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Snapping Live: Exploring the Effects of Ephemerality Nature of Messaging in Social Media Settings

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SNAPPING LIVE:
EXPLORING THE EFFECTS OF EPHEMERALITY NATURE OF MESSAGING IN
SOCIAL MEDIA SETTINGS

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DEDICATION

I would like to dedicate this thesis to my husband, Yaser. Your encouragement and support made all of this possible. Thank you for your patience and help through all of the frustrating nights. I am truly grateful to have you in my life.

I would also like to thank my parents for giving me strength to chase my dreams and for always believing in me.

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SNAPPING LIVE:
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DANIA ALJOUHI

ABSTRACT

Ephemeral messaging apps such as Snapchat has become a very popular app with young adults. The Snapchat application defined as an instant messaging app that allows its users to take pictures, videos, add a captions, doodles and send the content to a friend or add it to the user's story. Importantly, "the snaps" will self-destruct after a specified period of time. Further investigation regarding the effects of using ephemeral nature of messaging in Computer-Mediated Communication (CMC) is explored in the theoretical framework of Hyperpersonal. This study was designed to examine the role of ephemeral nature of messaging in social media settings. Using responses from an online survey regarding Snapchat intensity, Self-Disclosure, Self- Presentation, Social Presence, Self-Destructing Messages and synchronous communication scales were examined. Direct relationships were examined with simple correlation. Finally, a complete model was tested using structural equation modeling. Results demonstrate that Snapchat users mainly share selfies that are mostly taken at home and primarily for communication with close friends and family. Also, results of SEM model indicate that Snapchat intensity was significantly related to Hyperpersonal communication (Walther, 1996). However, it was found that Social Presence, Ephemerality: Self-Destructing Messages scales are positive predictors

of Ephemerality: Synchronicity. The findings are seen as an attempt to adapt the framework of Hyperpersonal theory (Walther, 1996). The results of the study will allow the researcher to better understand and measure the Ephemerality: Synchronicity and Hyperpersonal constructs as well as increase researchers understanding of the role of ephemerality nature of messaging in social media platforms.

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CHAPTER I

INTRODUCTION

“The single biggest problem in communication is the illusion that it has taken place.”

George Bernard Shaw

Nowadays, the revolution of the internet and the social media changed patterns of social relations and ways of communication. No one can deny that the revolution of the internet and the massive use of social media have transformed the way people communicate with each other in everyday life. Today, many individuals would prefer to text rather than make a phone call or meet. However, in the online environment, there always a chance to restore or backup your information and the “delete” option no longer means something is “gone forever,” (Ganzenmuller, 2014). Recently, there is a noticeable move toward ephemeral. There are now ephemeral messaging applications (apps) which allow people to transmit multimedia messages that automatically disappear from the recipient's screen after the message has been viewed. One of the most popular apps is Snapchat which allows its users to take pictures and short videos up to 10 seconds long. Moreover, Snapchat, Poke (created by Facebook), Wicker, Blink and other apps all provided ephemerality nature of messaging services. All these apps provide its users a

wide range of communication options with their loved ones, close friends, family members without worries about keeping their messages, pictures, and videos safe from photography theft. Although nothing can replace the feeling of a warm hug or a tap on your shoulder by a close friend or family member, the massive number of ephemeral social media apps seem to work very well for many online users.

Turkle (2012) argued that technologies make us connected but lonely. Moreover, indicates that people tend to avoid real world conversations and involve more in the mediated online environment, but what if we can provide real conversations using digital tools such as the ephemeral instant messaging and at the same time keep in touch with our close friends and family members. Could our feelings change to be connected and together instead? Additionally, the co-founder and chief executive of Snapchat, Spiegel, states that today, the picture is being used for talking and not only as it used historically, as memories for significant life events, but also as a way of conversation. Also, Spiegel reveals that 100 daily active users show greater engagement with 65% of those active users who exchange content such as pictures and daily stories of their own, which indicates a high level of active engagement. Hence, the general research question of this paper is how has Snapchat with its ephemerality nature of messaging reflect in-moment communication. Also, do a particular type of Self-Disclosure and Self-Presentation is experienced in the Snapchat application?

The ephemerality of messaging in social media appears to be more than a trend, and some speculate it could be the future of communication. Introducing the Self-Destructing Messages can be an initial step to a new form of interpersonal connection through the use of digital reality technology.

This thesis addresses the notion of ephemeral nature of messaging and how it can reflect in some sense real conversations based on exploring the literature review of Hyperpersonal theory in Computer-Mediated Communication (CMC) studies. The first Chapter provides an overview of the instant messaging history and social media as well as instant messaging and Snapchat application. The concept of ephemerality nature of messaging in Snapchat application along with Snapchat and its similarity to FtF communication are discussed. The following section provided an overview of the Hyperpersonal theory, discussed Hyperpersonal theory in CMC studies, and Snapchat application. The last part explained the Self-Disclosure and Self-Presentation in CMC studies, Self-Disclosure and Self-Presentation in Snapchat context, and lastly an overview of Social Presence in CMC studies. The methods of the analysis are presented in Chapter four. Finally, the results of the analysis are presented in Chapter five.

CHAPTER II

LITERATURE REVIEW

This section will cover a brief history of the instant messaging services to trace the changes in the IM services across a variety of applications and messenger services. The concept of instant messaging was introduced in the 1960s and appears in a multi-user operating system such as Compatible Time-Sharing System (CTSS) and Multiplexed Information and Computing Service (Multics). In the 1970s, some programmers worked on peer to peer protocol to allow the universities and research labs to communicate and interact with users of the same type of computer. The Zephyr Notification Service (i.e. IM services that provides its clients with immediate and rapid communication for small quantities of time-sensitive information) was launched in the 1980s, and it is still used by some companies such as MIT (Massachusetts Institute of Technology). During this year, Bulletin board systems were also created to allow its users to use a terminal program to exchange messages with each other and to upload and download delivery software.

In the 1990s, the instant messaging obtained a common usage, and it became to be known as (AOL). After that in 1996 s, Israeli company Mirabilis launched ICQ which is

a text based messengers and actually, it was the first version of IM that has a high penetration rate in the online market. (See Petronzio, 2012 for further discussions).

Instant Messaging in 2000c

These early instant messaging programs were primarily real-time text, where characters appeared as they were typed such as the UNIX "talk" command line program, which was popular in the 1980s and early 1990s. However, some implementations of real-time text feature integrated into IM services such as (AOL), and it introduced real-time communication as an additional feature. Additionally, the real success of IM was in 1997, when AOL launched AIM. Then, in 1998, Yahoo and Pidgin released IM with chat room services to compete with other IM services. The following year, Microsoft released MSN Messenger, and It allows its users to find out if their contacts online so they exchange simultaneous messages. In the 2000s, Apple developed "I chat" for Mac users. And later "I chat" was replaced by Lion's Messages which allow its users to send unlimited messages to any Apple applications. At that time, I believe the idea of involving real conversation started to appear on the scene. Furthermore, in 2005 AIM dominated the online market especially within the notion of chat rooms. Also, AIM promoted many features such as adding photos and playing games, and IM services accessed via web browser. The next section will explain how IM was introduced in the venue of social media.

Instant Messaging and Social Media

Previously, we explained some impressive beginnings of IM services. So, this section will cover the use of instant messaging in social media. First, in 2005, Google Talk, was released. It appears in Gmail' user's window. It was integrated with Google

Plus, which allows a high-speed communication with the users' email contacts. The service provides text, video, and voice calls. In 2006, Myspace IM appeared as a social platform that allowed users to exchange instant messages with friends on their desktop and online too. In 2008, the Facebook was launched and enable users to instant messaging with one friend or multiple friends through the group's feature when they logged into the social network. In 2011, Facebook incorporated video feature in the chat and integrated Facebook chat with Skype. Also, it has released the mobile application version of Facebook Messenger. Facebook purchased many mobile-focused companies, such as Instagram in 2012 and WhatsApp in 2014, but fails to obtain Snapchat.

Overview of Snapchat. There is a massive use of Snapchat, and it is unprecedented in the instant messaging history. In 2014, there were reportedly 50 billion IM sent per day, twice as many as standard text messages (Curtis, 2014). It's estimated that IM apps will account for 75% of mobile traffic by 2018 (Juniper Research, 2014). According to the Snapchat company, in May 2014, the app's users were sending 700 million photos and videos per day while Snapchat Stories' content was being viewed 500 million times per day. Also, the average number of photos shared on Snapchat every second was 8.795 photos in 2015. Snapchat was initially released in 2011. It is an app that allows its users to take a photo, record videos, add text, doodles and send them to their friend list. In 2013, Snapchat served the stories function which allows users to combine snaps into a story that can be viewed by other users up to 24 hours in chronological order. The screenshot notification function does not prevent the screenshots rather it detects the screenshot of the snaps and notifies the sender that the snap has been saved. In 2014, the Snapchat introduced “our story” function which allows the users in a particular

location to snap about a particular event (e.g. the United States presidential election, Arnold Sports Festival) then, combine the snaps into a story that appears to all Snapchat users. Also, the direct messages and videos were introduced in the same year. They allow users to exchange text, pictures, and live video supported with “Here online indicator” (that is a blue button which displayed within the chat window, and it informs the sender if the recipient is currently online and viewing their snap). In 2015, the Snapchat released ” Discover” function which consisted of different channels that provides a brief content supported with ads from popular channels (i.e., CNN, Mashable, BuzzFeed, etc.).

Instant Messaging & Snapchat. IM has become a compelling approach to the immediate communication in everyday life. IM is a type of online chat which offers real-time exchange of text, images, video and voice transmission over the Internet, exchanging emotions via emoticons, information provision, behaviour change interventions and surveying (Cole-Lewis & Kershaw, 2010; Hawn, 2009; Ramirez & Broneck, 2009; Ogara, Koh, & Prybutok, 2014; Piwek, & Joinson, 2016). IM applications have integrated into the majority of social media applications such as Facebook messenger and mobile services apps like WhatsApp, Snapchat, and Instagram. All the previous IM services store content. The content is stored for both parties, the sender, and the receiver, whereas, Snapchat app erase the content after viewing the snap. This means having a real time of exchanging video, pictures and voice and the content only exist for a limited period. Moreover, the synchronous communication feature becomes an important factor in this comparison, synchronous communication usually found in face to face conversations, phone calls, and instant messages, which occur in

real time. Synchronous communication is manifested in the Snapchat in different features (e.g. the ability to make live video chatting with each user in the contact list) or when a Snapchat user is updated with various global live events which are provided daily by the Snapchat company.

Summary. Based on the above information, the social platform for IM services allows consumers to enjoy sending instant messages from their mobile devices to other mobile devices without fees for the wireless services. Each of the previous IM services shares similar features and services regarding the IM services. First, the main difference between these IM services and Snapchat is the ephemerality of Snapchat messages. Moreover, none of the previous IM services developed an ephemeral destructing feature of the content (e.g. text, photos, and videos). Evidently, the timed exposure of the content are restored across all previous IM services but Snapchat. Second, the messaging function of Snapchat is being "conversational," rather than "transactional," as Spiegel indicates. Additionally, he said that the “ Here online indicator” in previous IM services was a negative indicator (online typing indicator) which prevents the flow of the conversations when each of the users tries to stop typing when they see the other user typing. Third, Snapchat has a unique, playful matrix (its improved lenses, camera filters, the use of doodles emotions, screenshot notifications, and daily stories) that allow its users to utilize a variety of features to produce a personalized content. Finally, the Snapchat application used primarily in mobile technology. It has only a mobile app version for IOS and Android.

Ephemeral Social Media

Nowadays, there are many challenges characterized by persistent media, and there is a noticeable shift to platforms that are designed to delete communication artifacts after a short period. Furthermore, Hollan and Stornetta (1992) indicate that some forms of communication have always been ephemeral – in particular, face-to-face interaction. Additionally, synchronous style of communication such as voice and video provides mediated channels in which no record is stored by default. Subsequently, ephemeral social media share some characteristics of synchronous communication such as face-to-face conversation, but they differ in which they are mainly asynchronous. More interestingly, social and mobile media impact how people plan their behavior, perceive time lapse, and experience daily life (Burchell, 2015).

Many issues remained unexplained regarding how ephemeral social media works on the temporal experiences. (e.g. the psychological benefits of experiencing in-moment communication), Killingsworth and Gilbert (2010). A recent study by Bayer, Ellison, Schoenebeck and Falk (2016) indicates that Snapchat participants did not see the application as a platform for sharing or viewing photos. Rather, Snapchat was seen as a playful matrix or channel for sharing spontaneous experiences with trusted ties.

Snapchat: The Ephemerality Nature of Messaging and Self-Destructing

Messages. Today, human have developed a smart, selective applications to enrich humans natural features of interaction regarding their sex, face, age, and desires. One purpose of using technologies is to bring people together online in a way that offers many of the properties of face to face interactions. Today, with the tremendous communication tools and features, the main goal is to achieve and create ways of conversation that could

simulate FtF communication. One of the current theoretical perspectives of CMC studies is to create a creative way of communication supported by the notion of in- the- moment communication.

New technologies and social media apps supported the use of the visual interactive features in the online interaction process which are lacking in email and old instant messaging. These technologies employ not only text but voice, live videos to improve and enrich conversations. For example, Twitter users post short messages (tweets) about live events, latest news, and a variety of topics. While, Facebook allows its users to interact and present themselves in many ways; from the text, voice, to public messages, private messaging. Also, online forms create new real-time data sharing that has gathered in its matrix the use of variety features (e.g. text, voice, pictures, live videos) and send the content in a simple destructing message format.

Expanding the definition of Self-Destructing Messages or the ephemerality nature of messaging will give us the chance to realize how the disappearing messages play a crucial role in our conversation and everyday interaction. Ephemeral nature of messages in CMC are closely driving, the sense of real conversations. It is defined as the feature that allows people to exchange multimedia messages which disappeared immediately after the receiver viewed the message. The word ephemeral refers to something that exists for a short period. “Self-destructing data may provide the solution, shifting control over digital communication back to owners” (Kotfila, 2014, p.12). This will give online users more privacy, allow them to engage in more selective Self-Disclosure, and Self-Presentation when they are exchanging snaps.

Ephemerality nature of messaging was employed and highly supported by the Snapchat matrix. According to Wagner (2014), 77% of college students use Snapchat once per day. The automatic deletion allows Snapchat users to experience similar feelings of FtF interaction via their smartphones. Furthermore, ephemerality plays as an effective tool that transmits our daily lives activities through Selfies, photos, and short videos. In Snapchat, the receiver displays the content (snaps) up to 10 seconds, and then it disappeared. The Self-Destructing Messages give its users the ultimate control over the content and the time. Users can control and decide the entire process of communication. Spiegel, CEO of Snapchat commented on the effect of the ephemerality nature of messaging and how it allows people to share more immediate selfies by saying that “the selfie makes sense as the fundamental unit of communication on Snapchat because it marks the transition between digital media as self-expression and digital media as communication.” Moreover, this brings us to the importance of ephemerality at the core of the conversation. “Snapchat sets expectations around a conversation that mirror the expectations we have when we are talking in-person” (Spiegel, 2014, “AXS Partner Summit Keynote,” para. 19).

However, after the advent of the Snapchat app and its self-destructing messages, many similar apps started to emerge. For example, Frankly app which allows its users to personalize the content by using a variety of features such as different background, font sizes and also the message disappear after 10 Sec. Indeed, it has a broad range of languages support. Although it allows its users to send audio voice clips, it does not have one on one conversation with live videos. Also, it does not have message seen notification or replay. Finally, it is designed more to meet new people rather than maintain

existing strong ties with friends and family members as the Snapchat app. Next, Wickr app and Blink messenger are current self -destructing messaging app which offers high secure systems that use encryption of text, pictures, and videos. In sum, all of the previous apps employed the ephemeral messaging as a focal point to attract users. However, without any doubt, Snapchat has pioneered the idea of ephemeral messaging media platform.

Besides the self- destructing messages Snapchat application has employed synchronous communication, and it is functioning in one on one video conversations. On the other hand, the asynchronous communication is apparently operating in the daily stories of Snapchat users. The daily story defined as a story of the photo, video, text that posted by the users and lasts up to 24 hours with the ability to change the privacy settings and customize the story viewing options (only friends or group of users). Although synchronous communication is the underlying concept of the Snapchat app, the overlap between synchronous and asynchronous communication, make Snapchat app more appealing. This overlap can enrich the communication between its users based on different factors (e.g. the features of the application, the ability to personalize the content, and the type of user; active user versus inactive user).

Snapchat and its Similarity to FtF Communication. Before assessing, how Snapchat application closely reflects FtF communication. It is significant to explain how mediated interpersonal communication works through the use of the Snapchat app. Moreover, how does interpersonal communication work in FtF settings, what its attributions and traits? Interpersonal communication is defined as “the type or kind of communication that happens when the people involved talk and listen in ways that

maximize the presence of the personal (Stewart, 2012, p. 36). One of its primary features is occurring” face to face.” Subsequently, this synchronous type of interaction reflects a lot of personal traits about individuals’ relationships and social roles. That being said, that interpersonal communication initially, focuses on the dyadic and small groups. One of the potential barriers to the interpersonal communication is disclosing yourself to others (Stewart, 2012, p. 211). If we apply the basic features of interpersonal communication in the Snapchat application framework, it is very obvious that it is targeting interpersonal type of communication (e.g. close ties).

Mediated interpersonal communication and CMC. CMC defined as “a process of human communication via computers, involving people, situated in particular contexts, engaging in processes to shape media for a variety of purposes (December, 1997). One of these purposes is interpersonal connections. Also, CMC defined as is a type of communication that facilitates “synchronous or asynchronous electronic mail and computer conferencing, by which senders encode in text messages that are relayed from senders’ computers to receivers” (Walther, 1992, p. 52). This tells us that CMC acts as a vehicle for interpersonal communication, but also it alters the content of social norms and boundaries. McQuillen (2003) stated that sometimes, CMC could be supplemental to offline, face-to-face relationships.

Mediated interpersonal studies. Baym (2010) identified seven key concepts that could provide a rich understanding of how media influence interpersonal connections and relationships. The seven key concepts are interactivity, temporal structure, social cues, storage, replicability, reach, and mobility. The previous seven key concepts helped us to consider a broad range of facets of human communication. That is including the degree to

which we consider media as more or less reliable in comparison to face to face interaction (e.g. Some users prefer to use email and not instant messaging or webcam). Moreover, Madianou and Miller (2013) provide a new framework of polymedia theory that helps to understand the effects of digital media in the context of interpersonal relationships. The study is navigating the environment of polymedia and linked to the ways in which interpersonal relationships experienced. Also, it demonstrates how polymedia are giving the users the chance to manage their relations and emotions based on its structure of affordances. (See Table 1).

Table 1.
Baym seven key concepts (2010)

IM features	Old (AOL) Messenger AIM	SKYPE	Yahoo Messenger	Google Talk/Hangouts	Twitter /Facebook IM Messenger	Snapchat
1- Interactivity	Moderate	Moderate	Moderate	Moderate.	High	High
2- Temporal structure	Yes	Yes	Yes	Yes	Yes	Yes
3- Social cues	low	Moderate	Moderate	Moderate	High	High
4- Storage	Yes	Yes	Yes	Yes	Yes	Yes
5- Replicability	Yes	Yes	Yes	Yes	Yes	Yes
6- Reach	Moderate	High	High	High	High	High
7- Mobility	Yes / low	Yes	Yes	Yes	Yes	Yes

Overview of the seven key concepts. Interactivity is defined as the ability of a medium to enable social interaction. Also, the variety of the medium that allows users to experience social interaction and how people interact with its interface. Moreover, how users interpret the content through the use of a medium. Next, a temporal structure which addresses the nature of communication whether synchronous (in the moment) or asynchronous (delayed, such as emails). Also, considering the situations in which media can be classified differently. In general, it is common to say that synchronous interaction is seen as more useful for dyadic or small groups, and asynchronous communication is more useful for large groups/public spaces. Social cues are explained by the nature of the information the media provides regarding the social cues. For example, the location “where is the sender? It reduces the feelings of uncertainty toward online identities.

Storage addresses the nature of saving or recalling the content in a medium. Is it via people’s memory, or online, saved messages on the phone? Replicability addresses how does the distribution of the content in a medium work. Is it easy to replicate and distribute the messages or not? Reach could be defined as the audience size in which the media can obtain and support and continue to cover. Finally, mobility and it is defined as the ability of a medium to be portable and moved freely and easily regardless of people’s location. In conclusion, all of these seven concepts identify the type of media that is being observed. Also, it helps us to distinguish between different kinds of media.

Summary. Considering the framework of the Snapchat application, it is obvious that its features resemble a blend of human expressions which exist in everyday life. These human expressions include the ability to take live pictures, videos, draw doodles, texting and at the same time be posted with live global events and breaking news. This

interaction is functioning on both types of communication; synchronous and asynchronous.

Instant Messaging and Mediated Interpersonal Communication

Computer-Mediated Communication technologies generated a broad range of changes in the dynamics of social interaction. Mediated interpersonal communication defined as any situation where a technological medium is introduced into FtF interaction, (Cathcart & Gumpert 1983). One of the best technologies of Computer-Mediated Communication technology is instant messaging, which defines as “an Internet-based application that provides a platform and environment for near real-time communication between users. IM has several features for facilitating interpersonal interaction, (Huang & Yen; 2003; Rennecker & Godwin 2005). It provides nearly synchronous communication fostered by presence awareness and pop-up notifications. Moreover, users can engage in multiple conversations on a one to one basis simultaneously through separate windows, (Chen, Yen, & Huang, 2004) and it allows users to express themselves via multimedia such as pictures or live chat video and text messages. (See Anandarajan, Zaman, Dai, & Arinze, 2010 for further discussions).

According to Cathcart and Gumpert (1983) through the interpersonal communication, people tend to edit and adjust the image of self by utilizing interpersonal mediated technologies. For example, two people are having a conversation; the technologies will help them to form good initial perceptions of the interpersonal transactions, and reinforce or deny their self-image.

Anandarajan, Zaman, Dai, and Arinze, (2010) examined how people tend to use IM to enrich the degree of interaction among their friends and family members and the

use of instant messaging technology that enable them to convey several kinds of communication efficiently (e.g. verbal and nonverbal meaning cues). This makes IM a very useful medium for socialization. This ensures the idea that people initially and subconsciously used IM because it can closely reflect the sense of face to face interaction. The traditional notion of online communication usually evokes the images of a desktop or a laptop, but today, the cell phones are a substantial device in everyday life. Cell phones are widely used for exploring different life activities. A survey study shows that cell phones are the most commonly own devices by American adults with 92% (Rainie & Zickuhr, 2015). Jin and Park (2010) replicated prior studies about cell phone use including texting and calling. He indicates that the use of a cell phone and its interpersonal motives are associated with FtF interpersonal communication and loneliness. The results of the Jin and Park (2010) study show that affection, escape, and inclusion were strong incentives (e.g. people are connected to cellphones in the first place because they want to refill the space of emotions they use to encounter in the traditional face to face communication). Also, the results support that the more the participants engaged in face to face interaction with others, the higher their interpersonal motives were, and the more frequent cellphone use occurred. Hence, the mobile phone in a short period has become an efficient mediated interpersonal communication tool.

IM and its interpersonal motives manifested in Snapchat. Many additional features make Snapchat a unique IM service. Snapchat application is only a smartphone app version and mainly used to communicate with close ties. It is available on Apple iOS and Android. Furthermore, the app is not able to be used by the web browser as Facebook or Twitter messenger services. The app provides a security feature for the content.

Moreover, it detects immediately if the receiver makes a screenshot of the content, then, the app notifies the sender about the action. Also, because the receiver must maintain tactile contact with the device's touchscreen by his finger till it disappears, it becomes hard to capture the content or to take a photo of the content by using another camera device.

Hyperpersonal Theory

Hyperpersonal theory, suggests that Computer-Mediated Communication (CMC) can become Hyperpersonal due to its ability to surpass face to face interaction (Walther, 1996). Thus, CMC with its rich structure can afford communicative advantages over the traditional FtF communication. The Hyperpersonal theory indicates that senders have the ability to edit, enhance, and develop the presentation of self which enables a selective optimized, and desirable presentation of oneself to others. Moreover, the theory indicates how the interactions between the users may lead eventually to an inflated reciprocal kind of exchange which results in the optimized type of relationships that could surpass FtF.

