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Uses and Gratifications of Digital Photo Sharing on Facebook

ABSTRACT

Despite the rapid adoption of Facebook as a means of photo sharing, minimal research has been conducted to understand user gratification behind this activity. In order to address this gap, the current study examines users' gratifications in sharing photos on Facebook by applying Uses and Gratification (U&G) theory. An online survey completed by 368 respondents identified six different gratifications, namely, affection, attention seeking, disclosure, habit, information sharing, and social influence, behind sharing digital photos on Facebook. Some of the study's prominent findings were: age was in positive correlation with disclosure and social influence gratifications; gender differences were identified among habit and disclosure gratifications; number of photos shared was negatively correlated with habit and information sharing gratifications. The study's implications can be utilized to refine existing and develop new features and services bridging digital photos and social networking services.

Keywords: Facebook; Photo Sharing; Social Networking Sites; Uses and Gratification theory; Cross-sectional research

1. Introduction

In recent years, personal photography has gained immense popularity and adoption (Goh, Ang, Chua, & Lee, 2009; Kirk, Sellen, Rother, & Wood, 2006; N. A. Van House, 2011). Affordability, better imaging quality, ubiquity of devices and, notably, the emergence of social networking services (SNS) can be credited for this immense growth (Goh et al., 2009; Litt & Hargittai, 2014). Lately, sharing photos, especially on the internet and particularly on SNS, has risen substantially, making it one of the most popular online activities (Maevé Duggan, 2013; Joinson, 2008; Madden, Lenhart, Duggan, Cortesi, & Gasser, 2013; Pai & Arnott, 2013). For instance, in Britain, almost 70% of the internet users in the country shared photos in 2013 (Dutton, Grant, & Groselj, 2013). The same study reports that engagement around photos has become the

most popular leisure activity on the internet in Britain, superseding listening to music, downloading music, playing games and watching videos (Dutton et al., 2013). Similarly, around 64% of British internet users post photos on SNS, and the activity is considered as the most frequent activity, surpassing posting messages and sharing videos on SNS (Dutton et al., 2013). Likewise, on Facebook, deemed to be the largest and fastest growing photo sharing SNS (Rainie, Brenner, & Purcell, 2012), roughly two billion photos are shared daily ("Facebook Newsroom," 2015). While the presented numbers suggest that an overwhelming number of SNS users frequently engage with digital photos, understanding of the reasons behind this activity has yet been limited. Without understanding the reasons for photo sharing in the context of SNS, it is rather unknowable to grasp the role of digital photos in the world of the contemporary web.

Online sharing of information and content and related research issues has received a significant amount of attention (Lampe, Wash, Velasquez, & Ozkaya, 2010; Lee & Ma, 2012); however, despite the enormous growth and usage of SNS, relevant research has not increased proportionally. In particular, the understanding of why and how specific activities (including those related to photos) are being performed on SNS is as yet quite limited (Joinson, 2008; Krause, North, & Heritage, 2014; Smock, Ellison, Lampe, & Wohn, 2011). More specifically, as SNS support a broad range of activities, and the usage and gratifications vary considerably among the users (Joinson, 2008; Smock et al., 2011), understanding the gratifications individuals seek and gain from specific activities provides a richer picture of their level of participation (Smock et al., 2011).

Considering the immense popularity of photo sharing practices on Facebook, the aim of the current study is to determine the various gratifications behind Facebook-based photo sharing related activities. In addition to this, the study also examines the relationship of age, gender and number of photos shared with photo sharing gratifications. To address these inquiries, a theoretical framework of Uses and Gratifications (U&G) has been utilized in the present study.

2. Theoretical background and research questions

2.1 Uses and Gratifications (U&G)

Media consumption habits are guided by the needs of the individuals that they seek to gratify (Katz, Blumler, & Gurevitch, 1999). Exploring potential gratifications that individuals seek from a media or service can provide insight into the reasons for continued use of a given media (Limayem & Cheung, 2011). U&G theory is one of the media use theories most commonly utilized by researchers and offers a broad application for understanding media usage (Dwyer, Hiltz, & Passerini, 2007; Foregger, 2008). Understanding the potential U&G can aid in predicting media usage, as well as its recurring use (Kaye & Johnson, 2002).

