many studies have revealed key motivations, including entertainment, affection, fashion, escape, immediate access and mobility, information seeking, and coordination (e.g., Grellhesl & Punyanunt-Carter, 2012; Leung, 2007; Wei, 2008). Some studies have focused more on the motivations of relational communication via cellphone use. These studies have found slightly varied motivations, such as self-presentation and intimacy (Reid & Reid, 2007), personal contact, decreasing loneliness, and social ease (Bardi & Brady, 2010), and affection, inclusion, and control (Jin & Park, 2010). Further, examining the uses of text-based communication media including email, cellphone texting, and Facebook Wall postings, Park, Chung, and Lee (2012) found two different types of motivations across the three media: motivation to communicate with strong tie networks and motivation to communicate with weak tie networks.

In order to identify different motivations, most studies factor-analyzed the statements gleaned from previous studies on traditional telephone or cellphone use (e.g., Grellhesl & Punyanunt-Carter, 2012; Leung, 2007; Reid & Reid, 2007), although some studies (e.g., Bardi & Brady, 2010; Jin & Park, 2010) employed existing scales of motivations for cellphone use such as the Interpersonal Communication Motive scale (Rubin, Perse, & Barbato, 1988).

These different motivations for cellphone texting are expected to affect usage patterns. In terms of examining media usage patterns, traditional media studies focused on the amount of users' time spent on a given medium. Given that some traditional media such as television or radio can be used without users' full attention, a simple measure of time spent on such media has been criticized

(McLeod & McDonald, 1985). Yet, cellphone use involves a more purposive behavior compared to mass media use such as television watching. Therefore, it is reasonable to measure an individual's cellphone use with the amount of time dedicated to it. In addition, another measure of texting usage patterns can be useful when considering the characteristics of cellphone use, which primarily involves communication with certain boundaries of people who already know each other: the number of text messages sent and received with these people can indicate how actively cellphone users are engaging in communication with others.

In the present study, we replicate previous studies on the motivations for the use of cellphone texting. Further, we examine how the motivations affect texting usage patterns by considering both users' time spent on cellphone texting and the number of text messages sent and received. The following research questions address these points:

RQ1: What are individuals' motivations for using cellphone texting?

RQ2: How do individuals' motivations affect (a) time spent on cellphone texting and (b) the number of text messages sent and received?

2.2. Cellphone texting and psychological outcomes

Social penetration theory (Altman & Taylor, 1973) posits that increased self-disclosure in interpersonal communication leads to enhanced feelings of intimacy. Perlman and Fehr (1987) defined intimacy as a feeling of closeness resulted from personal disclosures and interactions between communication partners. It is also regarded as a personal and subjective sense of connectedness stemmed from reciprocal interactions (Green, Derlega, & Mathews, 2006; Laurenceau, Rivera, Schaffer, & Pietromonaco, 2004), and as an essential component in maintaining close relationships (Bauemeister & Leary, 1995).

Cellphone texting takes place typically among people who know each other and therefore can serve as an outlet for self-disclosure. If this is the case, uses of cellphone texting are likely to heighten intimacy. For instance, in the context of instant messaging (IM), Hu, Wood, Smith, and Westbrook (2004) discovered that the amount of IM use was positively associated with affective and social intimacy among friends. It is notable, however, that some studies have found no significant association between the amount of time spent on social networking sites (SNSs) and emotional closeness (e.g., Pollet, Roberts, & Dunbar, 2011). Though not based upon empirical findings, Turkle (2011) also claimed that the use of cellphone has reduced the intimacy of interpersonal relationships. These contrasting findings suggest the following research question:

RQ3: What is the association between the use of cellphone texting (i.e., time spent on cellphone texting and the number of text messages sent and received) and perceived intimacy?

Anderson and Emmers-Sommer (2006) defines relationship satisfaction as "the degree to which an individual is content and satisfied with his or her relationship" (p. 155). With respect to the association between media use and relationship satisfaction, the extant literature offers limited empirical findings. The construct of relationship satisfaction has been utilized mostly in romantic relationships. Further, previous studies have shown inconsistent findings: a few found a negative association between romantic partners' use of new media such as Facebook and relationship satisfaction (e.g., Elphinston & Noller, 2011; Hand, Thomas, Buboltz, Deemer, & Buyanjargal, 2013), whereas others found no direct association between cellphone use and relationship satisfaction among college students (e.g., Hall & Baym, 2011).

It has been demonstrated that mobile communication via cellphones takes place among intimate and homogeneous peers