According to Walther (1996) the literature of CMC could be explained based on three phases; starting from impersonal, to interpersonal and finally Hyperpersonal. First, impersonal because traditional CMC illustrated no nonverbal cues and tended to be more task-oriented than FtF. This could be explained based on three factors. 1) The content of communication is a text based with no "socioemotional effects" (Walther, 1996, p.6). 2) It has advantages in group decision making with no peer pressure or influence. 3) "Group members can enjoy the "democratic" atmosphere in CMC more than FtF communication. As well as, anonymity, which can lead to more freedom for members to verbalize or express without the feeling pressure from high-status members, which is a crucial feature

of CMC”(Walther, 1996, p.7). Next, Walther indicates that CMC not always impersonal and could be interpersonal and capable of developing relationships. He explains that considering the absence of the nonverbal cues in exchanging the information between the sender and the receiver with the time increasing, the sharing of the information will increase, and the online users will know more details about the other users. Eventually, this type of interaction will lead to more immediacy and open communication similar to FtF settings.

Finally, the concept of Hyperpersonal appears in the scene. Walther indicates that CMC is more “socially desirable” than we tend to experience in parallel FtF interaction. (Walther, 1996, p.17). Moreover, the online users do experience Hyperpersonal interaction. More interestingly, users and senders do engage in selective Self-Disclosure and Self-Presentation through the message they exchange. The process of Hyperpersonal messages may be fostered by the asynchronous communication in which it allows more time for both parties sender and receiver to think about the content and create the desirable impression of self. Thus, online users can manage, edit, and control their online presentation of self- more than FtF interactions.

Hyperpersonal Communication in CMC Studies. There are numerous studies about CMC that describe the relational style of CMC. The most common theoretical point of view of CMC and FtF communication is that CMC (email and computer-based conferencing systems) reduce the nonverbal cue of the relational process. These reduced of nonverbal cues impact users’ perceptions of the whole information process and the interpretation of the messages (Walther, 1992). Thus, this will lead to impersonal or less socioemotional usage of the channel (Connolly, Jessup, & Valacich 1990; Hiltz, Johnson,

& Turoff 1986). Recently, there has been tremendous efforts to understand and develop CMC studies in a way that illustrate that CMC is driving a very efficient and productive communication that could lead to rich relationships than it was initially expected. (Walther, 1992).

Hyperpersonal Theory and Snapchat Application. In this section, it is argued that Snapchat app allows its users to experience Hyperpersonal communication. This is based on a brief analysis of some significant aspects of the Hyperpersonal theory. “Combinations of media attributes, social phenomena, and the psychological process may lead CMC to become “Hyperpersonal” in a way that surpasses interpersonal FtF communication” (Walther,1996, p.4-5). The theory posits that the level of interpersonal interaction in CMC can be improved and exceed the levels of emotions and intimacy of FtF interaction. Most importantly, the asynchronous of CMC allow its users to edit their feedback and restrict their emotions and thoughts by giving users a chance to control time and interaction. Walther (1996) states that asynchronous interaction allows “the user almost unlimited time for editing, composing, sending, and receiving messages” (p. 24). Also, the effects of CMC could be applied to group and dyadic interaction and in personal and professional context as well. Some scholars argue that the limited social and non-verbal cues in CMC allow users to hide their identity and they may subconsciously focus only on receiving the positive impressions from other users. Previous research regarding the influence of interpersonal mediated communication initially rated on the lack of nonverbal cues (Kiesler, Siegel & McGuire, 1984). Others are concerned about how communication turns out to be impersonal when it happens through this interpersonal mediated communication channel (Culnan & Markus, 1987). Also, some

argue that CMC studies suggested that the reduce nonverbal cues and the complete depend on language, or verbal cues may encourage CMC users to express real selective Self-Disclosure and Self-Presentation that surpasses FtF interaction. Walther (1996), states that online Self-Presentation is “more selective, malleable, and subject to self-censorship in CMC than it is in FtF interaction” (p. 20).

However, recently there is a noticeable focus on synchronous communication (in moment communication). This does not mean that the asynchronous communication is eliminated rather it can be considered that the recent CMC interaction is characterized by two type of communication; synchronous and asynchronous communication which can be managed by users.

Walther explained Hyperpersonal theory based on five important aspects; senders, receivers, the content, characteristics of the channel, and the feedback process. The theory posits that “senders” in which they can practice a selective Self-Presentation in CMC as indicated by Goffman (1959). He explains that the presentation of self in any settings is a performance of a particular impression the senders want to achieve. “The performance of an individual accentuates certain matters and conceal others” (Goffman, 1959, p. 67). CMC users could experience selective Self-Presentation through a careful use of the channel. A study about the content in Snapchat indicates that participants used Snapchat to exchange spontaneous content (i.e. selfies, humor, and feelings) during the day (Roesner, Gill, & Kohno, 2014).

The ephemeral nature of the message in the Snapchat app is a crucial aspect that illustrates the Self-Disclosure and the Self-Presentation of Snapchat users. This section argued that Snapchat users do experience a particular type of Self-Disclosure and Self-

Presentation. Furthermore, Snapchat enables users to have control over the time and the content. Thus, the Snapchat app is capable of giving an intimate, intense and Hyperpersonalised interaction between its users. The app primarily focuses on user experiences that reciprocate real conversations. Self-Destructing Messages means that when users view the message, they will not be able to view it again after the time reached zero. For Snapchat users, it is argued that the Self-Destructing Messages will give the users a greater opportunity to engage in selective Self-Disclosure and Self-Presentation. Subsequently, they will experience hyperpersonal interaction. The time limits of the Self-Destructing Messages in Snapchat cannot be increased beyond 10 seconds, but users have the chance to add their snaps to their daily stories which allow them to be viewed multiple times for 24 hours with the availability to customize the viewing settings of their friend list.

Another important aspect is the content. It is very different from other ephemeral social media platforms. The content in the Snapchat app is playful, fast-paced, and dynamic. Moreover, users can experience different ways of exchanging the content; they can send text, doodles, live pictures, selfies, videos supported by camera filters and improved lenses function. All these features enrich the quality of the content and make it more personal and appealing. In the Snapchat context, users can modify their presentation and retake the snap till it achieves the desirable impression that senders wish to convey. Also, “with more time for message construction and less stress of ongoing interaction, users may have taken the opportunity for objective self-awareness, reflection, selection, and transmission of favorable cues” (Walther, 1992, p.229). Moreover, CMC is characterized by two factors: reduced communication signals and synchronous and

asynchronous communication. Hence, the selection and the penetration of a favorable impression can be fostered in CMC. So, in the Snapchat app, the users can experience immediate feedback through the use of the direct snaps. They can interact with each other and send or receive an instant chat about a friend's daily story (up to 24 hours). Hence, their friends will be able to view the conversation plus the snap (picture, video, doodles, and text) and attach comment about their daily stories. This idea reflected the importance of the immediate and delayed (asynchronous) feedback.

Self-Disclosure and Self-Presentation

To understand how Self-Presentation and Self-Disclosure work in CMC we have first to review some related aspects of Self-Presentation and Self-Disclosure in the traditional FTF settings. Furthermore, the most important factor of intimate social relationships is Self-Disclosure, the act of revealing personal information to other people (Archer, 1980; Derlega, Metts, Petronio & Margulis, 1993). Goffman (1959) used the "metaphor of drama" to illustrate how people play multiple roles in everyday life. Moreover, he believes that in everyday life, individuals tend to control or guide their Self-Presentation and impression by changing their performances or their manners. It presents the idea of social impression management. Goffman indicates that the expressions of individuals can be divided into two unique types of sign activities; first, the expression an individual gives (Front stage) and second, the expression the individual gives off (backstage). The first includes the verbal symbolism which used intentionally and solely in exchanging communication messages. However, the second covers a broad range of actions that considered as symptomatic. Moreover, these actions were performed for other reasons than the information they conveyed. Finally, the following section

explains how Goffman's idea of Self-Disclosure and Self-Presentation function in CMC and specifically in the Snapchat app context.

Self-Disclosure in CMC Studies. In CMC, Some studies show that some forms of Computer-Mediated Communication can lower barriers to interaction and encourage more Self-Disclosure. Walther (1993) explained that based on the overextended interactions and similar amounts of message exchange, CMC and FtF partners reached similar levels on the number of traits they could attribute to their partners. Also, Tidwell and Walther (2002), indicate that CMC participants ended conversations feeling just as confident as FTF participant. Self-Disclosure has been considered as an essential aspect of communication research. Berg and Archer (1983) pointed out that Self-Disclosure has emerged as one of the most salient and critical behaviors in CMC. It is the self-revelation of private thoughts, experiences, and emotions are widespread on the Internet, from personal blogs and social networks to online and dating Websites (Joinson & Paine, 2007). A content analysis of Facebook profiles (Nosko, Wood, & Molema, 2010) indicates that on average Facebook users disclose approximately 25% of the standard information that could be disclosed, revealing highly personal, sensitive, and potentially stigmatizing information (e.g., political views, sexual orientation, religious affiliation, phone numbers, etc.) in their personal profiles. This clearly indicates how Self-Disclosure is a critical aspect of the online social interaction.

Self-Presentation in CMC Studies. The presentation of self by Goffman becomes a very popular concept for explaining the differences in the meaning and the activity of online interaction. Hogan (2010) argues that Self-Presentation based on Goffman (1959) can be divided into performances, which occurs in synchronous

“situations,” and “artifacts,” which takes place in asynchronous exhibitions. Based on the previous information, It is believed that the Self- Presentation in Snapchat is reflecting Goffman’s notion of the front stage and back stage behavior. Moreover, when creating online Self-Presentations, users have the opportunity to think about which aspects of their personalities should be presented or which photos convey the best images. They can manage their Self-Presentations more strategically than in face-to-face situations, (Ellison, Heino, & Gibbs, 2006). A good example of selective Self-Presentation in CMC is online dating, where daters (users) edit their photos professionally and delete less desirable features in dating profiles to appear attractive (Hancock & Toma, 2009; Toma, Hancock, & Ellison, 2008). Furthermore, research indicates that males, in particular, spend a significant amount of time composing personal messages depending on the sex and status of their partner (Walther, 2007).

Self-Disclosure and Self-Presentation in Snapchat context. To further explain Goffman’s idea clearly in the Snapchat context, we need first to introduce the audience of Snapchat users. It is defined as close people who are observing a particular user and monitoring his performance (Snaps). In the online space, the front stage presents the continuous adjustment of Self-Presentation based on the existing of others in the friend's list. Whereas, the backstage behavior shows the actual impression management or precisely what I called the real disclosure of self that shows personal details of one’s identity. In Snapchat context, the Self-Presentation appears in the use of direct snaps and the friend’s daily stories. Although they stay for up to 24 hours, they still resemble an exhibition of users’ activities. This type is more flexible, viewable, and suited in public settings. Also, it is important to note that a Snapchat user can customize and specify the

way he presents his daily stories “exhibitions.” This emphasized the notion that Snapchat may reflect FTF settings, considering the usage of the Snapchat app in which it provides a natural interaction that happened in everyday life. Snapchat may elevate some of the Self-Presentational concerns that influence the user experience of other media (Vitak, 2012). As a result, this may encourage more authentic and less filtered exchanges (see also Katz & Crocker, 2015).

Social Presence in CMC Studies

The concept of presence has been investigated for a long time. The Social Presence theory was revised by Short, Williams, and Christie (1976) in the interest of explaining how different media provide different ways of interaction with online users. Presence is defined as “the degree to which we as individuals perceive another as a real person and any interaction between the two of us as a relationship” (Wood & Smith, 2001, p.72). Furthermore, the concept of presence introduced recently differently in CMC. Nowadays, online users will feel connected to a remote location while being physically situated in a secondary location (Witmer & Singer, 1998). Further, a recent study indicates that “the visual nature of Snapchat provides an opportunity to see a friend’s experience and increase Social Presence” (Bayer, Ellison, Schoenebeck & Falk, 2016, p.17) almost as if in a shared face-to-face setting for just a few seconds (Rivière, 2005).

In this paper, Self-Destructing Messages considered as a critical factor that measures the Hyperpersonal concept and the feeling of Ephemerality: Synchronicity. Thus, Social Presence evidently becomes a significant predictor of Hyperpersonal and Ephemerality: Synchronicity communication. It is argued that the more Snapchat users

feel or perceive other people as real people, the more likely they will experience in-moment communication and engage in Hyperpersonal communication.

Conclusion

The review of this literature indicates several things. First, the few studies of ephemerality nature of messaging in social media tell us two things. Self-Destructing Messages in Snapchat provides synchronous communication that is similar to FtF communication. Also, Self-Destructing Messages will give online users more “control” over the communication process (Kotfila, 2014, p.12). This will allow them to engage in Hyperpersonal communication. The next section emphasizes the idea of Snapchat and its similarity to FtF communication. Thus, the concept of mediated interpersonal communication was introduced (Baym, 2010) and the seven key concepts used as a guide to assess whether “Self-Destructing Messages in Snapchat” are more or less reliable media in comparison to FtF communication.

The findings of IM and mediated interpersonal communication studies supported that IM is used to facilitate interpersonal connections (Rennecker & Godwin, 2005) and very useful tool of socialization. Further, research regarding IM and its interpersonal motives of Snapchat show that this smartphone app is mainly used to communicate with close ties and its features provide users greater options to manage the privacy of their content.

The framework of the Hyperpersonal theory was explained based on five factors; sender, receiver, content, the synchronous channel, and feedback. Further research about Self-Disclosure and Self-Presentation in Snapchat context demonstrate that Snapchat may reflect FTF settings, considering the usage of the app in which it provides a natural

interaction that happened in everyday life. Snapchat may elevate some of the Self-Presentational concerns that impact the user experience of other media (Vitak, 2012). Lastly, Social Presence was explained as a significant predictor of Hyperpersonal and Ephemerality: Synchronicity, “the visual nature of Snapchat provides an opportunity to see a friend’s experience and increase Social Presence” (Bayer, Ellison, Schoenebeck & Falk, 2016, p.17).

It is argued that the more Snapchat users perceive other people as real people, the more likely they will experience real communication and engage in Hyperpersonal interaction. To sum up, based on the previous literature: Social Presence, Snapchat intensity, and Ephemerality: Self-Destructing Messages present technological aspects from CMC. Thus, it is anticipated that the three previous predictors have the ability to predict Hyperpersonal communication and measure Snapchat users’ perception of synchronicity communication. Further, the relationships between Snapchat intensity, Social Presence, and Ephemerality: Self-Destructing Messages and Hyperpersonal and Ephemerality: Synchronicity constructs are explored in Figure 1. Thus, **the following relationships are investigated:**

RQ1a: Are there any differences in personality traits between Snapchat users and non-users?

RQ1b: Are there any differences in ethnicity between Snapchat users and non-users?

RQ2a: What is the relationship between Snapchat intensity and Hyperpersonal?

RQ2b: What is the relationship between Social Presence and Hyperpersonal?

RQ2c: What is the relationship between Ephemerality: Self-Destructing Messages and Hyperpersonal?

RQ3a: Is there a relationship between Snapchat intensity and Ephemerality:
Synchronicity?

RQ3b: Is there a relationship between Social Presence and Ephemerality: Synchronicity?

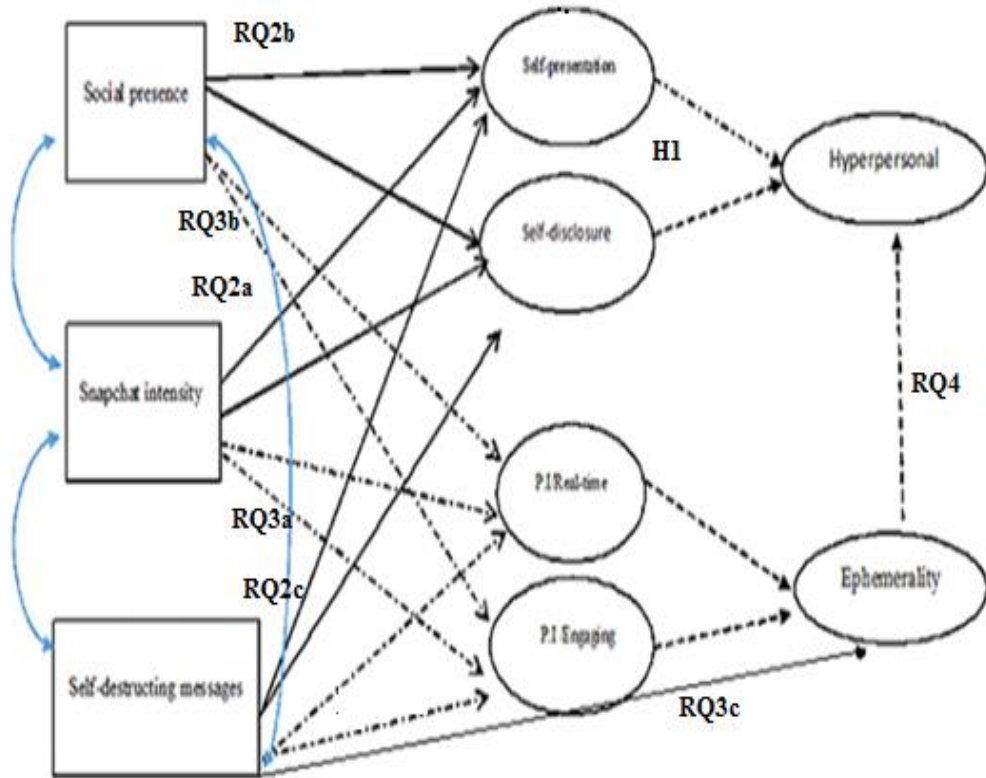
RQ3c: Is there a relationship between Ephemerality: Self-Destructing Messages and
Ephemerality: Synchronicity?

RQ4: What is the relationship between Ephemerality: Synchronicity and Hyperpersonal?

H1: Self-Presentation will be positively related to Self-Disclosure.

Figure 1.

The Predicted Model



CHAPTER III

METHOD

Previous chapters reviewed the literature on the Hyperpersonal theory and ephemerality nature of messaging in Snapchat context, as well as Self-Disclosure, Self-Presentation, and Social Presence in Computer-Mediated Communication. This study used structural equation modeling to test the rationale for research question 2, 3, 4 and hypothesis one as an attempt to adapt the theoretical framework of Hyperpersonal theory (Walther, 1996). Other descriptive statistics were utilized to get a better understanding of the sample. The purpose of this chapter is to describe the participants in the study, the procedure used to collect the data, the instruments and statistical analysis used to test the research questions and hypothesis.

Participants

The sample used for the current study included 195 individuals, one hundred sixty-two (83%) participants reported using Snapchat and thirty-three (17%) participants reported not using Snapchat. The sample consisted of 110 (61.1%) women and 69 (38.3%) men, 1 transgender (.6%). The mean age of the participants was 25.77 years ($SD = 5.55$, Range = 19 to 50). The racial and ethnicity background of the sample was Middle Eastern, (45%, $n = 81$), White (31.7%, $n = 57$), Black or African American, (17.8%, $n =$

32), Asian, (1.7%, $n = 3$), and Hispanic or Latino, (1.1%, $n = 2$) and self-identified, (2.8%, $n = 5$).

The majority of participants self-identified as single (65.6%, $n = 118$). Approximately 32.8% of participants ($n = 59$) were in a marital relationship and approximately 1.7% of participants ($n = 3$) were divorced. Furthermore, approximately .6% of participants reported having some high school with no diploma ($n=1$), 8.3% of participants reported having high school graduate ($n =15$) with diploma, 28.3% of participants reported having some college credit ($n = 51$), 26.7% of participants ($n = 48$) reported having a master's degree, and approximately 18.9% of participants ($n = 34$) reported having a bachelor's degree, 11.1% of participants ($n =20$) reported having an associate degree, and finally 4.4% of participants reported having a doctorate ($n =8$), and 1.7% of participants reported having a professional degree ($n =3$).

I also enquire about the device participants use to complete the survey.

Approximately 60% of participants ($n =108$) used smartphone, 24.4% of participants ($n =44$) a laptop/notebook, 12.8% ($n =23$) used a desktop computer and finally, 2.8% of participants ($n =5$) completed the survey by using tablet. (See Table 8 in Appendix E) for demographic characteristics of the sample.

Measures

Snapchat intensity. Snapchat intensity scale was adapted from the Facebook Intensity Scale developed by Ellison, Steinfield, & Lampe (2007). This scale was selected because of its broad set of questions that could be easily applied in Snapchat. The measure includes two self-reported assessment of Snapchat behavior that could be appropriate to assess the extent to which the participant was actively engaged in Snapchat

activities: (1) “the number of Snapchat friends” and (2) “the amount of time spent on Snapchat per day.” Furthermore, the Facebook intensity scale included a series of Likert-scale attitudinal questions designed to examine the extent to which the participant was emotionally connected to Snapchat and the extent to which Snapchat was integrated into their daily activities routine. The scale was created using the mean of all the included variables. Examples items include: “Snapchat is part of my everyday activity,” “I am proud to tell people I’m using Snapchat,” “Snapchat has become part of my daily routine,” “I feel out of touch when I haven’t snapped for a while,” “I feel I am part of the Snapchat community,” and “I would be sorry if Snapchat shut down.” The response categories range from 1 = strongly disagree to 5 = strongly agree. Cronbach’s alpha = .90.

Self-Disclosure. The Self-Disclosure scale consisted of four subscales of the General Disclosiveness Scale (GSD) developed by Wheelless (1978) and Wheelless and Grotz (1976). The scale was adapted to measure the self-disclosure patterns of Snapchat users and shed light on important dimensions of Self-Disclosure. The items were modified to measure the online users’ level of Self-Disclosure (Gibbs, Ellison & Heino, 2006). All scale items were measured on a 5-point Likert-type scale (1= strongly disagree, 5 = strongly agree). While the scale consists of four subscales, the current study only utilized two subscales.

Honesty. First, honesty subscale which comprised of five items. The scale was created using the mean of all the included variables. Examples included: “I am always honest in my Self-Disclosures to those I meet online,” “ My statements about my feelings, emotions, and experiences to those I meet online are always accurate self-

perceptions,” and “The things I reveal about myself to those I meet online are always accurate self-perceptions.” Cronbach’s alpha = .77.

Conscious intent. The conscious intent subscale which comprises of two items. The scale was created using the mean of all the included variables. Examples included: “When I express my feelings, in my snaps, I am always aware of what I am doing and saying” and “When I am self-disclosing in my daily stories, I am consciously aware of what I am revealing.” Cronbach’s alpha = .82.

Self-Presentation. Self-Presentation scale was comprised of three items. The items were modified to measure Snapchat users and were adapted from Walther, Slovacek, and Tidwell (2001). The adapted scale aims to measure the level of Self-Presentation of Snapchat users. The scale was created using the mean of all the included variables. The items included: “Snapchat application allow me to present myself in a favorable way,” “I think I have made a good impression on others through my snaps,” and “I think I have made a good impression on others through my daily stories.” All scale items were measured on a 5-point Likert-type scale (1= strongly disagree, 5 = strongly agree). Cronbach’s alpha = .86.

Media and Technology Usage and Attitudes (MTUAS). The Media and Technology Usage and Attitudes scale was adapted from Rosen, Whaling, Carrier, Cheever, and Rokkum (2013). The original scale included 44 items with 11 subscales, However, for the current study only five media and technology usage subscales were utilized:

Smartphone usage. Consisted of nine items. The scale was created using the mean of all the included variables. Examples included: “Take pictures using a mobile

phone,” and “Check the news on a mobile phone.” All scale items were measured on a 7-point frequency scale, (never=1, all the time=7). Cronbach’s alpha = .82.