Due to the strong basis of U&G theory in the communications literature, its theoretical grounding provides excellent foundations and relevance for research on social media usage and practices. An increasing number of researchers have adopted U&G theory for understanding the gratifications obtained from SNS. The popularity and growth of SNS has motivated researchers from various fields to apply U&G theory for studying gratifications of SNS usage, its impact and possible consequences (Bumgarner, 2007; Pai & Arnott, 2013; Quan-Haase & Young, 2010; Raacke & Bonds-Raacke, 2008). Previous studies have clearly demonstrated relationship creation and maintenance, passing time, information seeking, entertainment, sharing personal information, affection, and social surveillance as some of the key gratifications obtained from SNS use (Cheng, Liang, & Leung, 2014; Joinson, 2008; Leung, 2013; Papacharissi & Mendelson, 2010; Quan-Haase & Young, 2010; Whiting & Williams, 2013). As SNS support a wide variety of activities, it becomes important for researchers to investigate the reasons and motivations behind the use of SNS-specific activities. Previous literature has also shown that individuals are devoted, engaged, and highly motivated to spend effort and time in contributing content to specific SNS services (Boyd & Heer, 2006; Foregger, 2008; Krause et al., 2014). More recently, a number of studies have evaluated the U&G of specific activities on Facebook, including music listening (Krause et al.,

2014), sharing links (Baek, Holton, Harp, & Yaschur, 2011), participation in groups (Karnik, Oakley, Venkatanathan, Spiliotopoulos, & Nisi, 2013; Park, Kee, & Valenzuela, 2009), and news sharing (Lee & Ma, 2012). Considering the significance of photo sharing activity on Facebook, exploring the specific U&Gs is both timely and relevant.

2.2. Digital photo sharing

A large portion of the previous research on digital photo sharing and related practices has been directed towards the development and testing of experimental prototypes and concepts (Kirk et al., 2006; Naaman, Nair, & Kaplun, 2008), aimed at facilitating and simplifying sharing of digital photos, management, navigation and browsing of large digital collections.

Previous literature on digital photo sharing consisted of a variety of empirical work. This included examining various aspects of engaging in mobile phone photo sharing (Ames, Eckles, Naaman, Spasojevic, & House, 2010; Ames & Naaman, 2007; N. Van House, Davis, Ames, Finn, & Viswanathan, 2005; Vartiainen & Väänänen-Vainio-Mattila, 2010), online photo sharing (Chew, Rode, & Sellen, 2010; Miller & Edwards, 2007; Nightingale, 2007; Nov, Naaman, & Ye, 2010; Oeldorf-Hirsch & Sundar, 2010) and collocated photo sharing (Lucero, Holopainen, & Jokela, 2011; N. A. Van House, 2009).

People share photos to fulfill their intrinsic, as well as extrinsic needs (Nov et al., 2010). Sharing photos online can help people in fulfilling their social interaction needs, such as self-expression, self-presentation, communicating, and maintaining and nurturing social relationships (Frohlich, Kuchinsky, Pering, Don, & Ariss, 2002; Goh et al., 2009; Oeldorf-Hirsch & Sundar, 2010; Pering, Nguyen, Light, & Want, 2005; N. Van House et al., 2005). Sharing photos online can also have functional purposes with the aim of supporting personal and mutual tasks (Goh et al., 2009; Kindberg, Spasojevic, Fleck, & Sellen, 2005; N. Van House et al., 2005). Other gratifications of online photo sharing, such as feedback, public approval, attention, recognition, and social rewards in the form of comments and consequent conversation on shared photos, have also been

frequently highlighted in the literature (Ames & Naaman, 2007; Frohlich et al., 2002; Malinen, 2011; Nov et al., 2010). Many people engage in the activity out of habit, as they wish to share and get appreciation and attention from a wider audience on the web rather than just family members (Frohlich, Robinson, Eglinton, Jones, & Vartiainen, 2012; Miller & Edwards, 2007). Furthermore, engaging with photos is a fun and joyful activity, as photos shared with others provide entertainment value to the users (Nightingale, 2007; Vartiainen & Väänänen-Vainio-Mattila, 2010). Finally, photos are also deemed to be an imperative form of content used for self-disclosure purposes with the aim of sharing more information about oneself (Lee, 2009; Stefanone & Lackaff, 2009).

2.3. SNS-based Photo sharing

Sharing photos on SNS has emerged as one of the most essential and commonly used features (Joinson, 2008; Madden et al., 2013). For instance, more than half of the internet users in the USA have shared photos online that they captured themselves; meanwhile, around 42% of them have forwarded or shared photos posted by others (M Duggan & Brenner, 2012). Sharing photos allow users to share their feelings, thoughts, emotions, get instant feedback or ignite discussion around a topic of mutual interest (Mendelson & Papacharissi, 2010). Photo sharing activity on SNS has also been considered as a practical and informative means of interpreting self-image, interpersonal impressions, identity management and visual communication (Eftekhar, Fullwood, & Morris, 2014; Mendelson & Papacharissi, 2010). The possibility of interactivity around the posted photos in the form of sharing own photos, forwarding photos by others, getting comments, likes and discussions around those photos is the hallmark of SNS (Eftekhar et al., 2014). In a nutshell, SNS have dramatically changed the relationship between users and photos by empowering users to generate, share and discuss around various forms of content, especially digital photos (Eftekhar et al., 2014; Mendelson & Papacharissi, 2010) .