General Social Media Usage. Consisted of nine items. The scale was created using the mean of all the included variables. Examples of items include: “Check your Snapchat or other social media accounts,” “Check your Snapchat from your tablet,” and “Post daily stories and snaps.” All scale items were measured on a 7-point frequency scale, (never=1, all the time=7). Cronbach’s alpha= .87

Internet Searching. Consisted of four items. The scale was created using the mean of all the included variables. Examples included: “Search the Internet for news on any device,” and “Search the Internet for information on any device.” All scale items were measured on a 7-point frequency scale, (never=1, all the time=7). Cronbach’s alpha = .87

Media Sharing. Consisted of four items. The scale was created using the mean of all the included variables. Examples included: “Watch TV shows, movies, etc. on a laptop” and “Share your media files on a laptop.” All scale items were measured on a 7-point frequency scale, (never=1, all the time=7). Cronbach’s alpha = .81

Video Gaming. Consisted of three items. The scale was created using the mean of all the included variables. Examples included “Play games on a computer, video game console or Smartphone by yourself,” “Play games with other person(s) in the same location as you,” and “Play games with other person(s) NOT in the same location as you.” All scale items were measured on a 7-point frequency scale, (never=1, all the time=7). Cronbach’s alpha= .84

Attitudes. The subscales originally consisted of sixteen items which comprise four subscales. In this paper only three subscales were utilized:

Positive attitudes toward technology. Comprised of six items. The scale was created using the mean of all the included variables. Examples included: “I feel it is important to be able to find any information whenever I want online,” “I feel it is important to be able to access the internet anytime I want,” “I think it is important to keep up with the latest trends in technology,” and “Technology will provide solutions to many of our problems.” Cronbach’s alpha = .77.

Anxiety or dependence on technology. Consisted of three items. The scale was created using the mean of all the included variables. Examples included: “I get anxious when I don’t have my cell phone,” “I get anxious when I don’t have the internet available to me,” and “I am dependent on my technology.” Cronbach’s alpha = .85.

Negative attitudes toward technology. Consisted of three items. The scale was created using the mean of all the included variables. Examples included: “new technology makes life more complicated,” “I feel like Snapchat, and other social apps make people waste too much time,” and “I feel like Snapchat, and other social apps make people more isolated.” All the attitudes individual items were measured on a 5-point Likert scale from (1= strongly disagree, 5= strongly agree). Cronbach’s alpha =.61

Social Presence. The Social Presence scale was adapted from Kreijns, Kirschner, Jochems, and Buuren (2011). It was used to measure the reported level of Social Presence and consisted of five items. The scale was created using the mean of all the included variables. Examples of the scale items are: “When I have live conversations in the Snapchat app, I have my communication partner in my mind’s eye,” “When I have

live conversations in the Snapchat app, I feel that I deal with very real persons and not with abstract, anonymous persons,” and “When I have asynchronous conversations in the Snapchat app, I also have my communication partner in my mind’s eye.” Respondents were asked to rate their level of agreement with each statement on a 5-point Likert scale ranging from (1 = strongly disagree to 5= strongly agree). Cronbach’s alpha =.80.

Perceived Interactivity. The Measures of Perceived Interactivity was adapted from McMillan & Hwang (2002). The perceived interactivity measure is a multidimensional scale and consisted of three subscales. However, only two subscales are included in this paper:

Real-time conversation. Consisted of seven items that focus on communication and the overlap of time and communication and mainly focused on synchronous communication or live interaction. The scale was created using the mean of all the included variables. Examples of the real-time conversation subscale items are: “The Self-Destructing Messages in Snapchat app enable two- way communication,” “The Self-Destructing Messages in the Snapchat app are primarily one- way communication,” and “The Self-Destructing Messages in the Snapchat app allow me to experience real-time communication.” Cronbach’s alpha = .71.

Engaging. Consisted of eight items that focus mainly on user control but also includes time-related concepts. The scale was created using the mean of all the included variables. Examples of the engaging subscale are: “When I use the Snapchat app; it is easy to find my way through the app,” “Snapchat app has a variety of content”, “Snapchat app keeps my attention,” “Snapchat provides immediate communication,” and “The Snapchat app allows me to communicate anywhere.” All the subscale items were

measured on 5- points Likert scale (1= strongly disagree, 5= strongly agree). Cronbach's alpha =.80

Extroversion. The extroversion scale was adapted from Francis, Brown & Philipchalk (1992). The items were modified to presents six statements and a Likert-type of response options to increase variance. The scale was created using the mean of all the included variables. Examples included: "You are a talkative person," "You are lively," and "You easily bring some life into a rather dull party (R)." All the subscale items were measured on 5- points Likert scale (1= strongly disagree, 5= strongly agree). Cronbach's alpha =.85.

Self-Destructing Messages. Self-Destructing Messages scale consisted of six items. The goal of constructing the Self-Destructing Messages scale is to assess the effects of using Self-Destructing Messages accurately and whether using Self-Destructing Messages allow Snapchat users to experience real-time communication and send everyday activity. The items were constructed based on a general overview of the literature. All the subscale items were measured on 5- points Likert scale (1= strongly disagree, 5= strongly agree). The scale was created using the mean of all the included variables. Examples included: "Snapchat allows me to experience in moment communication," "Snapchat allows me to send casual content than other social app," and "Self-Destructing Messages in the Snapchat app allow me to send personal content." Cronbach's alpha = .78.

Snapchat Use items

The questions were adapted from Piwek and Joinson (2016). Participants were asked questions related to three different categories: first, the content of the snap

(whether it was pictures, videos, pictures with doodles on it). Second, participants' location when they sent the snap. Third, socially-related factors (whether they send it to a single person or group of people and who this was specifically).

SEM Measures

Note that In the SEM model, two constructs were created based on using some of the following previous scales. The scales were used in the SEM model are the Self-Disclosure scale, the Self-Presentation, Perceived Interactivity subscales, as well as Self-Destructing Messages scale.

Hyperpersonal construct. Hyperpersonal construct consisted of two Self-Disclosure subscales. The two subscales are honesty ($n = 5$ items), conscious intent ($n = 2$ items). And, Self-Presentation scale ($n = 3$ items), all were included in the analysis to present the Hyperpersonal construct.

Ephemerality: Synchronicity construct. Ephemerality: Synchronicity construct consisted of two subscales from Perceived Interactivity scale. The two subscales are: Real-time ($n = 7$ items) included in the analysis. Engaging originally consists of 8 items. However, only two items were retained in the analysis to assess the concept of synchronous communication accurately.

Procedure

Participants were recruited via email and social media to participate in an online survey. The survey was hosted on survey monkey (<http://www.surveymonkey.com>). The sample was identified using both convenience and snowball sampling techniques. First, students enrolled in communication courses at a Midwestern university were recruited via email. Some of these participants were given the opportunity to earn extra credit. Second,

participants were recruited by sharing a link to the survey via social media. To qualify for participation, the individuals had to be 18 years of age or older. The study received IRB approval (see figure A.1.in Appendix A). The complete questionnaire can be found in Appendix D.

CHAPTER IV

RESULTS

Statistical Analysis

To analyze data collected for this study, this thesis used univariate and multivariate statistical techniques, including exploratory factor analysis, structural equation modeling, *t*-test, chi-square and correlation analysis. Exploratory factor analysis was used to assess the measure of Self-Destructing Messages scale by using PCA. Structural equation modeling was used to test RQ2, RQ3, RQ4 and H1.

Sample Characteristics

The sample used for the current study involved 195 individuals, one hundred sixty-two (83%) participants reported using Snapchat and thirty-three (17%) participants reported not using Snapchat. Over half of the sample were women (61.1%) and self-identified as a single (65.6%). The mean age of the participants was 25.77 years (*SD* = 5.55, Range = 19 to 50). The racial and ethnicity background of the sample was Middle Eastern, (45 %), White (31.7%), African American, (17.8%). Finally, approximately 60% of participants used a smartphone to complete the survey, 24.4% of participants used a laptop/notebook, 12.8% used a desktop computer, and finally, 2.8% of participants

completed the survey by using a tablet. (See Table 8 in Appendix E) for demographic characteristics of the sample.

Data Preparation

All participants completed a series of scaled items to measure the variables of interest in this study. All the negatively keyed items were reverse coded so that higher values indicate a greater endorsement of each variable. All measures are briefly discussed next. All the scale means, standard deviations, and reliability coefficients for all measured variables are presented in Table 7 (see Appendix E).

Analysis of preliminary investigation. The original number of the sample included 306 individuals. Furthermore, frequency command was used to identify the variables with missing values. To handle the missing data, the missing values and patterns function in SPSS (version 24) were employed to identify the number and the distribution of those missing values. After looking at the frequency and missing values and patterns results, additional cases were deleted if exceeded the 68% cutoff missing data. The final sample included 195 completed surveys.

Descriptive Statistics

Snapchat users exploratory survey information. Snapchat users reported that they usually send pictures (48%) with doodles on it (8%). Since the question allowed participants to choose more than one option, (22%) of participants reported that they send a mix of all; pictures, videos, pictures with doodles on it. Furthermore, Snapchat users reported that they send and receive selfies (21.3%), images of food (16.7%), images of objects and messages (16%) other people (12.5%), coursework, (5.9%) animals (8.2%) and other (3.3%).

Participants were asked to identify to whom they sent their recent snaps. The most frequent responses were to single person (48.8%), group of people (46.9%), and other (4.3%), (see figure 2). The majority of participants reported that the last snap was sent to close friends (46.9%), family members (32%), acquaintances (6.2%), romantic partner (5.6), and coworker (3.7%), (see figure 3). Interestingly, most participants reported being in various locations; at their home (62.3%), in school (9.9%), work (6.8%), “other” locations (16%) such as park and café (see Figure 4).

Figure 2.

Summarized participants' recent snap (whether they send it to a single person or group of people).

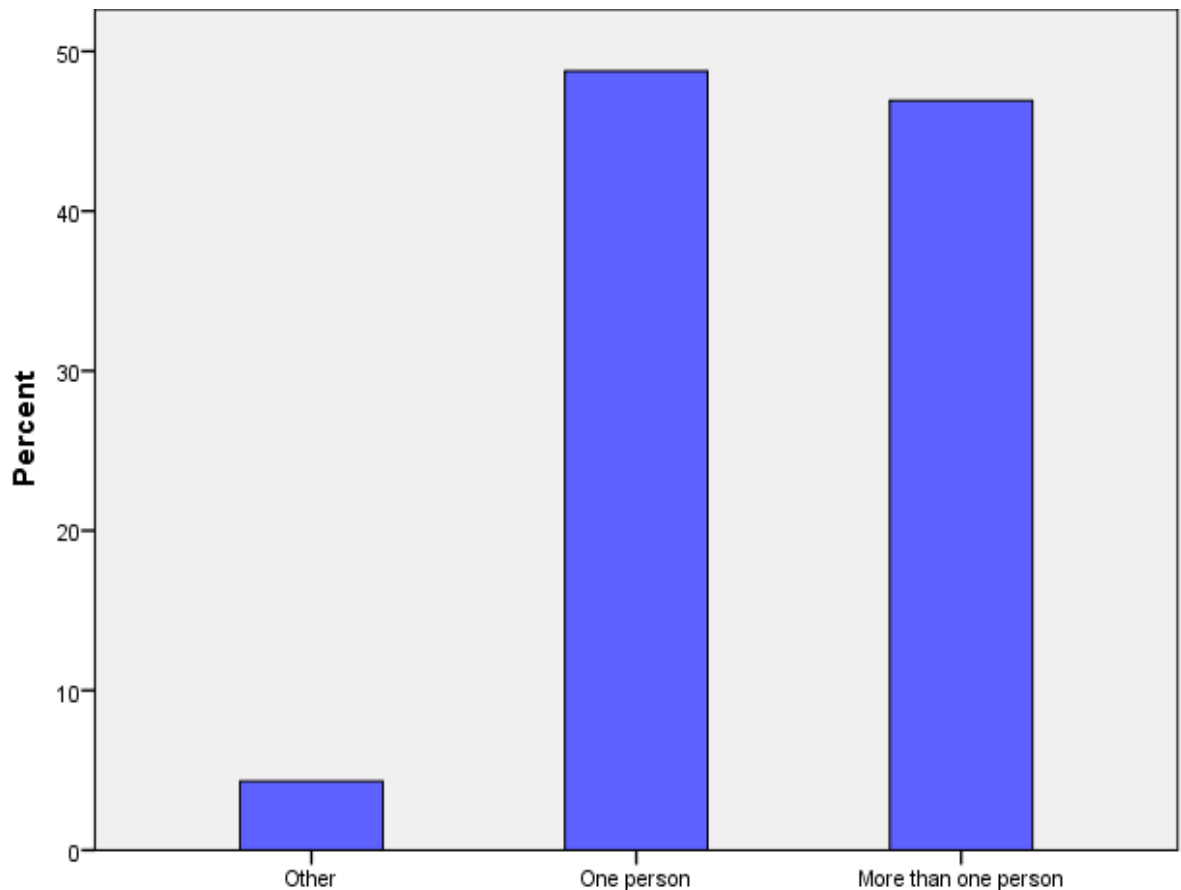


Figure 3.

Categorized the person(s) received their recent snap.

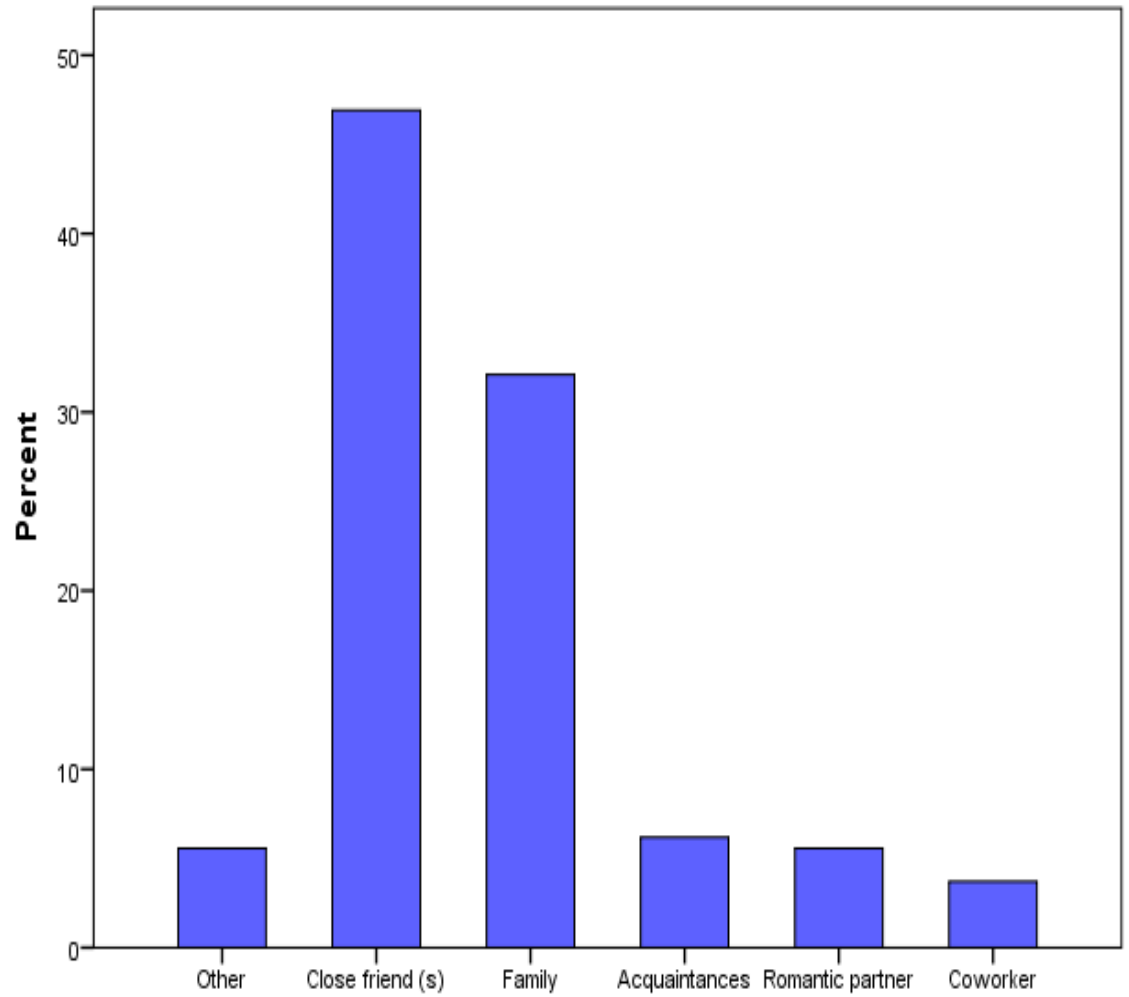
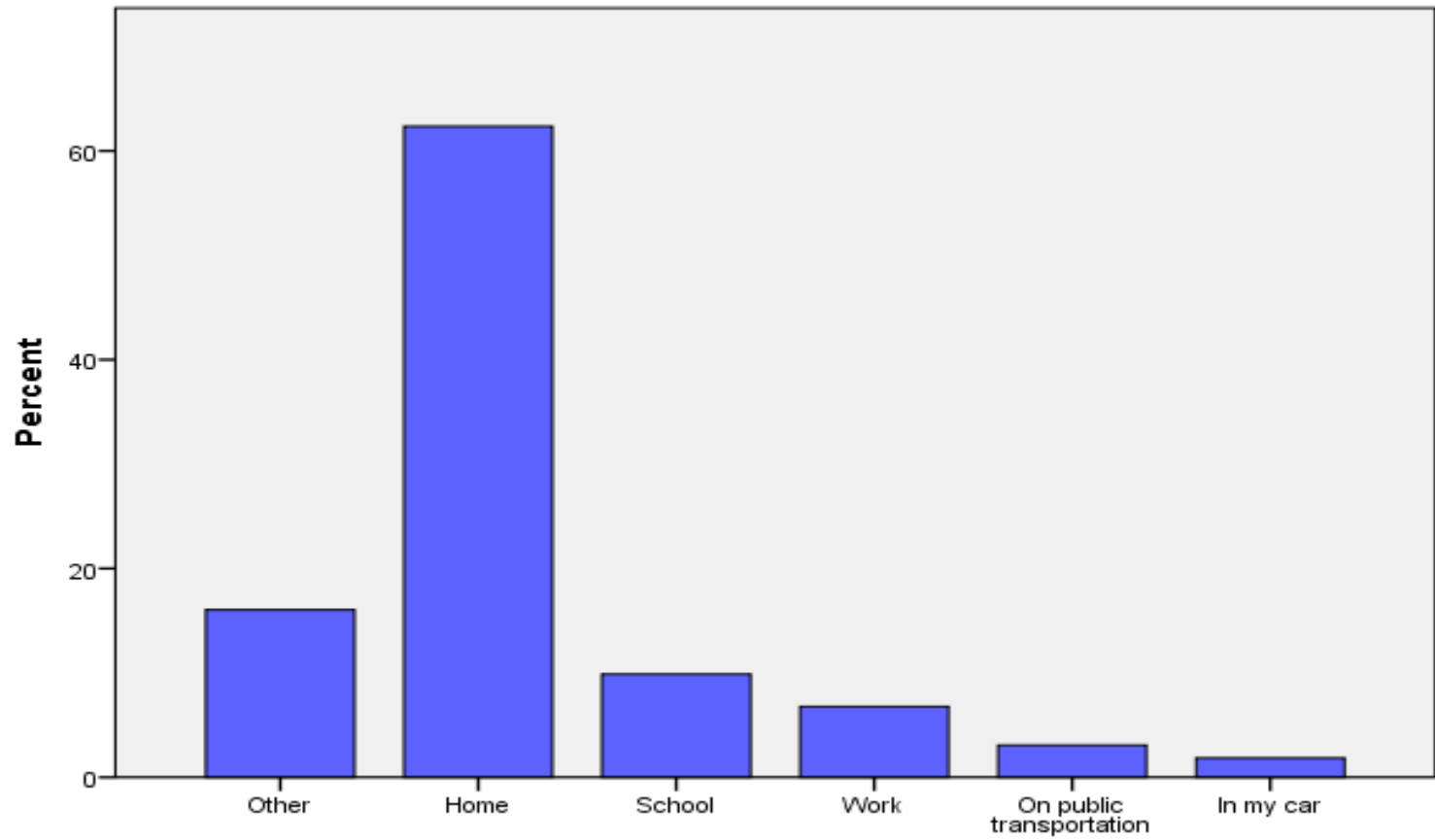


Figure 4.

Summarized location from where the snap was sent.



Media & Technology Usage and Attitude. These items were calculated to describe the participant's media usage. Table 7. Displays the means, standard deviations and Cronbach's alpha coefficient of all eight subscales. All subscales had acceptable reliabilities except for negative attitudes subscale. Note that based on the mean scores across all participants ($N=195$) the most commonly used technologies were, smartphone usage and internet searching. (See Appendix E).

Demographic differences.

Gender. A comparison between gender and media & technology usage and attitude scale demonstrate only two significant two-tailed differences were apparent to males. Furthermore, as is apparent males ($M = 3.40$; $SD = 1.73$) playing video games more often than females ($M = 2.54$; $SD = 1.57$; $t(177) = 3.40$, $p = .001$). Furthermore, females ($M = 4.32$; $SD = 1.18$) were doing significantly more general Snapchat usage than males ($M = 3.73$; $SD = 1.20$; $t(144) = 2.95$, $p = .004$). (See Table 2).

Table 2.

Pearson's Correlations between Media & Technology Usage, Attitude, and Gender.

<i>Subscale</i>	<i>Correlations with gender</i>
<i>Media & Technology usage subscales</i>	----
1.Smartphone usage	.13
2.Internet searching	.06
3.Video gaming	-.25**
4.General snapchat usage	.24**
5.Media sharing	-.06
<i>Attitude subscales</i>	----
6.Positive	.04
7. Negative.	-.00
8.Anxiety and dependence on technology	.14

Notes: ** $p < .01$

Age. Table 3. Displays the correlations between the Media & Technology Usage and Attitude subscales and age. As is apparent, older people showed a significantly lower daily use of all media/technology items with the exception of smartphone usage. Furthermore, older people showed more negative attitudes toward technology, and more anxious about not checking in with technology. However, age was not correlated with positive attitudes towards technology. Finally, it is important to note that the mean age of the participants was 25.77 years ($SD = 5.55$, Range = 19 to 50).

Table 3.

Pearson's Correlations between Media & Technology Usage, Attitude, and Age.

<i>Subscale</i>	<i>Correlations with age</i>
<i>Media & Technology usage subscales</i>	----
1.Smartphone usage	-.15
2.Internet searching	-.18*
3.Video gaming	-.33**
4.General snapchat usage	-.23**
5.Media sharing	-.34**
<i>Attitude subscales</i>	----
6.Positive	-.01
7. Negative.	.30**
8.Anxiety and dependence on technology	.15*

Notes: * $p < .05$, ** $p < .01$

Research Questions and Hypothesis testing

The research question 1 (a). The research question 1(a) asked if there are any differences in personality traits between Snapchat users and non-users. The independent variable represented two different groups (Snapchat users and non-users). The dependent variable was the extroversion scale. The results of an independent-samples t-test were not significant $t(193) = .035, p > .05$. Snapchat users, ($M = 2.62, SD = .79$) did not report a significant difference in the levels of extroversion more than nonusers ($M = 2.62, SD = .71$).

The research question 1 (b). The research question 1 (b) asked if there are any differences in ethnicity between Snapchat users and non-users. The independent variable was different ethnicity with three groups being represented: Caucasian, African American, and Middle Eastern. The dependent variable was “do you have a Snapchat account?” A chi-square test of independence was calculated comparing the frequency of Snapchat users and non-users by race. The chi-square test was viewed as the best statistical procedure to answer this research question since both variables are categorical. The result was statistically significant $\chi^2(2) = 13.117, p < .001$. The effect size for this finding, Cramer’s V was moderate .27. The results show that 93% ($n=53$) of the white were Snapchat users compared to 62.5 % ($n=20$) of the African American Snapchat users and 82.7 % ($n=67$) of the Middle Eastern were Snapchat users. Furthermore, 7% ($n=4$) of the white were non-Snapchat users compared to 37.5% ($n=12$) of African American and 17.3% ($n=14$) of the Middle Eastern were non-Snapchat users.

Structural Equation Modeling Analysis

A SEM analysis via AMOS 24.0 was conducted to answer RQ2, RQ3, RQ4, and hypothesis one.

Independent Variables. The independent variables were: Social Presence, Snapchat intensity, and Ephemerality: Self-Destructing Messages scales. The Social Presence scale originally contained five items, and only one item was dropped. Snapchat intensity has six items included in the analysis. The Ephemerality: Self-Destructing Messages scale has six items included in the analysis. (See Table 4) for detailed information about the factor loadings of the Self-Destructing Messages scale.

Table 4.
Summary of Exploratory Factor Analysis Results for Self- Destructing Messages Measure Using Principal Component Analysis. (N = 154)

Item	Factor loadings Self-Destructing Messages
Snapchat allows me to experience in moment communication.	.623
Snapchat allows me to send casual content than other social app.	.546
Self-Destructing Messages in the Snapchat app allow me to experience face to face communication.	.759
Self-Destructing Messages in the Snapchat app allow me to send personal content.	.790
Self-Destructing Messages in the Snapchat app allow me to send everyday activities.	.750
Self -Destructing Messages in the Snapchat app allow me to experience real conversations with close relationships.	.695
Eigenvalues	2.931
% of variance	48.58
KMO measure of sampling adequacy =	.773
Bartlett’s test of sphericity: approx. Chi-square= <i>df</i> =,15 <i>p</i> <.001	249.826

Dependent Variables. The dependent variables were Hyperpersonal and Ephemerality: Synchronicity constructs. Hyperpersonal consisted of two Self-Disclosure subscales. The two subscales are honesty (*n* = 5 items), conscious intent (*n* =2 items). And, Self-Presentation (*n* =3 items) scale, all were included in the analysis to present the Hyperpersonal construct. Next, ephemerality: Synchronicity construct consisted of two subscales from Perceived Interactivity scale. The two subscales are: Real-time (*n* =7items) included in the analysis. Engaging originally consists of 8 items. However, only

two items were retained in the analysis to assess the concept of synchronous communication accurately.

Overview of the model. The hypothesized model was tested with a structural equation model computed with the AMOS 24.0 statistical package using the maximum likelihood method. The computed model (See Figure 5) tested the paths predicted in Research Question 2, 3, 4, and Hypothesis 1. The three exogenous variables (Social Presence, Snapchat intensity, and Ephemerality: Self-Destructing Messages) were allowed to covary in the statistical model. In Figure 5 standardized parameters estimates are presented in the model with significance levels for these paths. (See Table 9 in Appendix F).

Incomplete data. Since missing values can be problematic when using structural equation modeling, an additional effort was made to ensure that the dataset contained no missing values. Also, it is important to point out that the data had already been cleaned by spot checking the missing data for the first part of the analysis. However, when I double check the missing values across all the constructs, I had to delete 14 cases due to a large number of missing values in Perceived Interactivity scale: Real-time and Engaging subscales items which were included in the ephemerality construct of the proposed model. Thus, the final analysis included 148 cases (Snapchat users) only.

Preliminary statistics of the model. The original model did not achieve an acceptable fit, based on the various goodness of fit statistics. Modification indices generated by AMOS were used to modify the model. In the final model, numerous individual errors of measurement were allowed to covary. There were 45 instances of this; (See Appendix F for further information). A substantial portion of these instances

was within a given construct. Specifically, three of these instances were among the measures of Social Presence. Two were among the measures of Snapchat intensity, and two were among the measure of Ephemerality: Self-Destructing Messages. Further, ten of them were among the measures of Hyperpersonal, and four of them were among the measures of Ephemerality: Synchronicity. Additionally, one instance was between an error of a measure of the predictor Social Presence and an error of a measure of another predictor, Ephemerality: Self-Destructing Messages. And one more instance was between an error of a measure of the predictor Snapchat intensity and an error of a measure of another predictor, Ephemerality: Self-Destructing Messages.

Other instances of covarying between errors of measurement crossed over from an exogenous construct to an endogenous construct (there were 22 instances of this). Finally, Landis, Edwards, and Cortina (2009) argue that estimation of measurement errors in SEM may be appropriate when correlations amongst measurement errors are unavoidable. Furthermore, in this model, some of the indicator variables have shared components with the dependent variables.

Pearson's Correlations

Pearson's correlations were calculated for the independent and dependent variables (more details about the missing data next). As shown in Table 5, the significant magnitude varied from .17 to .60. Four correlations among the Self-Disclosure scale were positively significant and ranged in size from .17 to .36. Snapchat intensity was significantly related to the Social Presence ($r = .31^{**}$). The correlation between Perceived Interactivity dimensions (Real-time and Engaging) was positively significant ($r = .48^{**}$). Moreover, Social Presence was significantly related to Perceived Interactivity

dimensions and one of the two presented dimensions of the Self-Disclosure. However, Self-Presentation was significantly positively related to Social Presence, Self-Disclosure dimensions, Snapchat intensity, Ephemerality: Self-Destructing Messages, Perceived Interactivity dimensions and the two dimensions of Self-Disclosure scale. The correlations ranged in size from .23 to .53. (See Table 5) for a more detailed report of the inter-correlations among the model variables examined in the model. (See Appendix G) for a more detailed report of the inter-correlations among all the variables examined in this study.

Table 5.
Pearson's Correlations Among Variables

	1	2	3	4	5	6	7	8
1.Social Presence	--							
2. Snapchat intensity	.31**	--						
3. Ephemerality: Self-Destructing Messages	.51**	.41**	--					
4. Ephemerality: Synchronicity (<i>Real-time</i>)	.60**	.14	.55**	--				
5. Ephemerality: Synchronicity (<i>Engaging</i>)	.41**	.37**	.47**	.48**	--			
6.Hyperpersonal: Self-Disclosure (Honesty)	.15	.03	.16	.21*	.13	--		
7. Hyperpersonal: Self-Disclosure (Conscious intent)	.22**	.05	.18*	.28**	.17*	.36**	--	
8. Hyperpersonal: Self-Presentation	.47**	.51**	.53**	.37**	.46**	.25**	.23**	--

Notes: * $p < .05$, ** $p < .01$

Overall Model Fit of the modified Model

Modifications were made to the proposed model (see Figure1). The paths specified in the modified model were based in part on the results of the zero-order correlations and the framework of Hyperpersonal theory (Walther, 1996). As mentioned before, zero-order correlations indicate that all three predictors (Social Presence, Snapchat intensity, and Ephemerality: Self-Destructing Messages) have significant relationships with Hyperpersonal and Ephemerality: Synchronicity constructs.

There were additional modifications made as motivated by AMOS' modification indices (as described above). After all, modifications were executed, the modified model was tested. The chi-square was significant, $\chi^2 (df = 509) = 672.56, p = .000$, which indicates that the hypothesized model is different from the data. However, as Byrne notes (2016), there are limitations to the chi-square analysis, and additional goodness-of-fit statistics have been developed to address this. For this model, other goodness of fit statistics indicate that the model has an acceptable fit to the data; RMSEA of .047, NFI of .787, CFI of .936, IFI of .938, TLI of .925. Altogether these goodness-of-fit statistics indicate an acceptable fit to the data. RMSEA of .08 or smaller is considered a reasonable fit, (Byrne, 2016). Additionally, as noted by Byrne (2016) and Ullman (2001) the NFI has shown a tendency to underestimate fit in small samples, so a CFI cutoff of $>.90$ and close to $.95$ was proposed to assess the fit of this model (Bentler, 1992; Hu & Bentler, 1999). With a TLI cutoff of $>.90$ (Hu & Bentler, 1999) this model's fit is considered acceptable.

To further examine the relationships between the three predictors and Hyperpersonal and Ephemerality: Synchronicity constructs, the following research questions and hypothesis one were investigated.

Research Questions & Hypothesis one

Research question 2 (a). The research question two (a) asked if there is a relationship between Snapchat intensity and Hyperpersonal. The results of the model show a significant path from Snapchat intensity to Hyperpersonal ($\beta=.34$, $SE=.059$, $p<.001$). Most interestingly, the Hyperpersonal theory of Computer-Mediated Communication (CMC) states that online users try to exploit the technological aspects of CMC to improve the content (e.g. messages, pictures., etc.) to manage impressions and facilitate desired relationships, Walther (2007).

Research question 2 (b). The research question two (b) asked if there is a relationship between Social Presence and Hyperpersonal. The path from Social Presence to Hyperpersonal was not significant ($\beta=.19$, $SE=.117$ $p >.05$). The research question two (b) was investigated because of the following reason. Snapchat app enables users to experience real-time conversations. So, it was assumed that the more Snapchat users engage in live interaction, the more they will perceive other people as real. Hence, the more likely they will experience Hyperpersonal interaction.

Research question 2 (c). The research question two (c) asked if there is a relationship between Ephemerality: Self-Destructing Messages and Hyperpersonal. The path from Ephemerality: Self-Destructing Messages to Hyperpersonal was negative and not significant ($\beta= -.11$, $SE=.096$, $p >.05$). The previous relationship was investigated because it was important to understand the precise effects of Ephemerality: Self-Destructing Messages contribute to Hyperpersonal. Self-Destructing Messages in Snapchat allow users to control the time of composing the snaps. So, Snapchat users can

edit, improve their snaps until they conveyed the desired impression. Subsequently, they will experience Hyperpersonal interaction.

Research question 3 (a). The research question three (a) asked if there is a relationship between Snapchat intensity and Ephemerality: Synchronicity. Contrary to our expectation, Snapchat intensity shows a significant negative relationship with Ephemerality: Synchronicity ($\beta = -.19$, $SE = .054$, $p < .003$). This may indicate that because the ephemerality in Snapchat is a central factor of the users' experiences, it eliminates the effects of Snapchat intensity as a potential source of Ephemerality: Synchronicity communication.

Research question 3 (b). The research question three (a) asked if there is a relationship between Social Presence and Ephemerality: Synchronicity. The results of the model show a significantly positive path from Social Presence to Ephemerality: Synchronicity ($\beta = .65$, $SE = .090$, $p < .001$). The previous question was investigated to understand the role of Social Presence contributes to Ephemerality: Synchronicity. The assumption was the more Snapchat users perceive other as real people, the more they will experience real interaction.

The research question 3 (c). Research question three (c) asked whether there is a relationship between Ephemerality: Self-Destructing Messages and Ephemerality: Synchronicity. The model shows a significant positive relationship between Ephemerality: Self-Destructing Messages and Ephemerality: Synchronicity ($\beta = .42$, $SE = .082$, $p < .001$). The question was investigated to test the role of Ephemerality: Self-Destructing Messages as an asynchronous channel that provides synchronous communication.

The research question 4. Research question four asked if there is a relationship between Ephemerality: Synchronicity and Hyperpersonal. The result indicates that the path from Ephemerality: Synchronicity to Hyperpersonal was near significant ($\beta = .41, p < .10, SE = .160$). The previous question was investigated to test the role of Ephemerality: Synchronicity contributes to Hyperpersonal and how the unlimited time in Snapchat app impact how users disclose or present themselves.

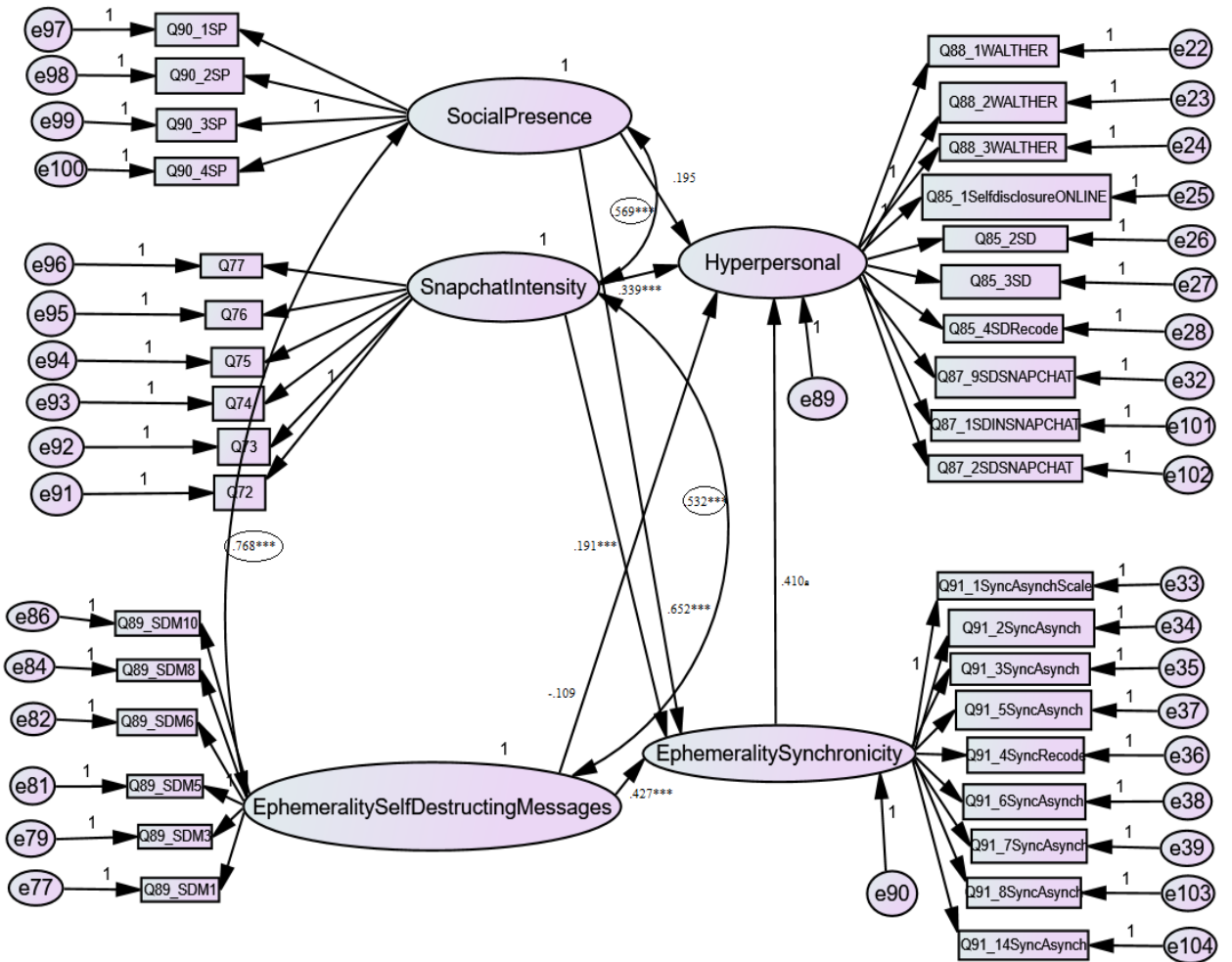
Hypothesis one. Hypothesis one proposed that Self-Presentation will be positively related to Self-Disclosure. The results of Pearson's correlations revealed that there was a significantly positive relationship between honesty and Self-Presentation, ($r = .19, p < .01, n = 148$). Also, a significantly positive correlation between intent and Self-Presentation, ($r = .23, p < .01, n = 148$). This finding replicated (Walther, 1996) study and was supported in which it explains the logic behind gathering the two scales in one construct to measure the concept of Hyperpersonal communication (Walther, 1996). Further, the finding indicates that the technical affordance of the Self-Destructing Messages in the Snapchat app, give Snapchat users more time to edit and improve their snaps to convey a desirable impression. Thus, in Snapchat context, the more users disclose information, the more they will present personal aspects of themselves.

Summary of the Research Questions and Hypothesis 1. As summarized above, the SEM model demonstrates that Snapchat intensity was the only significant predictor of Hyperpersonal communication. Also, there was a significant positive relationship between Ephemerality: Self-Destructing Messages, Social Presence, and Ephemerality: Synchronicity. As mentioned above the model show a nearly significant relationship between Ephemerality: Synchronicity and Hyperpersonal constructs. Further, the data

demonstrates that Ephemerality: Self-Destructing Messages, Social Presence, and Snapchat intensity accounted for approximately 84% of the variance in Ephemerality: Synchronicity and 52% of the variance in Hyperpersonal. Finally, the results of Pearson correlations indicate that Self-Presentation is positively related to Self-Disclosure.

Figure 5.

Final Model



Note:

- a - $.05 < p < .10$
- * - $p < .05$
- ** - $p < .01$
- *** - $p < .001$

Table 6.

Summary of Support Found for the Study Research Questions and H1

Research Questions / Hypothesis	Results
RQ1a: Are there any differences in personality traits between Snapchat users and nonusers?	Answered. No significant differences in personality traits between Snapchat users and nonusers.
RQ1b: Are there any differences in ethnicity between Snapchat users and nonusers?	Answered. Significant differences found in ethnicity between Snapchat users and nonusers.
RQ2a: Is there a relationship between Snapchat intensity and Hyperpersonal?	Answered. There was a significant positive relationship between Snapchat intensity and Hyperpersonal.
RQ2b: Is there a relationship between Social Presence and Hyperpersonal?	Answered. There was no significant relationship between Social Presence and Hyperpersonal.
RQ2c: Is there a relationship between Ephemerality: Self-Destructing Messages and Hyperpersonal?	Answered. There was no significant relationship between Ephemerality: Self-Destructing Messages and Hyperpersonal.

RQ3a: Is there a relationship between Snapchat intensity and Ephemerality: Synchronicity?

Answered. There was a significant negative relationship between Snapchat intensity and Ephemerality: Synchronicity.

RQ3b: Is there a relationship between Social Presence and Ephemerality: Synchronicity?

Answered. There was a significant positive relationship between Social Presence and Ephemerality: Synchronicity.

RQ3c: Is there a relationship between Ephemerality: Self-Destructing Messages and Ephemerality: Synchronicity?

Answered. The model shows a significant positive relationship between Ephemerality: Self-Destructing Messages and Ephemerality: Synchronicity.

RQ4: Is there a relationship between Ephemerality: Synchronicity and Hyperpersonal?

Answered. The model shows a near significant relationship between Ephemerality: Synchronicity and Hyperpersonal.

H1: Self-Presentation will be positively related to Self-Disclosure.

Supported.

CHAPTER V

DISCUSSION

The goal of this study was to adapt the framework of the Hyperpersonal theory. Further, the study sought to explore whether the ephemeral nature of messaging can closely reflect real conversations and allow its users to experience Hyperpersonal communication. To accomplish the task this study test a proposed structural equation model to examine the role of Social Presence, Snapchat intensity, and Ephemerality: Self-Destructing Messages on Hyperpersonal and Ephemerality: Synchronicity constructs. A significant relationship between Snapchat intensity and Hyperpersonal was anticipated. From this study, it is evident that Snapchat intensity plays a major role in the experience of Hyperpersonal communication (i.e. Self- Disclosure and Self–Presentation). The relationship between Self-Disclosure and Self-Presentation was replicated from (Walther, 1996) study and it was supported. This indicates that in Snapchat context, the more users disclose information, the more likely they will present themselves in a favorable manner. Subsequently, they will engage in Hyperpersonal interaction. Moreover, Social Presence and Ephemerality: Self-Destructing Messages were the predictors of Ephemerality: Synchronicity communication.

Summary of Results

Research question one (a) and (b). The first research question (a) asked: “Are there any differences in personality traits between Snapchat users and non-users?”

Overall the results indicate that there were no significant differences in personality traits between Snapchat users and nonusers. The RQ1 (b) asked, “Are there any differences in ethnicity between Snapchat users and non-users?” The results revealed that there were significant differences found in ethnicity between Snapchat users and nonusers. The finding shows the expected differences in ethnicity between Snapchat users and nonusers. Whites have more Snapchat users compared to African Americans and the Middle Easterners. Also, it indicates that African Americans have less Snapchat users compared to Whites and Middle Easterners. To sum up, Snapchat’s popularity among white is notable.

Research question 2 (a). The research question two (a) asked if there is a relationship between Snapchat intensity and Hyperpersonal. The results of the model show a significant path from Snapchat intensity to Hyperpersonal. This finding is consistent with Walther (2007) study. He states that online users try to exploit the technological aspects of CMC to improve the content (e.g. messages, pictures., etc.), manage impressions and facilitate desired relationships. This finding helps us to understand better how Snapchat intensity contributes to Hyperpersonal. This may indicate that the intensity use of Snapchat enables users to disclose more information and post more personal pictures that may deviate from their true selves due to the synchronistic characteristics of the channel (self-destructing messages). Finally, it is

important to consider that Snapchat intensity assessed users' emotional connectedness to the app and its integration into user's daily activities.

Research question 2 (b). The research question two (b) asked if there is a relationship between Social Presence and Hyperpersonal. The path from Social Presence to Hyperpersonal was not significant. The finding did not support the previous assumption. However, it may indicate that Snapchat intensity elevates or eliminates the effects of Social Presence as a possible source of Hyperpersonal due to the channel was used "self-destruct message" in the Snapchat app. Self-Destruct Message provides live interaction supported via a typically asynchronous channel.

Research question 2 (c). The research question two (c) asked if there is a relationship between Ephemerality: Self-Destructing Messages and Hyperpersonal. The path from Ephemerality: Self-Destructing Messages to Hyperpersonal was negative and not significant. This finding tells us that the Ephemerality: Self-Destructing Messages scale was not predicting Hyperpersonal rather the intensity of Snapchat does. This may happen because of two things. First, the novelty of the Ephemerality: Self-Destructing Messages scale. Second, the blended temporal structure of Snapchat enables social interaction and intense usage of Snapchat. Further, Walther (1996) suggests that asynchronous interaction allows "the user almost unlimited time for editing, composing, sending, and receiving messages" (p. 24).

Research question 3 (a). The research question three (a) asked if there is a relationship between Snapchat intensity and Ephemerality: Synchronicity. Contrary to our expectation, Snapchat intensity shows a significant negative relationship with Ephemerality: Synchronicity. This may indicate that because the ephemerality in

Snapchat is a central factor of the users' experiences, it pushed away the effects of Snapchat intensity as a potential source of Ephemerality: Synchronicity. This finding is consistent with a study by Counts and Fellheimer (2004). The researchers developed a photo-sharing application with limited persistence and users reported enjoying the glimpses into friends' lives and "disposability" of the pictures (p. 605). Thus, the Ephemerality: Synchronicity of the Snapchat provides support of a broad range of aspects such as Self-Presentation, Self-Disclosure, and relationships development. Rivière (2005) argues that sharing photos "operates at the level of emotional perception and increases our capacity for emotion and to feel 'together'" with another person (p. 174).

Research question 3 (b). The research question three (a) asked if there is a relationship between Social Presence and Ephemerality: Synchronicity. The result of the model shows a significant path from Social Presence to Ephemerality: Synchronicity. This finding may indicate that the visual nature of Snapchat provides an opportunity to see a friend's experience and increase "Social Presence" (Bayer, Ellison, Schoenebeck & Falk 2016, p.17), almost as if in a shared face-to-face setting for just a few seconds (Rivière, 2005). To sum up, The feeling of closeness represented by Social Presence is positively related to Ephemerality: Synchronicity communication.

Research question 3 (c). The second research question asked "Is there a relationship between Ephemerality: Self-Destructing Messages and Ephemerality: Synchronicity?" The results of the structural equation modeling revealed that there was a significant positive relationship between Ephemerality: Self-Destructing Messages and Ephemerality: Synchronicity. This is consistent with recent research by (Bayer, Ellison, Schoenebeck & Falk, 2016) which indicates that Snapchat participants did not see the

application as a platform for sharing or viewing photos. Rather, Snapchat was viewed as a playful matrix or channel for sharing spontaneous experiences with trusted ties. Also, this finding is consistent with what Walther predicted. He pointed out that applying the Hyperpersonal theory model in Instant Messenger and other real-time text messaging channels deserves further exploration. More importantly, he predicted that “it may be that time stops until users press “send” when they compose CMC messages regardless of synchrony, (Walther, 2007, p.17). Furthermore, as it was mentioned before based on the Snapchat users exploratory survey results, it was found that Snapchat users mainly share selfies mostly taken from the home and are primarily for communication with close friends and family. These findings are consistent with Piwek and Joinson (2016) study.

Research question 4. The research question four asked whether there is a relationship between Ephemerality: Synchronicity and Hyperpersonal. The results revealed a nearly significant relationship between the Ephemerality: Synchronicity and Hyperpersonal construct. This may indicate that Self-Destructing Messages allow Snapchat users to experience in moment communication in which Snapchat users had greater chance to control the entire process of communication “Self-destructing data may provide the solution, shifting control over digital communication back to owners” (Kotfila, 2014, p.12). Thus, they will be more likely to engage in Hyperpersonal communication in which Snapchat may elevate some of the Self-Presentational concerns that impact the user experience of other media (Vitak, 2012). Also, this finding is consistent with a research states that in CMC online users can manage their Self-Presentations more strategically than in face-to-face situations, (Ellison, Heino, & Gibbs, 2006).