Despite the fact that online photo sharing is an exceedingly popular activity (Maeve Duggan, 2013; Pai & Arnott, 2013), understanding the reasons and motivations behind photo sharing has been limited. More precisely, inquiry into users' motivations for sharing photos on SNS in general, and Facebook in particular, has not gained the attention warranted (Eftekhar et al., 2014; Oeldorf-Hirsch & Sundar, 2010). To bridge this gap, we pose the following research question in the context of the current study.

RQ1. What are the gratifications sought by Facebook users from photo sharing?

With reference to online settings, there is a substantial body of knowledge examining gender and age differences in usage behavior. Investigating gender differences with regard to SNS has also been actively researched (Barker, 2009; Hargittai, 2007; Kimbrough, Guadagno, Muscanell, & Dill, 2013; McAndrew & Jeong, 2012; Muscanell & Guadagno, 2012; Raacke & Bonds-Raacke, 2008). Some of these studies reveal gender as a clear predictor of using a specific activity, frequency and usage of SNS. For instance, compared to males, females are more frequent users of SNS and display a greater preference for using SNS (Kimbrough et al., 2013; McAndrew & Jeong, 2012). Likewise, females are more likely to use Facebook for sharing content, viewing photos and videos, sending friend requests, and posting public messages (Hargittai, 2007; Madden et al., 2013; Muscanell & Guadagno, 2012). Compared to males, females also spend more time on browsing through others' photos and using profile photos as an impression management tool (McAndrew & Jeong, 2012). On the other hand, males are more likely to engage in playing games on SNS more often than females (Muscanell & Guadagno, 2012). Due to these differences, it is also plausible to assume that gender differences might also exist in the different gratifications of Facebook-based photo sharing activity. So we pose the following question:

RQ2. To what extent are Facebook users' gratifications for photo sharing associated with gender?

The literature suggests that, compared to older users, their younger counterparts spend more time on Facebook, have more friends, and generally engage more through different Facebook activities (Muscanell & Guadagno, 2012). Older people engage mostly in online family activity (Muscanell & Guadagno, 2012), while the younger ones engage with Facebook to pass the time (Hollenbaugh & Ferris, 2014). Similarly, younger Facebook users are more inclined to disclosures compared to old users (Hollenbaugh & Ferris, 2014). Thus, with relevance to our study, we pose the following research question.

RQ3. To what extent are Facebook users' gratifications for photo sharing associated with age?

Furthermore, it is quite plausible that people sharing more photos might have different gratifications for sharing as compared to ones who share less. Thus, from this perspective, we ask the following question.

RQ4. To what extent are Facebook users' gratifications for photo sharing associated with the number of photos shared on Facebook?

3. Methods

3.1. Data collection and sampling

A cross-sectional survey was designed and hosted by a web-based service (Webropol) between 18th March and 18th April, 2014. Due to the exploratory nature of our study, any Facebook user who has ever posted photos on the platform was encouraged to participate in the study. As the survey was not specifically targeted towards any specific demographic group(s), the survey link, together with a brief description, was mainly posted on various Facebook public groups. The main criteria for selecting the Facebook group was that the number of followers should be at least 1000 and deemed to be of general public interest. A list of potential groups was identified by browsing through the first author's "Suggested Groups" page on his Facebook profile. Every effort was made to ensure that selected groups hosted users with diverse demographics and did not explicitly target photo-savvy users. After

selecting the potential groups, a personal message requesting to promote the survey was sent to each of the group's administrators. Moreover, the survey was also posted on the mailing list of an academic conference in which one of the authors participated in March 2014, as well as on two discussion groups on general social media topics. One week before the survey closing date, a reminder message was posted on all the publicized forums.

The survey questionnaire consisted of 35 questions and was designed to be completed in around 20 minutes. In total, 442 respondents completed the online questionnaire. Respondents' data mentioning not using Facebook for sharing photos was removed, while incomplete and missing responses were deleted. The data cleaning process was concluded in an overall population of 368 ($N=368$). Table 2 lists the detailed sample demographics.

3.2. Measures

3.2.1. Photo sharing gratifications scale

Gratifications for sharing photos on Facebook comprised of 26 statements. All these items were adopted from previous U&G studies on SNS (Papacharissi & Mendelson, 2010; Quan-Haase & Young, 2010; Smock et al., 2011) addressing eight different dimensions of U&G of photo sharing (see Table 1). These dimensions were affection, attention seeking, disclosure, entertainment, habitual pastime, information sharing, social influence, and social interaction. A five-point response scale was utilized for accessing this 26-item scale, anchored from 1 (Strongly disagree) to 5 (Strongly agree).