Hypothesis one. Hypothesis one proposed that there will be a positive relationship between Self-Presentation and Self-Disclosure. The results of Pearson's correlations revealed that there was a significantly positive relationship between Self-Disclosure and Self-Presentation. This finding helps us to understand better the role of Self-Disclosure and Self-Presentation contribute to Hyperpersonal in the Snapchat app. This indicates that in Snapchat context, the more users disclose information, the more likely they will present themselves in a favorable way and subsequently engage in Hyperpersonal interaction.

Theoretical contributions. The proposed model was created as an attempt to adapt the theoretical framework of Hyperpersonal theory (Walther, 1996). Many of the predicted or expected relationships (i.e. between Social Presence, Ephemerality: Self-Destructing Messages, and the Hyperpersonal construct) were not confirmed by the final structural equation model. However, the significant findings do provide insights into the experience of Snapchat users. Namely Snapchat intensity was the main predictor of Hyperpersonal. This finding supports that prior empirical evidence provided in the literature, as indicated by Walther (1996), online Self-Presentation is "more selective, malleable, and subject to self-censorship in CMC than it is in FtF interaction" (p. 20). Furthermore, surprisingly, the results showed a significant negative path from Snapchat intensity to Ephemerality: Synchronicity but demonstrated two positive predictors of the Ephemerality: Synchronicity dimensions comprise of Social Presence, Ephemerality: Self-Destructing Messages scales. These findings are consistent with a recent study that indicates "the visual nature of Snapchat provides an opportunity to see a friend's

experience and increase Social Presence” (Bayer, Ellison, Schoenebeck & Falk, 2016, p.17) almost as if in a shared face-to-face setting for just a few seconds (Rivière, 2005).

Similarly, the expected relationship between Ephemerality: Synchronicity and Hyperpersonal was near significant suggesting that the users’ perception of live interaction or synchronicity communication enables them to experience Hyperpersonal communication. These findings may be explained based on Walther (1996) study when he states that asynchronous interaction allows “the user almost unlimited time for editing, composing, sending, and receiving messages” (p. 24). Further, Hogan (2010) argues that Self-Presentation based on Goffman (1959) can be divided into performances, which take place in synchronous “situations,” and “artifacts,” which occurs in asynchronous exhibitions. Finally, as it was mentioned above the data demonstrates that Ephemerality: Self-Destructing Messages, Social Presence, and Snapchat intensity accounted for approximately 84% of the variance in Ephemerality: Synchronicity and 52% of the variance in Hyperpersonal. The findings support that the three predictors presented technological aspects of CMC which have contributions of explaining variance in Hyperpersonal and Ephemerality: Synchronicity constructs.

Practical Recommendations. The communication context is constantly evolving due to the continuous introduction of new technologies which resulting new ways of communication. The ephemeral social media platforms are shifting the role of the media from transactional to conversational. Hence, it is recommended that researcher should develop the theoretical framework of Hyperpersonal theory by pushing the boundaries of the Hyperpersonal model. This can be accomplished by addressing ephemeral social media platforms as well as existing research concerning mediated interpersonal

interaction with a focus on both the medium and its technological aspects as well as the users' experiences which altogether have the potential to explain Hyperpersonal communication in CMC and user's perception of Synchronicity communication.

Although this research provides some support for the Hyperpersonal communication in CMC, there is still significant work to be done. The model is not yet finished and should continue to be investigated as the empirical findings of this model have many implications for the ways in which the communication studies field and the world consider online interactions. Finally, it is recommended to understand the complexity of the Hyperpersonal model and the methodological implications of using structural equation modeling. For example, it is recommended to replicate the findings of the study in a new sample, alternative measures of Self-Disclosure, self-destructing scales and investigate whether the model has shared components or not.

Limitations

This study provides to some degree insight into the sample population's Snapchat use by identifying that 83% ($N= 162$) of participants use Snapchat. Also, it provided a snapshot of the sample participants Media & Technology Usage and Attitude, personal traits, and Snapchat uses. In this thesis, the average of Snapchat friends was not calculated due to the massive number of missing data. Subsequently, the score of Snapchat intensity was not calculated. Probably, this study could go one step further by computing the Snapchat Intensity score and compare it to Snapchat users' personal traits to get a better understanding of the role that Snapchat intensity played in their personality while coping with the Technology development. Also, it was beneficial to measure the personality traits of Snapchat users and nonusers. Although the results indicate no

significant difference found between Snapchat users and nonusers, it does not mean a difference does not exist. Perhaps, this study could reach significant differences in personality traits of Snapchat users and nonusers if another personality trait component was integrated into the survey for example shyness.

Second, the majority of participants were college students and thus may not represent Snapchat users who are at different ages. In this study, the sample has more females than males. Also, the majority of the participants were from the Middle East (completed their education in U.S.A) and whites. Previously, the findings demonstrate that based on ethnicity Whites use Snapchat more than African Americans and Middle Easterners. Since a snowball sampling method was employed, the results may not be generalized to the entire population. A larger sample and more diverse demographic could lead to more significant statistical findings to the proposed model of the Hyperpersonal theory. It is believed that a more thorough understanding of Social Presence and Ephemerality: Self-Destructing Messages are required to understand what the precise effects of the Social Presence and Ephemerality: Self-Destructing Messages contributed to Hyperpersonal. Additionally, it is believed that a higher number of responses might have contributed to the Social Presence, and Ephemerality: Self-Destructing Messages reaching significance levels. Thus, the study should be replicated with a new larger sample to confirm the results. Also, further research is needed to ascertain whether the previous results of the SEM can contribute to the development of the Hyperpersonal model (Walther, 1996). Last, the world of social media is rapidly changing, Snapchat in 2011 is not the Snapchat of 2016. Constantly, Snapchat developers are updating the app and adding new features. So, the real question is, how they will

enrich the concepts of Self-Disclosure, Self- Presentation and in moment communication in the app?

Future Research

The current study could provide several other avenues for future research. First, future research should take these limitations into consideration, especially in obtaining a larger sample and more diverse demographic which could lead to more significant statistical findings to the model of the Hyperpersonal theory. Second, the Ephemerality: Self-Destructing Messages scale should be examined and validated with a larger and more diverse sample. To ensure the generality of the measure and its validity to other social media contexts, the scale should be examined in future research. This scale could prove to be an important measure that helps researchers to understand better the recent changing trends of technology which online users utilize to communicate. Third, future research should investigate the reason Snapchat intensity was a significant negative predictor of Ephemerality: Synchronicity. Furthermore, future research should investigate why Social Presence and Ephemerality: Self-Destructing Messages were not significant predictors of Hyperpersonal. Fourth, future research may also take advantage of alternative measures for the Self-Disclosure. This can be accomplished by expanding the concept by measuring not only honesty, the conscious intent of Self-Disclosure but also amount and valence of Self- Disclosure. Finally, a researcher may want to know why Snapchat intensity was the only positive significant predictor of Hyperpersonal while Social Presence, Ephemerality: Self-Destructing Messages were significant predictors of Ephemerality: Synchronicity. Also, a researcher may want to know why Snapchat was a significant negative predictor of Ephemerality: Synchronicity. It could be useful to

identify the causes and the shortfalls in the proposed structural equation model of Hyperpersonal theory to deliver an adequate support to develop the theory. Finally, future research may consider testing the patterns of Self-Disclosure and Self-Presentation across different ethnicity.

Conclusion

This thesis contributes to existing literature about mediated interpersonal relationship developments in two ways. First, the theoretical goal of this thesis was to understand and test the role of Snapchat intensity, Social Presence, and Ephemerality: Self-Destructing Messages on Hyperpersonal theory and Ephemerality: Synchronicity. CMC can be Hyperpersonal because it surpasses FtF interaction. Walther (1996) indicates that Hyperpersonal is "more socially desirable than we tend to experience in parallel FtF interaction" (p. 17). The previous three predictors presented different technological aspects of CMC and helped us to understand better how Snapchat users experience or perceive the perception of synchronicity or live interaction in the Snapchat context. As Walther states, online users try to exploit the technological aspects of CMC to improve the content (e.g. messages, pictures., etc.) to manage impressions and facilitate desired relationships, Walther (2007).

This study has many implications for researchers who are interested in Communication studies and social media. The model clarified how Social Presence, Snapchat intensity, and Ephemerality: Self-Destructing Messages impact Hyperpersonal interaction and Ephemerality: Synchronicity communication in the context of Snapchat. Together, the results of the model and the Snapchat users exploratory delineated the Snapchat's position in the social media ecology; Snapchat users mainly share selfies that

are primarily used for communication with close ties. Further, the data provides useful information for researchers who are interested in developing the Hyperpersonal model; Snapchat intensity was the only positive significant predictor of Hyperpersonal while Social Presence and Ephemerality: Self-Destructing Messages were the two positive predictors of Ephemerality: Synchronicity communication. This may indicate that the Snapchat and its Self-Destructing Messages could be the reason for these findings, as well as the type of interpersonal relationships, reported (close ties versus weak ties).

Methodologically, the contribution of this research is a successful application of Snapchat intensity, Social Presence, Ephemerality: Self-Destructing Messages and Ephemerality: Synchronicity interaction in the context of mediated interpersonal relationships and social media smartphone app. All the four scales had very good reliabilities in measuring Snapchat users' relationships and perceptions of synchronous communication. Finally, this data creates an avenue of interests for knowing and understanding the precise technological aspects of the three previous predictors contributed to Hyperpersonal and users' perception of live interaction or synchronicity communication in Snapchat context.

REFERENCES

- Anandarajan, M., Zaman, M., Dai, Q., & Arinze, B. (2010). Generation Y adoption of instant messaging: An examination of the impact of social usefulness and media richness on use richness. *IEEE Transactions on Professional Communication*, *53*(2), 132-143. doi: 10.1109/TPC.2010.2046082.
- Archer, J. L. (1980). Self-Disclosure. In D. Wegner & R. Vallacher (Eds.), *The self in social psychology* (pp. 183–204). London: Oxford University Press.
- Bayer, J. B., Ellison, N. B., Schoenebeck, S. Y., & Falk, E. B. (2016). Sharing the small moments: ephemeral social interaction on Snapchat. *Information, Communication & Society*, *19*(7), 956-977. doi:10.1080/1369118X.2015.1084349
- Baym, N. K. (2010). *Personal Connections in the Digital Age*. Polity Press.
- Bentler, P. M. (1992). On the fit of models to covariances and methodology to the Bulletin. *Psychological Bulletin*, *112*(3), 400. doi:10.1037/0033-2909.112.3.400
- Berg, J. H., & Archer, R. L. (1983). The disclosure-liking relationships: Effects of Self-perception, order of disclosure, and topical similarity. *Human Communication Research*, *10*, 269–281. doi:10.1111/j.1468-2958.1983.tb00016.x
- Burchell, K. (2015). Tasking the everyday: Where mobile and online communication take time. *Mobile Media & Communication*, *3*(1), 36–52. doi:10.1177/2050157914546711

- Byrne, B. M. (2016). *Structural equation modeling with AMOS: Basic concepts, applications, and programming*. Routledge.
- Cathcart, R., & Gumpert, G. (1983). Mediated interpersonal communication: Toward a new typology. *Quarterly Journal of Speech*, 69(3), 267-277.
doi: 10.1080/00335638309383654.
- Chen, K., Yen, D. C., & Huang, A. H. (2004). Media selection to meet communications contexts: comparing e-mail and instant messaging in an undergraduate population. *The Communications of the Association for Information Systems*, 14(1), pp. 387-405. <http://aisel.aisnet.org/cais/vol14/iss1/54>.
- Cole-Lewis, H., & Kershaw, T. (2010). Text messaging as a tool for behavior change in disease prevention and management. *Epidemiologic Reviews*, 32, 56-69.
doi: 10.1093/epirev/mxq004.
- Connolly, T., Jessup, L. M., & Valacich, J. S. (1990). Effects of anonymity and evaluative tone on idea generation in computer-mediated groups. *Management Science*, 36(6), 689-703. doi: 10.1287/mnsc.36.6.689.
- Counts, S., & Fellheimer, E. (2004). *Supporting Social Presence through lightweight photo sharing on and off the desktop*. Proceedings of CHI, pp. 599-606. ACM.
doi:10.1145/985692.985768
- Curtis, S. (2014). Instant messaging overtakes texting in the UK (13 Jan 2014). <http://www.telegraph.co.uk/technology/news/10568395/Instant-messaging-overtakes-texting-in-the-UK.html>.
- Culnan, M. J., & Markus, M. L. (1987). Information technologies. In F. M. Jablin, L. L. Putnam, K. H. Roberts, & L. W. Porter (Eds.), *Handbook of organizational communication: An interdisciplinary perspective* (pp. 420-443). Newbury Park, CA: Sage.

- December, J. (1997). Notes on defining of computer-mediated communication. *Computer-Mediated Communication Magazine*, 3(1).
- Derlega, V. J., Metts, S., Petronio, S., & Margulis, S. T. (1993). *Self-Disclosure*. Newbury Park, CA: Sage.
- Ellison, N. B. (2007). Social network sites: Definition, history, and scholarship. *Journal of Computer-Mediated Communication*, 13(1), 210-230.
doi:10.1111/j.1083-6101.2007.00393.
- Ellison, N. B., Steinfield, C., & Lampe, C. (2007). The benefits of Facebook “friends:” Social capital and college students’ use of online social network sites. *Journal of Computer-Mediated Communication*, 12(4), 1143-1168. doi: 10.1111/j.1083-6101.2007.00367.
- Ellison, N., Heino, R., & Gibbs, J. (2006). Managing impressions online: Self-presentation processes in the online dating environment. *Journal of Computer-Mediated Communication*, 11, 415–441. doi: 10.1111/j.1083-6101.2006.00020.x
- Francis, L. J., Brown, L. B., & Philipchalk, R. (1992). The development of an abbreviated form of the Revised Eysenck Personality Questionnaire (EPQR-A): Its use among students in England, Canada, the USA and Australia. *Personality and Individual Differences*, 13(4), 443-449. doi: 10.1016/0191-8869(92)90073-X.
- Ganzenmuller, R. G. (2014). Snap and Destroy: Preservation Issues for Ephemeral Communications. *Buffalo Law Review*. 62, 1239.

- Gibbs, J. L., Ellison, N. B., & Heino, R. D. (2006). Self-Presentation in online personals: the role of anticipated future interaction, Self-Disclosure, and perceived success in Internet dating. *Communication Research*, 33(2), 152-177.
doi: 10.1177/0093650205285368.
- Goffman, E. (1959). *The presentation of self in everyday life*. New York: Anchor Books.
- Hancock, J. T., & Toma, C. (2009). Putting your best face forward: The accuracy of online dating photographs. *Journal of Communication*, 59, 367–386.
doi:10.1111/j.1460-2466.2009.01420.x
- Hawn, C. (2009). Take two aspirin and tweet me in the morning: how Twitter, Facebook, and other social media are reshaping health care. *Health affairs*, 28(2), 361-368.
doi:10.1377/hlthaff.28.2.361
- Hiltz, S. R., Johnson, K., & Turoff, M. (1986). Experiments in group decision making: communication process and outcome in face-to-face versus computerized conferences. *Human Communication Research*, 13(2), 225-252.
doi: 10.1111/j.1468-2958.1986.tb00104.x
- Hogan, B. (2010). The presentation of self in the age of social media: Distinguishing performances and exhibitions online. *Bulletin of Science, Technology & Society*, SAGE Publications. doi: 10.1177/0270467610385893.
- Hollan, J., & Stornetta, S. (1992). *Beyond being there*. Proceedings of CHI, pp. 119–125. ACM. Retrieved from <http://dl.acm.org/citation.cfm?id=142769>

- Hu, L. T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural equation modeling: a multidisciplinary journal*, 6(1), 1-55.
doi: 10.1080/10705519909540118
- Huang, A. H., & Yen, D. C. (2003). Usefulness of instant messaging among young users: Social vs. work perspective. *Human Systems Management*, 22(2), 63-72.
- Jin, B., & Park, N. (2010). In-person contact begets calling and texting: Interpersonal motives for cell phone use, face-to-face interaction, and loneliness. *Cyberpsychology, Behavior, and Social Networking*, 13(6), 611-618.
doi:10.1089/cyber.2009.0314.
- Joinson, A. N., & Paine, C. B. (2007). Self-Disclosure, privacy, and the Internet. *The Oxford handbook of Internet psychology*, 237-252.
doi:10.1093/oxfordhb/9780199561803.013.0016.
- Juniper Research. (2014). Mobile messaging markets. Technical Report.
<http://www.juniperresearch.com/press-release/mobile-messaging-pr1>
- Katz, J. E., & Crocker, E. T. (2015). Selfies and photo messaging as visual conversation: Reports from the United States, United Kingdom, and China. *International Journal of Communication*, 9, 1861–1872.
- Kiesler, S., Siegel, J. & McGuire, T.W. (1984). Social psychological aspects of computer- mediated communication. *American Psychologist*, 39, 1123- 1134.
doi: 10.1037/0003-066X.39.10.1123
- Killingsworth, M. A., & Gilbert, D. T. (2010). A wandering mind is an unhappy mind. *Science*, 330(6006), 932–932. doi:10.1126/science.1192439.

- Kotfila, C. (2014). This message will self-destruct: The growing role of obscurity and self-destructing data in digital communication. *Bulletin of the American Society for Information Science and Technology*, 40(2), 12-16.
doi: 10.1002/bult.2014.1720400206
- Kreijns, K., Kirschner, P. A., Jochems, W., & Van Buuren, H. (2011). Measuring perceived Social Presence in distributed learning groups. *Education and Information Technologies*, 16(4), 365-381. doi:10.1007/s10639-010-9135-7.
- Landis, R.S., Edwards, B.D., & Cortina, J.M. (2009). On the practice of allowing correlated residuals among indicators in structural equation modeling. In C.E. Madianou, M., & Miller, D. (2013). Polymedia: Towards a new theory of digital media in interpersonal communication. *International Journal of Cultural Studies*, 16(2), 169-187. doi: 10.1177/1367877912452486
- McQuillen, J. S. (2003). The influence of technology on the initiation of interpersonal relationships. *Education*, 123, 616-624.
doi: <http://connection.ebscohost.com/c/articles/9557721/influence-technology-initiation-interpersonal-relationships>.
- McMillan, S. J., & Hwang, J. S. (2002). Measures of perceived interactivity: An exploration of the role of direction of communication, user control, and time in shaping perceptions of interactivity. *Journal of advertising*, 31(3), 29-42.
doi: 10.1080/00913367.2002.10673674
- Nosko, A., Wood, E., & Molema, S. (2010). All about me: Disclosure in online social networking profiles: The case of FACEBOOK. *Computers in Human Behavior*, 26, 406–418. doi: 10.1016/j.chb.2009.11.012

- Ogara, S. O., Koh, C. E., & Prybutok, V. R. (2014). Investigating factors affecting social presence and user satisfaction with mobile instant messaging. *Computers in Human Behavior*, 36, 453-459. doi:10.1016/j.chb.2014.03.064
- Petronzio, M. (2012, October 25). A Brief History of Instant Messaging. Retrieved from <http://mashable.com/2012/10/25/instant-messaging-history/>.
- Piwek, L., & Joinson, A. (2016). “What do they Snapchat about?” Patterns of use in time-limited instant messaging service. *Computers in Human Behavior*, 54, 358-367. doi: 10.1016/j.chb.2015.08.026
- Rainie, L. & Zickuhr, K. (2015, August 25). Chapter 1: Always on Connectivity. Retrieved May 01, 2017, from <http://www.pewinternet.org/2015/08/26/chapter-1-always-on-connectivity/>.
- Ramirez Jr, A., & Broneck, K. (2009). IM me': Instant messaging as relational maintenance and everyday communication. *Journal of Social and Personal Relationships*, 26(2-3), 291-314. doi: 10.1177/0265407509106719
- Rennecker, J., & Godwin, L. (2005). Delays and interruptions: A self-perpetuating paradox of communication technology use. *Information and Organization*, 15(3), 247-266. doi: 10.1016/j.infoandorg.2005.02.004
- Rivière, C. (2005). Mobile camera phones: a new form of “being together” in daily interpersonal communication. In *Mobile communications* (pp. 167-185). Springer London. doi: 10.1007/1-84628-248-9_11

- Roesner, F., Gill, B. T., & Kohno, T. (2014, March). Sex, lies, or kittens? investigating the use of Snapchat's self-destructing messages. In *International Conference on Financial Cryptography and Data Security* (pp. 64-76). Springer Berlin Heidelberg. doi: 10.1007/978-3-662-45472-5_5.
- Rosen, L. D., Whaling, K., Carrier, L. M., Cheever, N. A., & Rökkum, J. (2013). The media and technology usage and attitudes scale: An empirical investigation. *Computers in Human Behavior*, 29(6), 2501-2511.
doi: 10.1016/j.chb.2013.06.006
- Spiegel, E. (2014). *AXS Partner Summit Keynote*. Retrieved from:
<https://www.snap.com/fin-fi/news/post/2014-axs-partner-summit-keynote/>.
- Short, J., Williams, E., & Christie, B. (1976). *The Social Psychology of Telecommunication*. London: Wiley.
- Stewart, J. (2012). *Bridges not walls: A book about interpersonal 21 communication*. (11th ed). Boston. McGraw-Hill.
- Tidwell, L. C., & Walther, J. B. (2002). Computer-mediated communication effects on disclosure, impressions, and interpersonal evaluations: Getting to know one another a bit at a time. *Human Communication Research*, 28(3), 317-348.
doi: 10.1111/j.1468-2958.2002.tb00811.x
- Toma, C. L., Hancock, J. T., & Ellison, N. (2008). Separating fact from fiction: An examination of deceptive Self-Presentation in online dating profiles. *Personality and Social Psychology Bulletin*, 34, 1023–1036. doi:10.1177/0146167208318067
- Turkle, S. (2012). *Alone together: Why we expect more from technology and less from each other*. Basic books.

- Ullman, J. B. (2001). Structural equation modeling. In B. G. Tabachnick & L. S. Fidell (Eds.), *Using Multivariate Statistics* (4th ed; pp. 653-771). Boston: Allyn & Bacon.
- Vitak, J. (2012). The impact of context collapse and privacy on social network site disclosures. *Journal of Broadcasting & Electronic Media*, 56(4), 451–470.
doi:10.1080/08838151.2012.732140.
- Wagner, Study Finds 77% of College Students Use Snapchat Daily, MASHABLE (2014). Retrieved from <http://www.mashable.com/2014/02/24/Snapchat-study-college-students>.
- Walther, J. B. (1992). Interpersonal effects in computer-mediated interaction a relational perspective. *Communication Research*, 19(1), 52-90.
doi:10.1177/009365092019001003
- Walther, J. B. (1993). Impression development in computer-mediated interaction. *Western Journal of Communication*, 57(4), 381-398.
doi:10.1080/10570319309374463
- Walther, J. B. (1996). Computer-mediated communication: Impersonal, interpersonal and Hyperpersonal interaction. *Communication Research*, 23, 3–43.
doi:10.1177/009365096023001001
- Walther, J. B. (2007). Selective Self-Presentation in computer-mediated communication: Hyperpersonal dimensions of technology, language, and cognition. *Computers in Human Behavior*, 23, 2538-2557.
doi:10.1016/j.chb.2006.05.002

- Walther, J. B., Slovacek, C. L., & Tidwell, L. C. (2001). Is a picture worth a thousand words? Photographic images in long-term and short-term computer-mediated communication. *Communication Research*, 28, 105-134.
doi: 10.1177/009365001028001004
- Wheeless, L. R., & Grotz, J. (1976). Conceptualization and measurement of reported self-disclosure. *Human Communication Research*, 2(4), 338-346.
doi: 10.1111/j.1468-2958.1976.tb00494.x
- Wheeless, L. R. (1978). A follow-up study of the relationships among trust, disclosure, and interpersonal solidarity. *Human Communication Research*, 4, 143-157. doi: 10.1111/j.1468-2958.1978.tb00604.x
- Witmer, B. G. & Singer, M. J. (1998). Measuring presence in virtual environments: A presence questionnaire. *Presence: Teleoperators and Virtual Environments*, 7, 225–240. doi:10.1162/105474698565686
- Wood, A. F. & Smith, M. J. (2001). *Online Communication: Linking Technology, Identity, and Culture*. Mahwah, NJ: Lawrence Erlbaum Associates.

APPENDICES

APPENDIX A

Figure A.1. IRB Approval letter.

Oct 4, 2016

Dear Cheryl Bracken,

RE: IRB-FY2016-251

SNAPPING LIVE: EXPLORING THE EFFECTS OF EPHEMERALITY NATURE OF MESSAGING IN SOCIAL MEDIA SETTINGS.

The IRB has reviewed and approved your application for the above named project, under the category noted below. Approval for use of human subjects in this research is for a one-year period as noted below. If your study extends beyond this approval period, *you must contact this office to initiate an **annual review of this research.***

Approval Category: Expedited, Category 7

Approval Date: Oct 3, 2016

Expiration Date: Oct 2, 2017

By accepting this decision, you agree to notify the IRB of: (1) any additions to or changes in procedures for your study that modify the subjects' risk in any way; and (2) any events that affect that safety or well-being of subjects. Notify the IRB of any revisions to the protocol, including the addition of researchers, **prior to implementation.**

Thank you for your efforts to maintain compliance with the federal regulations for the protection of human subjects. Please let me know if you have **any questions.**

Sincerely,

Mary Jane Karpinski

IRB Analyst

Cleveland State University

Sponsored Programs and Research Services

(216) 687-3624

m.karpinski2@csuohio.edu

APPENDIX B

CITI Certification

COLLABORATIVE INSTITUTIONAL TRAINING INITIATIVE (CITI PROGRAM)

- **Name:** Dania aljouhi (ID: 5089126)
- **Email:** d.aljouhi@vikes.csuohio.edu
- **Institution Affiliation:** Cleveland State University (ID: 698)
- **Phone:** 6147725416
- **Curriculum Group:** Human Research
- **Course Learner Group:** Social & Behavioral Research Investigators
- **Stage:** Stage 1 - Basic Course
- **Report ID:** 17355912
- **Report Date:** 09/18/2015
- **Current Score**:** 94

APPENDIX C

Informed Consent Form

Dear Participant:

Our names are Dr. Cheryl and Ms. Dania. We are members of the School of Communication at Cleveland State University. The goal of this study is to learn about messaging apps and how they can change how people feel about connecting with other people on their phones. If you agree to complete this survey, we will ask you to do the following things: To answer questions about your social media usage and some questions about yourself. The survey will take no longer than 15 minutes.

Your participation in this study is entirely voluntary. You have the right to leave the study at any time. Leaving the study will not result in any punishment or loss of benefits to which you are entitled. There are no reasonable or expected risks to you.

If your teacher has offered extra credit for participation, you will have the choice to enter your name and the name of your instructor. If you choose to provide your name, it will be removed from the file before any data analysis is started.

The records of this study will be kept private. Only the researchers will see the data. In any sort of report, we may publish, we will not include any information that will make it possible to identify a participant. Research records will be kept in a locked file. All electronic information will be coded and secured using a password protected file.

For further information regarding this research, please contact Dr. Cheryl Bracken at (216/687-4512), email:

(c.bracken@csuohio.edu), or Ms. Dania Al-Jouhi at (614/772-5416), email:
(d.aljouhi@vikies.csuohio.ed).

* "I am 18 years or older, and I agree to participate in this research study. I understand my participation is voluntary and that I may stop at any time without penalty."

Start the survey

APPENDIX D

Questionnaire

SNAPPING LIVE: EXPLORING THE EFFECTS OF EPHEMERALITY NATURE OF MESSAGING IN SOCIAL MEDIA SETTINGS.

1. Welcome to My Survey

Informed Consent Form

Dear Participant:

Our names are Dr. Cheryl and Ms. Dania. We are members of the School of Communication at Cleveland State University. The goal of this study is to learn about messaging apps and how they can change how people feel about connecting with other people on their phones. If you agree to complete this survey, we will ask you to do the following things: To answer questions about your social media usage and some questions about yourself. The survey will take no longer than 15 minutes.

Your participation in this study is entirely voluntary. You have the right to leave the study at any time. Leaving the study will not result in any punishment or loss of benefits to which you are entitled. There are no reasonable or expected risks to you.

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* "I am 18 years or older, and I agree to participate in this research study. I understand my participation is voluntary and that I may stop at any time without penalty"

Start the survey

SNAPPING LIVE: EXPLORING THE EFFECTS OF EPHEMERALITY NATURE OF MESSAGING IN SOCIAL MEDIA SETTINGS.

2. Media & Technology Usage

* Please indicate how often you do each of the following activities on any device (mobile phone, laptop, desktop, etc.)

	Never	Rarely	Occasionally	Sometimes	Frequently	Usually	All the time
1-Read e-mail on a mobile phone. (Smartphone Usage)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2-Get directions or use GPS on a mobile phone. (Smartphone Usage)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3-Browse the web on a mobile phone. (Smartphone Usage)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4-Listen to music on a mobile phone. (Smartphone Usage)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5-Take pictures using a mobile phone. (Smartphone Usage)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6-Check the news on a mobile phone. (Smartphone Usage)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7-Record video on a mobile phone. (Smartphone Usage)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8-Use apps (for any purpose) on a mobile phone. (Smartphone Usage)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9-Search for information on a mobile phone. (Smartphone Usage)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
1-Watch TV shows, movies, etc. on a laptop. (Media sharing)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2-Watch video clips on a laptop. (Media sharing)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Never	Rarely	Occasionally	Sometimes	Frequently	Usually	All the time
3-Download media files from other people on a Laptop.(Media sharing)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4-Share your media files on a laptop.(Media sharing)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
1-Search the Internet for news on any device. (Internet searching)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2-Search the Internet for information on any device.(Internet searching)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3-Search the Internet for videos on any device. (Internet searching)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4-Search the Internet for images or photos on any device.(Internet searching)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
1-Play games on a computer, video game console or Smartphone by yourself.(Video Gaming)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2-Play games with other person(s) in the same location as you.(Video Gaming)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3-Play games with other person(s) NOT in the same location as you. (Video Gaming)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

SNAPPING LIVE: EXPLORING THE EFFECTS OF EPHEMERALITY NATURE OF MESSAGING IN SOCIAL MEDIA SETTINGS.

3. Part B. Attitude

* Please indicate how strongly you agree or disagree with all the following statements which apply to you by selecting a number from 1 (strongly disagree) to 5 (strongly agree).

	Strongly disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly agree (5)
1-I feel it is important to be able to find any information whenever I want online.(Positive attitudes)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2-I feel it is important to be able to access the Internet any time I want. (Positive attitudes)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3-I think it is important to keep up with the latest trends in technology. (Positive attitudes)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4-I get anxious when I don't have my cell phone. (Anxiety/dependence)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5-I get anxious when I don't have the Internet available to me. (Anxiety/dependence)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6-I am dependent on my technology. (Anxiety/dependence)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7-Technology will provide solutions to many of our problems. (Positive attitudes)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8-Technology makes anything possible. (Positive attitudes)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9-I feel that I get more accomplished because of technology.(Positive attitudes)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Strongly disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly agree (5)
10-I feel like Snapchat, and other social apps make people waste too much time.(Negative attitudes)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11-New technology makes life more complicated.(Negative attitudes)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12-I feel like Snapchat, and other social apps make people more isolated.(Negative attitudes)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

SNAPPING LIVE: EXPLORING THE EFFECTS OF EPHEMERALITY NATURE OF MESSAGING IN SOCIAL MEDIA SETTINGS.

4. Extroversion Scale

* Please indicate how strongly you agree or disagree with all the following statements which apply to you by selecting a number from 1 (strongly disagree) to 5 (strongly agree).

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1-You are a talkative person.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2-You are lively.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3-You easily bring some life into a rather dull party.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4-At social events, you tend to keep in the background.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5-You are mostly quiet when you are with other people.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6-Other people think of you as being very lively.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

* Do you have a Snapchat account?

- Yes
- No

SNAPPING LIVE: EXPLORING THE EFFECTS OF EPHEMERALITY NATURE OF MESSAGING IN SOCIAL MEDIA SETTINGS.

5. General Social Media usage " Snapchat" - Media & Technology Usage

* How often do you do each of the following activities on Snapchat or other social media apps?

	Never	Rarely	Occasionally	Sometimes	Frequently	Usually	All the time
1-Check your Snapchat account or other social media accounts. (General social media usage)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2-Check your Snapchat account from your tablet. (General social media usage)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3-Check Snapchat account at work or school.(General social media usage)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4-Post daily stories and snaps.(General social media usage)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5-Send photos, videos, text using your Snapchat account. (General social media usage)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6-Check other people's daily stories on your Snapchat app.(General social media usage)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7-View other People's Snapchats.(General social media usage)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8-View other people's status, and profile photos, etc. (General social media usage)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9-Click and comment on posting daily stories, etc. (General social media usage)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

SNAPPING LIVE: EXPLORING THE EFFECTS OF EPHEMERALITY NATURE OF MESSAGING IN SOCIAL MEDIA SETTINGS.

6. Snapchat users exploratory information

* What type of snaps do you send usually?

- Pictures.
- Videos.
- Pictures with doodles on it.
- All.

What do you send and receive?

- Selfie
- Food
- Objects
- Messages
- Other people
- Coursework
- Animals
- Explicit
- other

Other (please specify)

SNAPPING LIVE: EXPLORING THE EFFECTS OF EPHEMERALITY NATURE OF MESSAGING IN SOCIAL MEDIA SETTINGS.

7. Continue Snapchat users exploratory information

* Please go back to (the interaction page) of your Snapchat account and answer the following questions:



Who did you send your last snap to?

- One person.
- More than one person.
- Other (please specify)

* How would you categorize the person(s) you sent the snap to?

- Close friend(s).
- Family.
- Acquaintances.
- Romantic partner.
- Coworker.
- Other (please specify)

Where were you when you sent it?

- Home.
- School.
- Work.
- On public transportation.
- In my car.
- Other (please specify)

SNAPPING LIVE: EXPLORING THE EFFECTS OF EPHEMERALITY NATURE OF MESSAGING IN SOCIAL MEDIA SETTINGS.

8. Snapchat Intensity scale

* Please indicate how strongly you agree or disagree with all the following statements which apply to you by selecting a number from 1 (strongly disagree) to 5 (strongly agree).

	Strongly disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly agree (5)
1-Snapchat is part of my everyday activity.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2-I am proud to tell people I'm using Snapchat.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3-Snapchat has become part of my daily routine.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4-I feel out of touch when I haven't snapped for a while.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5-I feel I am part of the Snapchat community.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6-I would be sorry if Snapchat shut down	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

* Approximately how many TOTAL snapchat friends do you have?

* In the past week, on average, approximately how much time PER DAY have you spent actively using Snapchat?

SNAPPING LIVE: EXPLORING THE EFFECTS OF EPHEMERALITY NATURE OF MESSAGING IN SOCIAL MEDIA SETTINGS.

9. self disclosure online scale-Honesty

* Please indicate how strongly you agree or disagree with all the following statements which apply to you by selecting a number from 1 (strongly disagree) to 5 (strongly agree).

	Strongly disagree(1)	disagree(2)	Neutral (3)	agree(4)	Strongly agree (5)
1-I am always honest in my self-disclosures to those I meet online.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2-My statements about my feelings, emotions, and experiences to those I meet online are always accurate self-perceptions.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3-The things I reveal about myself to those I meet online are always accurate reflections of who I am.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4-I am not always honest in my self-disclosures with those I meet online.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5-My snaps about my feelings, emotions, and experiences are always accurate self-perceptions.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

SNAPPING LIVE: EXPLORING THE EFFECTS OF EPHEMERALITY NATURE OF MESSAGING IN SOCIAL MEDIA SETTINGS.

10. Continue Self disclosure scale/Conscious intent

* Please indicate how strongly you agree or disagree with all the following statements which apply to you by selecting a number from 1 (strongly disagree) to 5 (strongly agree).

	Strongly disagree(1)	disagree(2)	Neutral (3)	agree(4)	Strongly agree (5)
1-When I express my feelings, in my snaps, I am always aware of what I am doing and saying.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2-When I am self-disclosing in my daily stories, I am consciously aware of what I am revealing.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

SNAPPING LIVE: EXPLORING THE EFFECTS OF EPHEMERALITY NATURE OF MESSAGING IN SOCIAL MEDIA SETTINGS.

11. Self-presentation scale.

* Please indicate how strongly you agree or disagree with all the following statements which apply to you by selecting a number from 1 (strongly disagree) to 5 (strongly agree).

	Strongly disagree(1)	disagree(2)	Neutral (3)	agree(4)	Strongly agree (5)
1-Snapchat application allows me to present myself in a favorable way.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2-I think I have made a good impression on others through my snaps.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3-I think I have made a good impression on others through my daily stories.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

SNAPPING LIVE: EXPLORING THE EFFECTS OF EPHEMERALITY NATURE OF MESSAGING IN SOCIAL MEDIA SETTINGS.

12. Self destructing messages scale.

* Please indicate how strongly you agree or disagree with all the following statements which apply to you by selecting a number from 1 (strongly disagree) to 5 (strongly agree).

In this question, you will be asked about self-destructing messages. Throughout this study, we define Self-Destructing Messages as messages that automatically disappear from the recipient's screen after the message has been viewed and the timer has expired.

	Strongly disagree(1)	disagree(2)	Neutral (3)	agree(4)	Strongly agree (5)
1-Snapchat allows me to experience in moment communication.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2-Snapchat allows me to send casual content than other social app	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3-Self-destructing messages in the Snapchat app allow me to experience face to face communication.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4-Self-destructing messages in the Snapchat app allow me to send personal content.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5-Self-destructing messages in the Snapchat app allow me to send everyday activities.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6-Self -destructing messages in the Snapchat app allow me to experience real conversations with close relationships.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

SNAPPING LIVE: EXPLORING THE EFFECTS OF EPHEMERALITY NATURE OF MESSAGING IN SOCIAL MEDIA SETTINGS.

13. Social Presence scale.

* Please indicate how strongly you agree or disagree with all the following statements which apply to you by selecting a number from 1 (strongly disagree) to 5 (strongly agree).

In this question, you will be asked about Synchronous communication. Throughout this study, we consider synchronous communication to be when the sender and receiver are actively communicating (e.g., messaging, snapping,) at the same time. While, we define Asynchronous as when you do not need or expect the recipient of your message to respond right away (e.g. email).

	Strongly disagree(1)	disagree(2)	Neutral (3)	agree(4)	Strongly agree (5)
1-When I have live conversations in the Snapchat app, I have my communication partner in my mind's eye".	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2-When I have asynchronous conversations in the Snapchat app, I also have my communication partner in my mind's eye'.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3-When I have live conversations in the Snapchat app, I feel that I deal with very real persons and not with abstract, anonymous persons.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4-When I have asynchronous conversations in the Snapchat app, I also feel that I deal with very real persons and not with abstract, anonymous persons.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5-Real-time conversations in the Snapchat app can hardly be distinguished from face-to-face conversations.(NOT IN SEM)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

SNAPPING LIVE: EXPLORING THE EFFECTS OF EPHEMERALITY NATURE OF MESSAGING IN SOCIAL MEDIA SETTINGS.

14. measure of perceived interactivity: Real-time/Engaging

* Please indicate how strongly you agree or disagree with all the following statements which apply to you by selecting a number from 1 (strongly disagree) to 5 (strongly agree).

	Strongly disagree(1)	disagree(2)	Neutral (3)	agree(4)	Strongly agree (5)
1-The self-destructing messages in Snapchat app enable two- way communication.(Real time)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2-The self-destructing messages in the Snapchat app allow me to experience real-time communication.(Real time)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3-The self-destructing messages in the Snapchat app are interactive.(Real time)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4-The self-destructing messages in the Snapchat app are primarily one- way communication.(Real time)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5-The self-destructing messages in the Snapchat app are interpersonal.(Real time)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6-The self-destructing messages in Snapchat app enable conversation.(Real time)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7-The self-destructing messages in Snapchat app provide non-synchronous communication.(Real time)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Strongly disagree(1)	disagree(2)	Neutral (3)	agree(4)	Strongly agree (5)
1-The Snapchat app allows me to communicate anywhere. (Engaging) (included in SEM)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2-Snapchat allows me to edit my snaps or use them later.(Engaging)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3-Snapchat app has a variety of content. (Engaging)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4-Snapchat app keeps my attention.(Engaging)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5-When I use the Snapchat app; it is easy to find my way through the app.(Engaging)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6-Snapchat app enables me to store my snaps. (Engaging)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7-Snapchat provides immediate communication. (Engaging) (included in SEM)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8-Snapchat app lacks contents.(Engaging)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

15. Demographic Questions

What type of media device are you using to complete this survey?

- Smart phone
- Laptop/notebook
- Tablet
- Desktop computer
- Other

* What is your gender?

- Male
- Female
- Transgender
- Transsexual
- Genderqueer
- Genderfuck
- Non-gendered
- Agender
- Genderless
- Non-binary
- Trans Man
- Trans Woman
- Third Gender
- Two-Spirit
- Bi-Gender
- Genderfluid
- Transvestite
- Rather not to say.
- Other (please specify)

* What is your age?

SNAPPING LIVE: EXPLORING THE EFFECTS OF EPHEMERALITY NATURE OF MESSAGING IN SOCIAL MEDIA SETTINGS.

16.

* Please specify your ethnicity.

- White
- Hispanic or Latino
- Black or African American
- Native American or American Indian
- Asian / Pacific Islander
- Middle Eastern
- Other (please specify)

What is your marital status?

- Single, never married
- Married or domestic partnership
- Widowed
- Divorced
- Separated

* What is the highest degree or level of school you have completed? If currently enrolled, highest degree received.

- Some high school, no diploma
- High school graduate, diploma or the equivalent
- Some college credit, no degree
- Associate degree
- Bachelor's degree
- Master's degree
- Professional degree
- Doctorate degree
- other

Thank you for taking the time to complete our survey.

If you are a student and you are eligible for extra credit, please provide the following information so we can inform your instructor you participated. If you do not know some information, just leave it blank. Your identifying information will immediately be separated from your responses.

PLEASE PRESS THE "DONE" BUTTON TO SUBMIT THE SURVEY.

What is your name?

What is your ID number?

What is the title of the class are you completing the survey? (For example - COM 101)

What is the name of your instructor?

APPENDIX E

Table 7

Means, Standard Deviations, and Reliability Coefficients for Measures

	<i>M</i>	<i>SD</i>	α
Self-Presentation	3.32	.85	.86
The Self-Destructing Messages	3.15	.67	.78
Snapchat intensity	2.82	.97	.90
Social Presence scale	3.17	.69	.80
Extroversion scale	2.62	.77	.85
Self-Disclosure scale			
<i>Honesty</i>	3.32	.60	.77
<i>Intent</i>	3.92	.81	.82
Perceived interactivity scale			
<i>Real-time</i>	3.17	.52	.71
<i>Engaging.</i>	3.46	.62	.80
Media and Technology Usage			
<i>Media sharing</i>	4.06	1.50	.81
<i>Internet searching usage</i>	5.38	1.38	.87
<i>General Snapchat usage</i>	4.11	1.19	.87
<i>Video Gaming</i>	2.79	1.64	.84
<i>Smartphone usage</i>	5.81	.90	.82
Attitude Scale			
<i>positive attitudes</i>	3.94	.67	.77
Anxiety and dependence on technology			
<i>Negative attitudes</i>	3.65	1.02	.85
	3.49	.82	.61

Table 8

Demographic Characteristics of the Sample

	<i>n</i>	%
Gender		
Male	69	38.3
Female	110	61.1
Transgender	1	.6
Marital Status		
Single	118	65.6
Married	59	32.8
Divorced	3	1.7
Racial/Ethnic Group		
White	57	31.7
Hispanic or Latino	2	1.1
Black or African American	32	17.8
Asian / Pacific Islander	3	1.7
Middle Eastern	81	45
Other	5	2.8
Highest degree or level of school you have completed, If currently enrolled, highest degree received.		
Some high school, no diploma	1	.6
High school graduate, diploma or the equivalent	15	8.3
Some college credit, no degree	51	28.3
Associate degree	20	11.1
Bachelor's degree	34	18.9
Master's degree	48	26.7
Professional degree	3	1.7
Doctorate degree	8	4.4
Media device used to complete the survey		
Smart phone	108	60
Laptop/notebook	44	24.4
Tablet	5	2.8
Desktop computer	23	12.8

N=195

SYSMY=7.7 %

APPENDIX F

AMOS

Table 9

Unstandardized, Standardized, and Significance Levels for the final model in figure 5.

Parameter Estimate	Unstandardized	Standardized	<i>p</i>
Measurement Model Estimates			
Q89_SDM1 ← Ephemerality: Self-Destructing Messages	.547	.613	***
Q89_SDM3 ← Ephemerality: Self-Destructing Messages	.688	.636	***
Q89_SDM5 ← Ephemerality: Self-Destructing Messages	1.000	.798	-----
Q89_SDM6 ← Ephemerality: Self-Destructing Messages	.890	.765	***
Q89_SDM8 ← Ephemerality: Self-Destructing Messages	.834	.743	***
Q89_SDM10 ← Ephemerality: Self-Destructing Messages	.803	.748	***
Q90_1SP ← Social Presence	.975	.845	***
Q90_2SP ← Social Presence	.760	.742	***
Q90_3SP ← Social Presence	1.000	.866	-----
Q90_4SP ← Social Presence	.856	.767	***
Q72 ← Snapchat Intensity	1.000	.779	-----
Q73 ← Snapchat Intensity	.953	.860	***
Q74 ← Snapchat Intensity	1.097	.815	***
Q75 ← Snapchat Intensity	1.148	.881	***
Q76 ← Snapchat Intensity	1.000	.841	***
Q77 ← Snapchat Intensity	.935	.714	***
Q85_SelfdisclosureONLINE ← Hyperpersonal(Honesty)	1.000	.522	----
Q85_2SD ← Hyperpersonal(Honesty)	.470	.286	***
Q85_3SD ← Hyperpersonal(Honesty)	.486	.335	***
Q85_4SDR ← Hyperpersonal(Honesty)	.465	.270	.002
Q87_9SDSNAPCHAT ← Hyperpersonal(Honesty)	.676	.446	***
Q87_1SDINSNAPCHAT ← Hyperpersonal(Intent)	.597	.402	***
Q87_2SDINSNAPCHAT ← Hyperpersonal(Intent)	.621	.428	***
Q88_1Self Presentation ← Hyperpersonal	1.417	.831	***
Q88_2Self Presentation ← Hyperpersonal	1.000	.687	----
Q88_3Self Presentation ← Hyperpersonal	1.020	.659	***
Q91_1SyncSubscale ← Ephemerality: Synchronicity	1.000	.843	-----
Q91_2SyncSubscale ← Ephemerality: Synchronicity	1.063	.852	***
Q91_3SyncSubscale ← Ephemerality: Synchronicity	.938	.804	***
Q91_4SyncSubscaleR ← Ephemerality: Synchronicity	-.201	-.214	.01
Q91_5SyncSubscale ← Ephemerality: Synchronicity	.614	.607	***
Q91_6SyncSubscale ← Ephemerality: Synchronicity	.905	.745	***
Q91_7SyncSubscale ← Ephemerality: Synchronicity	.431	.418	***
Q91_8SyncSubscale ← Ephemerality: Synchronicity	.706	.599	***
Q91_14SyncSubscale ← Ephemerality: Synchronicity	.821	.624	***
Structural Model			
Ephemerality: Synchronicity ← Ephemerality: Self -Destructing Messages	.357	.427	***
Ephemerality: Synchronicity ← Social Presence	.545	.652	***
Ephemerality: Synchronicity ← Snapchat Intensity	-.160	-.191	.003
Hyperpersonal ← Snapchat Intensity	.203	.339	***
Hyperpersonal ← Social Presence	.117	.195	.319
Hyperpersonal ← Ephemerality: Self -Destructing Messages	-.065	-.109	.449
Hyperpersonal ← Ephemerality: Synchronicity	.294	.410	.066
Note: $\chi^2(df = 509) = 672.56, p = .000$; RMSEA of .047, a NFI of .787, a CFI of .936, IFI of .938, TLI of .925			

AMOS OUTPUT

Group number 1 (Group number 1)

Notes for Group (Group number 1)

The model is recursive.
Sample size = 148

Variable Summary (Group number 1)

Your model contains the following variables (Group number 1)

Observed, endogenous variables

Q89_SDM1
Q89_SDM3
Q89_SDM5
Q89_SDM6
Q89_SDM8
Q89_SDM10
Q91_5SyncAsynch
Q87_9SDSNAPCHAT
Q85_4SDRecode
Q91_7SyncAsynch
Q91_6SyncAsynch
Q91_4SyncRecode
Q91_3SyncAsynch
Q91_2SyncAsynch
Q91_1SyncAsynchScale
Q85_3SD
Q85_2SD
Q85_1SelfdisclosureONLINE
Q72Snapchatintensity
Q73
Q74
Q75
Q76
Q77
Q90_1SP
Q90_2SP
Q90_3SP
Q90_4SP

Q88_3WALTHERONLINEPRESNTATION
Q88_2WALTHERONLINEPRESNTATION
Q88_1WALTHERONLINEPRESENTATION
Q87_1SDINSNAPCHAT
Q87_2SDSNAPCHAT
Q91_8SyncAsynch
Q91_14SyncAsynch
Unobserved, endogenous variables
EphemeralitySynchronicity
Hyperpersonal
Unobserved, exogenous variables
e77
e79
EphemeralitySelfDestructingMessages
e81
e82
e86
e28
e39
e38
e37
e36
e35
e33
e34
e32
e25
e27
e26
e89
Snapchatintensity
e91
e92
e93
e94
e95
e96
e84
SocialPresence
e97
e98
e99
e100
e90
e23
e22

e24
e101
e102
e103
e104

Variable counts (Group number 1)

Number of variables in your model: 77
Number of observed variables: 35
Number of unobserved variables: 42
Number of exogenous variables: 40
Number of endogenous variables: 37

Parameter Summary (Group number 1)

	Weights	Covariances	Variances	Means	Intercepts	Total
Fixed	43	0	3	0	0	46
Labeled	0	0	0	0	0	0
Unlabeled	36	48	37	0	0	121
Total	79	48	40	0	0	167

Models

Default model (Default model)

Notes for Model (Default model)

Computation of degrees of freedom (Default model)

Number of distinct sample moments: 630
Number of distinct parameters to be estimated: 121
Degrees of freedom (630 - 121): 509

Result (Default model)

Minimum was achieved
Chi-square = 672.569
Degrees of freedom = 509
Probability level = .000

Group number 1 (Group number 1 - Default model)

Estimates (Group number 1 - Default model)

Scalar Estimates (Group number 1 - Default model)

Maximum Likelihood Estimates

Regression Weights: (Group number 1 - Default model)

			Estimate	S.E.	C.R.	P	Label
EphemeralitySynchronicity	<-- -	EphemeralitySelfDestructingMes sages	.357	.08 2	4.369	***	par_2 1
EphemeralitySynchronicity	<-- -	SocialPresence	.545	.09 0	6.047	***	par_2 3
EphemeralitySynchronicity	<-- -	Snapchatintensity	-.160	.05 4	- 2.964	.00 3	par_3 7
Hyperpersonal	<-- -	Snapchatintensity	.203	.05 9	3.427	***	par_2 0
Hyperpersonal	<-- -	SocialPresence	.117	.11 7	.996	.31 9	par_2 6
Hyperpersonal	<-- -	EphemeralitySynchronicity	.294	.16 0	1.838	.06 6	par_8 3
Hyperpersonal	<-- -	EphemeralitySelfDestructingMes sages	-.065	.09 6	-.676	.49 9	par_8 4
Q89_SDM5	<-- -	EphemeralitySelfDestructingMes sages	1.000				
Q89_SDM6	<-- -	EphemeralitySelfDestructingMes sages	.890	.06 6	13.58 3	***	par_1
Q89_SDM8	<-- -	EphemeralitySelfDestructingMes sages	.834	.07 2	11.55 6	***	par_2
Q91_5SyncAsynch	<-- -	EphemeralitySynchronicity	.614	.07 6	8.056	***	par_3
Q87_9SDSNAPCHAT	<-- -	Hyperpersonal	.676	.12 8	5.287	***	par_4
Q91_3SyncAsynch	<-- -	EphemeralitySynchronicity	.938	.07 9	11.88 5	***	par_5
Q91_2SyncAsynch	<-- -	EphemeralitySynchronicity	1.063	.08 3	12.87 1	***	par_6
Q85_4SDRecode	<-- -	Hyperpersonal	.465	.14 9	3.118	.00 2	par_7
Q85_3SD	<-- -	Hyperpersonal	.486	.11 2	4.322	***	par_8
Q85_2SD	<-- -	Hyperpersonal	.470	.11 7	4.018	***	par_9
Q85_1SelfdisclosureONLINE	<-- -	Hyperpersonal	1.000				
Q89_SDM1	<-- -	EphemeralitySelfDestructingMes sages	.547	.06 5	8.478	***	par_1 0
Q89_SDM10	<-- -	EphemeralitySelfDestructingMes sages	.803	.07 0	11.39 7	***	par_1 1
Q72Snapchatintensity	<-- -	Snapchatintensity	1.000				
Q73	<-- -	Snapchatintensity	.953	.06 5	14.65 0	***	par_1 2
Q74	<-- -	Snapchatintensity	1.097	.05 7	19.18 5	***	par_1 3
Q75	<-- -	Snapchatintensity	1.148	.07 5	15.38 7	***	par_1 4
Q76	<-- -	Snapchatintensity	1.000	.06 8	14.65 2	***	par_1 5
Q77	<-- -	Snapchatintensity	.935	.08 4	11.07 2	***	par_1 6
Q90_1SP	<-- -	SocialPresence	.975	.06 7	14.66 0	***	par_1 7

			Estimate	S.E.	C.R.	P	Label
Q90_2SP	<-- -	SocialPresence	.760	.067	11.264	***	par_18
Q90_3SP	<-- -	SocialPresence	1.000				
Q90_4SP	<-- -	SocialPresence	.856	.051	16.826	***	par_19
Q88_3WALTHERONLINEPRESENTATION	<-- -	Hyperpersonal	1.020	.080	12.684	***	par_22
Q89_SDM3	<-- -	EphemeralitySelfDestructingMessages	.688	.077	8.931	***	par_24
Q91_1SyncAsynchScale	<-- -	EphemeralitySynchronicity	1.000				
Q88_1WALTHERONLINEPRESENTATION	<-- -	Hyperpersonal	1.417	.153	9.279	***	par_25
Q88_2WALTHERONLINEPRESENTATION	<-- -	Hyperpersonal	1.000				
Q91_7SyncAsynch	<-- -	EphemeralitySynchronicity	.431	.083	5.225	***	par_30
Q91_6SyncAsynch	<-- -	EphemeralitySynchronicity	.905	.085	10.603	***	par_31
Q91_4SyncRecode	<-- -	EphemeralitySynchronicity	-.201	.079	-2.550	.011	par_32
Q87_1SDINSNAPCHAT	<-- -	Hyperpersonal	.597	.130	4.583	***	par_33
Q87_2SDSNAPCHAT	<-- -	Hyperpersonal	.621	.131	4.721	***	par_34
Q91_8SyncAsynch	<-- -	EphemeralitySynchronicity	.706	.088	8.059	***	par_35
Q91_14SyncAsynch	<-- -	EphemeralitySynchronicity	.821	.101	8.123	***	par_36

Standardized Regression Weights: (Group number 1 - Default model)

		Estimate
EphemeralitySynchronicity	<--- EphemeralitySelfDestructingMessages	.427
EphemeralitySynchronicity	<--- SocialPresence	.652
EphemeralitySynchronicity	<--- Snapchatintensity	-.191
Hyperpersonal	<--- Snapchatintensity	.339
Hyperpersonal	<--- SocialPresence	.195
Hyperpersonal	<--- EphemeralitySynchronicity	.410
Hyperpersonal	<--- EphemeralitySelfDestructingMessages	-.109
Q89_SDM5	<--- EphemeralitySelfDestructingMessages	.798
Q89_SDM6	<--- EphemeralitySelfDestructingMessages	.765
Q89_SDM8	<--- EphemeralitySelfDestructingMessages	.743
Q91_5SyncAsynch	<--- EphemeralitySynchronicity	.607
Q87_9SDSNAPCHAT	<--- Hyperpersonal	.446
Q91_3SyncAsynch	<--- EphemeralitySynchronicity	.800
Q91_2SyncAsynch	<--- EphemeralitySynchronicity	.849
Q85_4SDRecode	<--- Hyperpersonal	.270
Q85_3SD	<--- Hyperpersonal	.335
Q85_2SD	<--- Hyperpersonal	.286
Q85_1SelfdisclosureONLINE	<--- Hyperpersonal	.522

		Estimate
Q89_SDM1	<--- EphemeralitySelfDestructingMessages	.613
Q89_SDM10	<--- EphemeralitySelfDestructingMessages	.748
Q72Snapchatintensity	<--- Snapchatintensity	.779
Q73	<--- Snapchatintensity	.860
Q74	<--- Snapchatintensity	.815
Q75	<--- Snapchatintensity	.881
Q76	<--- Snapchatintensity	.841
Q77	<--- Snapchatintensity	.714
Q90_1SP	<--- SocialPresence	.845
Q90_2SP	<--- SocialPresence	.742
Q90_3SP	<--- SocialPresence	.866
Q90_4SP	<--- SocialPresence	.767
Q88_3WALTHERONLINEPRESNTATION	<--- Hyperpersonal	.659
Q89_SDM3	<--- EphemeralitySelfDestructingMessages	.636
Q91_1SyncAsynchScale	<--- EphemeralitySynchronicity	.843
Q88_1WALTHERONLINEPRESENTATION	<--- Hyperpersonal	.831
Q88_2WALTHERONLINEPRESENTATION	<--- Hyperpersonal	.687
Q91_7SyncAsynch	<--- EphemeralitySynchronicity	.418
Q91_6SyncAsynch	<--- EphemeralitySynchronicity	.745
Q91_4SyncRecode	<--- EphemeralitySynchronicity	-.214
Q87_1SDINSNAPCHAT	<--- Hyperpersonal	.402
Q87_2SDSNAPCHAT	<--- Hyperpersonal	.428
Q91_8SyncAsynch	<--- EphemeralitySynchronicity	.599
Q91_14SyncAsynch	<--- EphemeralitySynchronicity	.624

Covariances: (Group number 1 - Default model)

		Estimate	S.E.	C.R.	P	Label
EphemeralitySelfDestructingMessages	<--> SocialPresence	.768	.045	17.186	***	par_27
EphemeralitySelfDestructingMessages	<--> Snapchatintensity	.532	.062	8.606	***	par_28
Snapchatintensity	<--> SocialPresence	.569	.060	9.457	***	par_29
e101	<--> e102	.404	.066	6.073	***	par_38
e23	<--> e24	.287	.050	5.806	***	par_39
e99	<--> e100	.241	.052	4.641	***	par_40
e97	<--> e98	.145	.047	3.064	.002	par_41
e91	<--> e93	.363	.065	5.625	***	par_42
e25	<--> e26	.603	.094	6.449	***	par_43
e27	<--> e26	.360	.064	5.637	***	par_44
e25	<--> e27	.358	.069	5.158	***	par_45
e28	<--> e27	.217	.058	3.736	***	par_46
e32	<--> e27	.192	.046	4.131	***	par_47
e103	<--> e104	.279	.055	5.066	***	par_48
e104	<--> Snapchatintensity	.203	.055	3.728	***	par_49
e25	<--> e89	-.155	.044	-3.528	***	par_50
e79	<--> e86	-.203	.052	-3.907	***	par_51
e81	<--> e82	.154	.056	2.730	.006	par_52
e93	<--> e84	-.119	.041	-2.912	.004	par_53
e28	<--> e32	.230	.066	3.477	***	par_54
e38	<--> e34	-.144	.037	-3.900	***	par_55
e27	<--> e96	.182	.052	3.510	***	par_56
e100	<--> e103	-.122	.032	-3.756	***	par_57
e94	<--> e89	-.118	.028	-4.242	***	par_58
e77	<--> e89	.123	.028	4.478	***	par_59

			Estimate	S.E.	C.R.	P	Label
e79	<-->	e22	.199	.049	4.034	***	par_60
e92	<-->	e94	-.211	.042	-5.079	***	par_61
e98	<-->	e100	.120	.032	3.716	***	par_62
e28	<-->	e97	.132	.049	2.688	.007	par_63
e92	<-->	e103	.119	.036	3.285	.001	par_64
e39	<-->	e103	.173	.042	4.129	***	par_65
e39	<-->	e37	.158	.042	3.786	***	par_66
e82	<-->	e39	.167	.044	3.818	***	par_67
e84	<-->	e104	.171	.049	3.502	***	par_68
e32	<-->	e99	.108	.031	3.445	***	par_69
e84	<-->	e89	.111	.028	3.903	***	par_70
e77	<-->	e33	-.096	.033	-2.909	.004	par_71
e79	<-->	e35	-.117	.042	-2.803	.005	par_72
e26	<-->	e99	-.087	.028	-3.083	.002	par_73
e38	<-->	e95	-.104	.039	-2.640	.008	par_74
e94	<-->	e24	.089	.030	2.941	.003	par_75
e82	<-->	e24	.106	.031	3.430	***	par_76
e98	<-->	e103	-.084	.034	-2.441	.015	par_77
e32	<-->	e98	.118	.039	3.045	.002	par_78
e79	<-->	e98	-.108	.039	-2.760	.006	par_79
e22	<-->	e102	-.117	.036	-3.228	.001	par_80
e86	<-->	e24	.079	.032	2.474	.013	par_81
e77	<-->	e24	.071	.029	2.475	.013	par_82

Correlations: (Group number 1 - Default model)

			Estimate
EphemeralitySelfDestructingMessages	<-->	SocialPresence	.768
EphemeralitySelfDestructingMessages	<-->	Snapchatintensity	.532
Snapchatintensity	<-->	SocialPresence	.569
e101	<-->	e102	.633
e23	<-->	e24	.651
e99	<-->	e100	.582
e97	<-->	e98	.343
e91	<-->	e93	.578
e25	<-->	e26	.570
e27	<-->	e26	.468
e25	<-->	e27	.389
e28	<-->	e27	.267
e32	<-->	e27	.289
e103	<-->	e104	.398
e104	<-->	Snapchatintensity	.228
e25	<-->	e89	-.331
e79	<-->	e86	-.342
e81	<-->	e82	.271
e93	<-->	e84	-.204
e28	<-->	e32	.285
e38	<-->	e34	-.384
e27	<-->	e96	.243
e100	<-->	e103	-.215

			Estimate
e94	<-->	e89	-.460
e77	<-->	e89	.419
e79	<-->	e22	.420
e92	<-->	e94	-.605
e98	<-->	e100	.243
e28	<-->	e97	.216
e92	<-->	e103	.267
e39	<-->	e103	.279
e39	<-->	e37	.302
e82	<-->	e39	.284
e84	<-->	e104	.257
e32	<-->	e99	.230
e84	<-->	e89	.354
e77	<-->	e33	-.255
e79	<-->	e35	-.239
e26	<-->	e99	-.161
e38	<-->	e95	-.239
e94	<-->	e24	.207
e82	<-->	e24	.203
e98	<-->	e103	-.155
e32	<-->	e98	.212
e79	<-->	e98	-.188
e22	<-->	e102	-.262
e86	<-->	e24	.159
e77	<-->	e24	.145

Variances: (Group number 1 - Default model)

	Estimate	S.E.	C.R.	P	Label
EphemeralitySelfDestructingMessages	1.000				
Snapchatintensity	1.000				
SocialPresence	1.000				
e90	.109	.030	3.666	***	par_85
e89	.173	.038	4.519	***	par_86
e77	.498	.061	8.141	***	par_87
e79	.697	.087	7.986	***	par_88
e81	.571	.078	7.276	***	par_89
e82	.563	.074	7.571	***	par_90
e86	.506	.069	7.346	***	par_91
e28	.986	.115	8.543	***	par_92
e39	.613	.070	8.723	***	par_93
e38	.457	.060	7.594	***	par_94
e37	.449	.054	8.259	***	par_95
e36	.589	.069	8.548	***	par_96
e35	.345	.046	7.563	***	par_97
e33	.285	.040	7.187	***	par_98
e34	.305	.045	6.714	***	par_99
e32	.659	.077	8.503	***	par_100
e25	1.266	.147	8.593	***	par_101
e27	.669	.075	8.945	***	par_102
e26	.886	.103	8.623	***	par_103
e91	.649	.081	8.052	***	par_104
e92	.320	.054	5.920	***	par_105

	Estimate	S.E.	C.R.	P	Label
e93	.609	.076	7.973	***	par_106
e94	.381	.069	5.489	***	par_107
e95	.413	.055	7.567	***	par_108
e96	.840	.102	8.264	***	par_109
e84	.562	.073	7.670	***	par_110
e97	.379	.062	6.139	***	par_111
e98	.472	.063	7.438	***	par_112
e99	.334	.056	5.977	***	par_113
e100	.514	.070	7.368	***	par_114
e23	.401	.053	7.511	***	par_115
e22	.324	.064	5.078	***	par_116
e24	.486	.062	7.820	***	par_117
e101	.661	.079	8.334	***	par_118
e102	.616	.076	8.066	***	par_119
e103	.623	.071	8.751	***	par_120
e104	.793	.093	8.541	***	par_121

Squared Multiple Correlations: (Group number 1 - Default model)

	Estimate
EphemeralitySynchronicity	.844
Hyperpersonal	.516
Q91_14SyncAsynch	.345
Q91_8SyncAsynch	.358
Q87_2SDSNAPCHAT	.183
Q87_1SDINSNAPCHAT	.162
Q88_1WALThERONLINEPRESENTATION	.690
Q88_2WALThERONLINEPRESNTATION	.472
Q88_3WALThERONLINEPRESNTATION	.434
Q90_4SP	.588
Q90_3SP	.750
Q90_2SP	.550
Q90_1SP	.715
Q77	.510
Q76	.708
Q75	.776
Q74	.664
Q73	.739
Q72Snapchatintensity	.607
Q85_1SelfdisclosureONLINE	.037
Q85_2SD	.082
Q85_3SD	.112
Q91_1SyncAsynchScale	.710
Q91_2SyncAsynch	.721
Q91_3SyncAsynch	.640
Q91_4SyncRecode	.046
Q91_6SyncAsynch	.555
Q91_7SyncAsynch	.175

	Estimate
Q85_4SDRecode	.073
Q87_9SDSNAPCHAT	.199
Q91_5SyncAsynch	.369
Q89_SDM10	.560
Q89_SDM8	.553
Q89_SDM6	.585
Q89_SDM5	.637
Q89_SDM3	.405
Q89_SDM1	.375

Total Effects (Group number 1 - Default model)

	SocialPre sence	Snapchatint ensity	EphemeralitySelfDestruct ingMessages	EphemeralitySync hronicity	Hyperper sonal
EphemeralitySynchronicity	.545	-.160	.357	.000	.000
Hyperpersonal	.277	.156	.040	.294	.000
Q91_14SyncAsynch	.447	-.131	.293	.821	.000
Q91_8SyncAsynch	.385	-.113	.252	.706	.000
Q87_2SDSNAPCHAT	.172	.097	.025	.182	.621
Q87_1SDINSNAPCHAT	.165	.093	.024	.175	.597
Q88_1WALTHERONLINEPR ESENTATION	.393	.221	.057	.417	1.417
Q88_2WALTHERONLINEPR ESNTATION	.277	.156	.040	.294	1.000
Q88_3WALTHERONLINEPR ESNTATION	.283	.159	.041	.300	1.020
Q90_4SP	.856	.000	.000	.000	.000
Q90_3SP	1.000	.000	.000	.000	.000
Q90_2SP	.760	.000	.000	.000	.000
Q90_1SP	.975	.000	.000	.000	.000
Q77	.000	.935	.000	.000	.000
Q76	.000	1.000	.000	.000	.000
Q75	.000	1.148	.000	.000	.000
Q74	.000	1.097	.000	.000	.000
Q73	.000	.953	.000	.000	.000
Q72Snapchatintensity	.000	1.000	.000	.000	.000
Q85_1SelfdisclosureONLINE	.277	.156	.040	.294	1.000
Q85_2SD	.130	.073	.019	.138	.470
Q85_3SD	.135	.076	.019	.143	.486
Q91_1SyncAsynchScale	.545	-.160	.357	1.000	.000
Q91_2SyncAsynch	.579	-.170	.379	1.063	.000
Q91_3SyncAsynch	.511	-.150	.335	.938	.000
Q91_4SyncRecode	-.110	.032	-.072	-.201	.000
Q91_6SyncAsynch	.493	-.144	.323	.905	.000
Q91_7SyncAsynch	.235	-.069	.154	.431	.000
Q85_4SDRecode	.129	.073	.019	.137	.465
Q87_9SDSNAPCHAT	.187	.105	.027	.199	.676
Q91_5SyncAsynch	.334	-.098	.219	.614	.000
Q89_SDM10	.000	.000	.803	.000	.000
Q89_SDM8	.000	.000	.834	.000	.000
Q89_SDM6	.000	.000	.890	.000	.000
Q89_SDM5	.000	.000	1.000	.000	.000
Q89_SDM3	.000	.000	.688	.000	.000
Q89_SDM1	.000	.000	.547	.000	.000

Standardized Total Effects (Group number 1 - Default model)

	SocialPre sence	Snapchatint ensity	EphemeralitySelfDestruct ingMessages	EphemeralitySync hronicity	Hyperper sonal
EphemeralitySynchronicity	.652	-.191	.427	.000	.000
Hyperpersonal	.463	.260	.067	.410	.000
Q91_14SyncAsynch	.407	-.119	.266	.624	.000
Q91_8SyncAsynch	.390	-.114	.256	.599	.000
Q87_2SDSNAPCHAT	.198	.111	.029	.175	.428
Q87_1SDINSNAPCHAT	.186	.105	.027	.165	.402
Q88_1WALTHERONLINEPR ESNTATION	.385	.216	.055	.341	.831
Q88_2WALTHERONLINEPR ESNTATION	.318	.179	.046	.282	.687
Q88_3WALTHERONLINEPR ESNTATION	.305	.172	.044	.270	.659
Q90_4SP	.767	.000	.000	.000	.000
Q90_3SP	.866	.000	.000	.000	.000
Q90_2SP	.742	.000	.000	.000	.000
Q90_1SP	.845	.000	.000	.000	.000
Q77	.000	.714	.000	.000	.000
Q76	.000	.841	.000	.000	.000
Q75	.000	.881	.000	.000	.000
Q74	.000	.815	.000	.000	.000
Q73	.000	.860	.000	.000	.000
Q72Snapchatintensity	.000	.779	.000	.000	.000
Q85_1SelfdisclosureONLINE	.242	.136	.035	.214	.522
Q85_2SD	.132	.075	.019	.117	.286
Q85_3SD	.155	.087	.022	.137	.335
Q91_1SyncAsynchScale	.550	-.161	.360	.843	.000
Q91_2SyncAsynch	.554	-.162	.363	.849	.000
Q91_3SyncAsynch	.522	-.153	.342	.800	.000
Q91_4SyncRecode	-.140	.041	-.091	-.214	.000
Q91_6SyncAsynch	.486	-.142	.318	.745	.000
Q91_7SyncAsynch	.273	-.080	.179	.418	.000
Q85_4SDRecode	.125	.070	.018	.111	.270
Q87_9SDSNAPCHAT	.206	.116	.030	.183	.446
Q91_5SyncAsynch	.396	-.116	.260	.607	.000
Q89_SDM10	.000	.000	.748	.000	.000
Q89_SDM8	.000	.000	.743	.000	.000
Q89_SDM6	.000	.000	.765	.000	.000
Q89_SDM5	.000	.000	.798	.000	.000
Q89_SDM3	.000	.000	.636	.000	.000
Q89_SDM1	.000	.000	.613	.000	.000

Direct Effects (Group number 1 - Default model)

	SocialPre sence	Snapchatint ensity	EphemeralitySelfDestruct ingMessages	EphemeralitySync hronicity	Hyperper sonal
EphemeralitySynchronicity	.545	-.160	.357	.000	.000
Hyperpersonal	.117	.203	-.065	.294	.000
Q91_14SyncAsynch	.000	.000	.000	.821	.000
Q91_8SyncAsynch	.000	.000	.000	.706	.000
Q87_2SDSNAPCHAT	.000	.000	.000	.000	.621
Q87_1SDINSNAPCHAT	.000	.000	.000	.000	.597
Q88_1WALTHERONLINEPR ESNTATION	.000	.000	.000	.000	1.417

	SocialPre sence	Snapchatint ensity	EphemeralitySelfDestruct ingMessages	EphemeralitySync hronicity	Hyperper sonal
Q88_2WALTHERONLINEPR ESNTATION	.000	.000	.000	.000	1.000
Q88_3WALTHERONLINEPR ESNTATION	.000	.000	.000	.000	1.020
Q90_4SP	.856	.000	.000	.000	.000
Q90_3SP	1.000	.000	.000	.000	.000
Q90_2SP	.760	.000	.000	.000	.000
Q90_1SP	.975	.000	.000	.000	.000
Q77	.000	.935	.000	.000	.000
Q76	.000	1.000	.000	.000	.000
Q75	.000	1.148	.000	.000	.000
Q74	.000	1.097	.000	.000	.000
Q73	.000	.953	.000	.000	.000
Q72Snapchatintensity	.000	1.000	.000	.000	.000
Q85_1SelfdisclosureONLINE	.000	.000	.000	.000	1.000
Q85_2SD	.000	.000	.000	.000	.470
Q85_3SD	.000	.000	.000	.000	.486
Q91_1SyncAsynchScale	.000	.000	.000	1.000	.000
Q91_2SyncAsynch	.000	.000	.000	1.063	.000
Q91_3SyncAsynch	.000	.000	.000	.938	.000
Q91_4SyncRecode	.000	.000	.000	-.201	.000
Q91_6SyncAsynch	.000	.000	.000	.905	.000
Q91_7SyncAsynch	.000	.000	.000	.431	.000
Q85_4SDRecode	.000	.000	.000	.000	.465
Q87_9SDSNAPCHAT	.000	.000	.000	.000	.676
Q91_5SyncAsynch	.000	.000	.000	.614	.000
Q89_SDM10	.000	.000	.803	.000	.000
Q89_SDM8	.000	.000	.834	.000	.000
Q89_SDM6	.000	.000	.890	.000	.000
Q89_SDM5	.000	.000	1.000	.000	.000
Q89_SDM3	.000	.000	.688	.000	.000
Q89_SDM1	.000	.000	.547	.000	.000

Standardized Direct Effects (Group number 1 - Default model)

	SocialPr esence	Snapchati ntensity	EphemeralitySelfDestr uctingMessages	EphemeralitySy nchronicity	Hyperpe rsonal
EphemeralitySynchronicity	.652	-.191	.427	.000	.000
Hyperpersonal	.195	.339	-.109	.410	.000
Q91_14SyncAsynch	.000	.000	.000	.624	.000
Q91_8SyncAsynch	.000	.000	.000	.599	.000
Q87_2SDSNAPCHAT	.000	.000	.000	.000	.428
Q87_1SDINSNAPCHAT	.000	.000	.000	.000	.402
Q88_1WALTHERONLIN EPRESENTATION	.000	.000	.000	.000	.831
Q88_2WALTHERONLIN EPRESNTATION	.000	.000	.000	.000	.687
Q88_3WALTHERONLIN EPRESNTATION	.000	.000	.000	.000	.659
Q90_4SP	.767	.000	.000	.000	.000
Q90_3SP	.866	.000	.000	.000	.000
Q90_2SP	.742	.000	.000	.000	.000
Q90_1SP	.845	.000	.000	.000	.000
Q77	.000	.714	.000	.000	.000
Q76	.000	.841	.000	.000	.000
Q75	.000	.881	.000	.000	.000

	SocialPr esence	Snapchati ntensity	EphemeralitySelfDestr uctingMessages	EphemeralitySy nchronicity	Hyperpe rsonal
Q74	.000	.815	.000	.000	.000
Q73	.000	.860	.000	.000	.000
Q72Snapchatintensity	.000	.779	.000	.000	.000
Q85_1SelfdisclosureONLI NE	.000	.000	.000	.000	.522
Q85_2SD	.000	.000	.000	.000	.286
Q85_3SD	.000	.000	.000	.000	.335
Q91_1SyncAsynchScale	.000	.000	.000	.843	.000
Q91_2SyncAsynch	.000	.000	.000	.849	.000
Q91_3SyncAsynch	.000	.000	.000	.800	.000
Q91_4SyncRecode	.000	.000	.000	-.214	.000
Q91_6SyncAsynch	.000	.000	.000	.745	.000
Q91_7SyncAsynch	.000	.000	.000	.418	.000
Q85_4SDRecode	.000	.000	.000	.000	.270
Q87_9SDSNAPCHAT	.000	.000	.000	.000	.446
Q91_5SyncAsynch	.000	.000	.000	.607	.000
Q89_SDM10	.000	.000	.748	.000	.000
Q89_SDM8	.000	.000	.743	.000	.000
Q89_SDM6	.000	.000	.765	.000	.000
Q89_SDM5	.000	.000	.798	.000	.000
Q89_SDM3	.000	.000	.636	.000	.000
Q89_SDM1	.000	.000	.613	.000	.000

Indirect Effects (Group number 1 - Default model)

	SocialPr esence	Snapchati ntensity	EphemeralitySelfDestr uctingMessages	EphemeralitySy nchronicity	Hyperpe rsonal
EphemeralitySynchronicity	.000	.000	.000	.000	.000
Hyperpersonal	.160	-.047	.105	.000	.000
Q91_14SyncAsynch	.447	-.131	.293	.000	.000
Q91_8SyncAsynch	.385	-.113	.252	.000	.000
Q87_2SDSNAPCHAT	.172	.097	.025	.182	.000
Q87_1SDINSNAPCHAT	.165	.093	.024	.175	.000
Q88_1WALTHERONLIN EPRESENTATION	.393	.221	.057	.417	.000
Q88_2WALTHERONLIN EPRESNTATION	.277	.156	.040	.294	.000
Q88_3WALTHERONLIN EPRESENTATION	.283	.159	.041	.300	.000
Q90_4SP	.000	.000	.000	.000	.000
Q90_3SP	.000	.000	.000	.000	.000
Q90_2SP	.000	.000	.000	.000	.000
Q90_1SP	.000	.000	.000	.000	.000
Q77	.000	.000	.000	.000	.000
Q76	.000	.000	.000	.000	.000
Q75	.000	.000	.000	.000	.000
Q74	.000	.000	.000	.000	.000
Q73	.000	.000	.000	.000	.000
Q72Snapchatintensity	.000	.000	.000	.000	.000
Q85_1SelfdisclosureONLI NE	.277	.156	.040	.294	.000
Q85_2SD	.130	.073	.019	.138	.000

	SocialPr esence	Snapchati ntensity	EphemeralitySelfDestr uctingMessages	EphemeralitySy nchronicity	Hyperpe rsonal
Q85_3SD	.135	.076	.019	.143	.000
Q91_1SyncAsynchScale	.545	-.160	.357	.000	.000
Q91_2SyncAsynch	.579	-.170	.379	.000	.000
Q91_3SyncAsynch	.511	-.150	.335	.000	.000
Q91_4SyncRecode	-.110	.032	-.072	.000	.000
Q91_6SyncAsynch	.493	-.144	.323	.000	.000
Q91_7SyncAsynch	.235	-.069	.154	.000	.000
Q85_4SDRecode	.129	.073	.019	.137	.000
Q87_9SDSNAPCHAT	.187	.105	.027	.199	.000
Q91_5SyncAsynch	.334	-.098	.219	.000	.000
Q89_SDM10	.000	.000	.000	.000	.000
Q89_SDM8	.000	.000	.000	.000	.000
Q89_SDM6	.000	.000	.000	.000	.000
Q89_SDM5	.000	.000	.000	.000	.000
Q89_SDM3	.000	.000	.000	.000	.000
Q89_SDM1	.000	.000	.000	.000	.000

Standardized Indirect Effects (Group number 1 - Default model)

	SocialPr esence	Snapchati ntensity	EphemeralitySelfDestr uctingMessages	EphemeralitySy nchronicity	Hyperpe rsonal
EphemeralitySynchronicity	.000	.000	.000	.000	.000
Hyperpersonal	.268	-.078	.175	.000	.000
Q91_14SyncAsynch	.407	-.119	.266	.000	.000
Q91_8SyncAsynch	.390	-.114	.256	.000	.000
Q87_2SDSNAPCHAT	.198	.111	.029	.175	.000
Q87_1SDINSNAPCHAT	.186	.105	.027	.165	.000
Q88_1WALTHERONLIN EPRESENTATION	.385	.216	.055	.341	.000
Q88_2WALTHERONLIN EPRESNTATION	.318	.179	.046	.282	.000
Q88_3WALTHERONLIN EPRESNTATION	.305	.172	.044	.270	.000
Q90_4SP	.000	.000	.000	.000	.000
Q90_3SP	.000	.000	.000	.000	.000
Q90_2SP	.000	.000	.000	.000	.000
Q90_1SP	.000	.000	.000	.000	.000
Q77	.000	.000	.000	.000	.000
Q76	.000	.000	.000	.000	.000
Q75	.000	.000	.000	.000	.000
Q74	.000	.000	.000	.000	.000
Q73	.000	.000	.000	.000	.000
Q72Snapchatintensity	.000	.000	.000	.000	.000
Q85_1SelfdisclosureONLI NE	.242	.136	.035	.214	.000
Q85_2SD	.132	.075	.019	.117	.000
Q85_3SD	.155	.087	.022	.137	.000
Q91_1SyncAsynchScale	.550	-.161	.360	.000	.000
Q91_2SyncAsynch	.554	-.162	.363	.000	.000
Q91_3SyncAsynch	.522	-.153	.342	.000	.000

	SocialPresence	SnapchatIntensity	EphemeralitySelfDestructingMessages	EphemeralitySynchronicity	Hyperpersonal
Q91_4SyncRecode	-.140	.041	-.091	.000	.000
Q91_6SyncAsynch	.486	-.142	.318	.000	.000
Q91_7SyncAsynch	.273	-.080	.179	.000	.000
Q85_4SDRecode	.125	.070	.018	.111	.000
Q87_9SDSNAPCHAT	.206	.116	.030	.183	.000
Q91_5SyncAsynch	.396	-.116	.260	.000	.000
Q89_SDM10	.000	.000	.000	.000	.000
Q89_SDM8	.000	.000	.000	.000	.000
Q89_SDM6	.000	.000	.000	.000	.000
Q89_SDM5	.000	.000	.000	.000	.000
Q89_SDM3	.000	.000	.000	.000	.000
Q89_SDM1	.000	.000	.000	.000	.000

Modification Indices (Group number 1 - Default model)

Covariances: (Group number 1 - Default model)

	M.I.	Par Change
e103 <--> e89	4.528	.042
e102 <--> e104	4.559	-.077
e101 <--> EphemeralitySelfDestructingMessages	4.833	.082
e94 <--> e103	4.354	.074
e92 <--> e22	4.323	.070
e91 <--> e99	5.178	-.055
e91 <--> e97	5.192	.071
e33 <--> SocialPresence	4.171	.069
e33 <--> EphemeralitySelfDestructingMessages	4.386	-.071
e34 <--> e89	4.002	-.038
e37 <--> e38	4.929	.080
e86 <--> e93	5.006	.084
e82 <--> e90	4.825	.056
e79 <--> e97	4.217	-.076

Regression Weights: (Group number 1 - Default model)

	M.I.	Par Change
Q90_3SP <--- Hyperpersonal	4.540	-.139
Q90_3SP <--- Q91_14SyncAsynch	4.995	-.075
Q90_3SP <--- Q91_8SyncAsynch	5.130	-.085
Q90_3SP <--- Q88_2WALTHERONLINEPRESNTATION	6.622	-.109
Q90_3SP <--- Q85_3SD	4.028	-.085
Q90_3SP <--- Q91_3SyncAsynch	4.612	-.081
Q77 <--- Q89_SDM3	4.248	.139

			M.I.	Par Change
Q75	<---	Q87_2SDSNAPCHAT	6.096	-.161
Q75	<---	Q87_1SDINSNAPCHAT	6.030	-.157
Q74	<---	Hyperpersonal	4.552	-.192
Q74	<---	Q88_1WALTHERONLINEPRESENTATION	4.912	-.110
Q72Snapchatintensity	<---	Hyperpersonal	5.159	.217
Q72Snapchatintensity	<---	Q87_2SDSNAPCHAT	4.161	.127
Q72Snapchatintensity	<---	Q87_1SDINSNAPCHAT	6.666	.157
Q85_3SD	<---	Q91_7SyncAsynch	4.363	.124
Q91_2SyncAsynch	<---	Q85_4SDRecode	6.736	-.125
Q91_2SyncAsynch	<---	Q87_9SDSNAPCHAT	5.388	-.127
Q91_7SyncAsynch	<---	Q85_2SD	4.242	.114
Q91_7SyncAsynch	<---	Q85_3SD	6.851	.164
Q85_4SDRecode	<---	Q85_2SD	4.441	.155
Q87_9SDSNAPCHAT	<---	Q87_2SDSNAPCHAT	4.654	.139
Q87_9SDSNAPCHAT	<---	Q87_1SDINSNAPCHAT	4.150	.129
Q87_9SDSNAPCHAT	<---	Q85_2SD	6.091	.141
Q91_5SyncAsynch	<---	Q87_9SDSNAPCHAT	4.291	-.121
Q89_SDM10	<---	Q77	4.389	-.098
Q89_SDM5	<---	Q91_8SyncAsynch	5.742	-.149
Q89_SDM5	<---	Q90_3SP	4.525	-.113
Q89_SDM5	<---	Q89_SDM8	5.890	-.132
Q89_SDM1	<---	Snapchatintensity	4.737	.118
Q89_SDM1	<---	Q77	4.895	.091
Q89_SDM1	<---	Q75	6.814	.107
Q89_SDM1	<---	Q85_2SD	4.156	-.111
Q89_SDM1	<---	Q85_3SD	4.774	-.135

Model Fit Summary

CMIN

Model	NPAR	CMIN	DF	P	CMIN/DF
Default model	121	672.569	509	.000	1.321
Saturated model	630	.000	0		
Independence model	35	3158.882	595	.000	5.309

RMR, GFI

Model	RMR	GFI	AGFI	PGFI
Default model	.192	.807	.761	.652
Saturated model	.000	1.000		
Independence model	.266	.275	.232	.259

Baseline Comparisons

Model	NFI	RFI	IFI	TLI	CFI
	Delta1	rho1	Delta2	rho2	
Default model	.787	.751	.938	.925	.936
Saturated model	1.000		1.000		1.000
Independence model	.000	.000	.000	.000	.000

Parsimony-Adjusted Measures

Model	PRATIO	PNFI	PCFI
Default model	.855	.673	.801
Saturated model	.000	.000	.000
Independence model	1.000	.000	.000

NCP

Model	NCP	LO 90	HI 90
Default model	163.569	100.325	234.908
Saturated model	.000	.000	.000
Independence model	2563.882	2391.561	2743.627

FMIN

Model	FMIN	F0	LO 90	HI 90
Default model	4.575	1.113	.682	1.598
Saturated model	.000	.000	.000	.000
Independence model	21.489	17.441	16.269	18.664

RMSEA

Model	RMSEA	LO 90	HI 90	PCLOSE
Default model	.047	.037	.056	.707
Independence model	.171	.165	.177	.000

AIC

Model	AIC	BCC	BIC	CAIC
Default model	914.569	993.055	1277.231	1398.231
Saturated model	1260.000	1668.649	3148.244	3778.244
Independence model	3228.882	3251.584	3333.784	3368.784

ECVI

Model	ECVI	LO 90	HI 90	MECVI
Default model	6.222	5.791	6.707	6.755
Saturated model	8.571	8.571	8.571	11.351
Independence model	21.965	20.793	23.188	22.120

HOELTER

Model	HOELTER .05	HOELTER .01
Default model	123	129
Independence model	31	32

APPENDIX G

Correlations

		COMPUTE Socialpresencescale=MEAN(Q90_1SP, Q90_2SP, Q90_3SP, Q90_4SP, Q90_5SP)	COMPUTE Snapchattimemstintensity=MEAN(Q72Snapchatintensity,Q73,Q74,Q75,Q76,Q77)	SDSEM	COMPUTE Real_Timesubscale=MEAN(Q91_1SynchAsynch, Q91_2SynchAsynch, Q91_3SynchAsynch, Q91_4SynchRecode, Q91_5SynchAsynch, Q91_6SynchAsynch, Q91_7SynchAsynch)	COMPUTE Engaging_subscale=MEAN(Q91_8SynchAsynch, Q91_9SynchAsynch, Q91_10SynchAsynch, Q91_11SynchAsynch, Q91_12SynchAsynch, Q91_13SynchAsynch, Q91_14SynchAsynch, Q91_15SynchRecode)	SDHONESTYSEM	COMPUTE SelfDisclosureonline_intentsubscale=MEAN(Q87_1SDSNAPCHAT, Q87_2SDSNAPCHAT)	COMPUTE WalthersSelfPresentationscale=MEAN(Q88_1WALTERONLINEPRESENTATION, Q88_2WALTERONLINEPRESENTATION, Q88_3WALTERONLINEPRESENTATION)	COMPUTE PositiveAttitudessubscale=MEAN(Q37positiveandnegativeattitudes,Q38,Q39,Q43,Q44,Q45)	COMPUTE Anxietyanddependence_subscale=MEAN(Q40,Q41,Q42)	COMPUTE NegativeAttitudes_subscale=MEAN(Q46,Q47,Q48)	gendercode		
COMPUTE Socialpresencescale=MEAN(Q90_1SP, Q90_2SP, Q90_3SP, Q90_4SP, Q90_5SP)	Pearson Correlation	1	.332**	.535**	.610**	.440**	.116	.178*	.454**	.000	.006	.266**	.296**	-.002	.045
	Sig. (2-tailed)		.000	.000	.000	.000	.157	.029	.000	.998	.944	.001	.000	.981	.587
	N	150	150	150	148	148	150	150	150	141	150	150	150	150	146
COMPUTE Snapchattimemstintensity=MEAN(Q72Snapchatintensity,Q73,Q74,Q75,Q76,Q77)	Pearson Correlation	.332**	1	.429**	.147	.374**	.037	.076	.532**	-.197*	-.109	.166*	.215**	-.044	.171*
	Sig. (2-tailed)	.000		.000	.075	.000	.639	.343	.000	.020	.166	.035	.006	.582	.039
	N	150	162	154	148	148	160	157	154	141	162	162	162	162	146
SDSEM	Pearson Correlation	.535**	.429**	1	.552**	.403**	.176*	.206*	.549**	-.051	-.033	.201*	.200*	-.086	.059
	Sig. (2-tailed)	.000	.000		.000	.000	.029	.010	.000	.551	.687	.013	.013	.287	.480
	N	150	154	154	148	148	154	154	154	141	154	154	154	154	146
COMPUTE Real_Timesubscale=MEAN(Q91_1SynchAsynch, Q91_2SynchAsynch, Q91_3SynchAsynch, Q91_4SynchRecode, Q91_5SynchAsynch, Q91_6SynchAsynch, Q91_7SynchAsynch)	Pearson Correlation	.610**	.147	.552**	1	.504**	.210*	.281**	.371**	-.062	-.070	.184*	.209*	-.052	.078
	Sig. (2-tailed)	.000	.075	.000		.000	.011	.001	.000	.467	.397	.025	.011	.530	.348
	N	148	148	148	148	148	148	148	148	141	148	148	148	148	146
COMPUTE Engaging_subscale=MEAN(Q91_8SynchAsynch, Q91_9SynchAsynch, Q91_10SynchAsynch, Q91_11SynchAsynch, Q91_12SynchAsynch, Q91_13SynchAsynch, Q91_14SynchAsynch, Q91_15SynchRecode)	Pearson Correlation	.440**	.374**	.403**	.504**	1	.170*	.277**	.452**	-.117	-.064	.148	.216**	.070	.206*
	Sig. (2-tailed)	.000	.000	.000	.000		.039	.001	.000	.165	.441	.073	.008	.396	.013
	N	148	148	148	148	148	148	148	148	141	148	148	148	148	146
SDHONESTYSEM	Pearson Correlation	.116	.037	.176*	.210*	.170*	1	.403**	.282**	-.097	-.097	.185*	.093	-.116	.081
	Sig. (2-tailed)	.157	.639	.029	.011	.039		.000	.000	.254	.224	.019	.240	.144	.330
	N	150	160	154	148	148	160	157	154	141	160	160	160	160	146
COMPUTE SelfDisclosureonline_intentsubscale=MEAN(Q87_1SDSNAPCHAT, Q87_2SDSNAPCHAT)	Pearson Correlation	.178*	.076	.206*	.281**	.277**	.403**	1	.264**	.040	.069	.131	.170*	.109	.126
	Sig. (2-tailed)	.029	.343	.010	.001	.001	.000		.001	.639	.392	.101	.033	.176	.129
	N	150	157	154	148	148	157	157	154	141	157	157	157	157	146
COMPUTE WalthersSelfPresentationscale=MEAN(Q88_1WALTERONLINEPRESENTATION, Q88_2WALTERONLINEPRESENTATION, Q88_3WALTERONLINEPRESENTATION)	Pearson Correlation	.454**	.532**	.549**	.371**	.452**	.282**	.264**	1	-.276**	-.255**	.172*	.213**	-.079	.147
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.001		.001	.001	.033	.008	.329	.077
	N	150	154	154	148	148	154	154	154	141	154	154	154	154	146
Q94What is your age?	Pearson Correlation	.000	-.197*	-.051	-.062	-.117	-.097	.040	-.276**	1	.572**	-.013	.150*	.299**	-.089
	Sig. (2-tailed)	.998	.020	.551	.467	.165	.254	.639	.001		.000	.864	.048	.000	.245
	N	141	141	141	141	141	141	141	141	174	174	174	174	174	173
MiddleEastern_Dummy	Pearson Correlation	.006	-.109	-.033	-.070	-.064	-.097	.069	-.255**	.572**	1	.140	.208**	.253**	-.041
	Sig. (2-tailed)	.944	.166	.687	.397	.441	.224	.392	.001	.000		.051	.003	.000	.586
	N	150	162	154	148	148	160	157	154	174	195	195	195	195	179
COMPUTE PositiveAttitudessubscale=MEAN(Q37positiveandnegativeattitudes,Q38,Q39,Q43,Q44,Q45)	Pearson Correlation	.266**	.166*	.201*	.184*	.148	.185*	.131	.172*	-.013	.140	1	.515**	-.062	.049
	Sig. (2-tailed)	.001	.035	.013	.025	.073	.019	.101	.033	.864	.051		.000	.393	.513
	N	150	162	154	148	148	160	157	154	174	195	195	195	195	179
COMPUTE Anxietyanddependence_subscale=MEAN(Q40,Q41,Q42)	Pearson Correlation	.298**	.215**	.200*	.209*	.216**	.093	.170*	.213**	.150*	.208**	.515**	1	.019	.145
	Sig. (2-tailed)	.000	.006	.013	.011	.008	.240	.033	.008	.048	.003	.000		.793	.052
	N	150	162	154	148	148	160	157	154	174	195	195	195	195	179
COMPUTE NegativeAttitudes_subscale=MEAN(Q46,Q47,Q48)	Pearson Correlation	-.002	-.044	-.086	-.052	.070	-.116	.109	-.079	.299**	.253**	-.062	.019	1	-.006
	Sig. (2-tailed)	.981	.582	.287	.530	.396	.144	.176	.329	.000	.000	.393	.793		.937
	N	150	162	154	148	148	160	157	154	174	195	195	195	195	179
gendercode	Pearson Correlation	.045	.171*	.059	.078	.206*	.081	.126	.147	-.089	-.041	.049	.145	-.006	1
	Sig. (2-tailed)	.587	.039	.480	.348	.013	.330	.129	.077	.245	.586	.513	.052	.937	
	N	146	146	146	146	146	146	146	146	173	179	179	179	179	179

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).