Table 1. Review of gratifications obtained from SNS and photo sharing used in current study

Factor	Definition	SNS-related studies	Photo sharing-related studies
Affection seeking	Affection refers to the need for getting (as well as expressing) appreciation or	(Cheng et al., 2014; Leung, 2013; Quan-Haase & Young, 2010)	(Goh et al., 2009; Malinen, 2011)

	feelings by appreciating, encouraging or showing care.		
Attention seeking	Attention seeking can be described as the sentiments of getting attention and importance from others.	(Park et al., 2009; Urista, Dong, & Day, 2009)	(Malinen, 2011)
Disclosure	Refers to sharing personal information about oneself or closely related people.	(Hollenbaugh & Ferris, 2014; Mendelson & Papacharissi, 2010; Quan-Haase & Young, 2010)	(Lee, 2009; Stefanone & Lackaff, 2009)
Entertainment	Refers to relaxation, fun and enjoyment while engaging in an activity or with people.	(Bumgarner, 2007; Papacharissi & Mendelson, 2010; Park et al., 2009; Smock et al., 2011)	(Nightingale, 2007; Oeldorf-Hirsch & Sundar, 2010; Vartiainen & Väänänen-Vainio-Mattila, 2010)
Habitual pastime	Refers to unintentional and regularly performed behavioral pattern or activity.	(Bumgarner, 2007; Papacharissi & Mendelson, 2010; Quan-Haase & Young, 2010; Smock et al., 2011)	(Ames et al., 2010; Miller & Edwards, 2007)
Information sharing	Sharing information with others to express one's desires, feelings, interests and situation.	(Papacharissi & Mendelson, 2010; Park et al., 2009; Smock et al., 2011)	(Goh et al., 2009; Kindberg et al., 2005; Oeldorf-Hirsch & Sundar, 2010)

Social influence	The combination of various feelings, including “following a trend”, “being stylish”, “appearing cool”, with an intention to be part of a group or society.	(Papacharissi & Mendelson, 2010; Quan-Haase & Young, 2010)	(Oeldorf-Hirsch & Sundar, 2010)
Social interaction	Involves communications with others with an aim to create and maintain relationships.	(Park et al., 2009; Quan-Haase & Young, 2010) Park et al. 2009; Quan-Haase and Young 2010	(Goh et al., 2009; Oeldorf-Hirsch & Sundar, 2010; Pering et al., 2005; N. Van House et al., 2005)

3.2.2. Demographics

Two demographic variables, namely age and gender, were measured from the study participants (see Table 2).

Table 2. Descriptive statistics on demographics

Measure	Item	Frequency	Percentage (%)
Gender	Male	174	47.3
	Female	194	52.7
	18-25	53	14.4
	26-35	146	39.6
	36-45	96	26.1

Age (years)	46-60	65	17.7
	>60	8	2.1

3.3. Data analysis

The original sample of 442 respondents was examined using missing value analysis (MVA) of SPSS 21.0. The MVA revealed that 40 user cases were incomplete and, were thus deleted. The updated sample size of 402 respondents revealed that 34 cases were infected with a missing value (over 50%), hence they were also deleted. Little's MCAR Chi-square test revealed significant value of $X^2 = 789.891$, $df = 587$, $p < .01$, indicating that missing data was not missing completely at random. Earlier literature has suggested that, in practice, most datasets possess missing data not missing completely at random. Furthermore, data not missing completely at random can also be imputed. Maximum likelihood (ML) algorithm is a robust method for data imputation, thus it was utilized for imputing the missing data in the collected sample. The imputed data set of 368 respondents was later utilized for further data analysis.

4. Results

4.1. Gratifications for sharing photos

Exploratory factor analysis (EFA) was performed using the collected empirical dataset in order to examine the underlying gratification structure for online photo sharing. The EFA was performed using SPSS 21.0 tool. All the gratification items were examined using EFA with Maximum Likelihood Estimation (MLE) algorithm with "Varimax rotation". The threshold limit for the factor loading was kept at .50, so that survey items that did not fulfill the minimum threshold limit were deleted from the pool of items. The process was repeated until a stable set of survey items were produced. The EFA process concluded with the production of six online photo sharing gratifications, namely Affection (AF), Attention seeking (AS), Disclosure (DE), Habitual pastime (HP), Information sharing (IS) and Social influence (SI). All six gratifications fulfilled the Kaiser

criterion, i.e. eigenvalue > 1.0 . The EFA also resulted in excellent 77.68% variance explained in the online photo sharing gratification (Table 3).

Table 3: Exploratory factor analysis of photo sharing gratifications on Facebook

Gratification Instrument	Photo Sharing Gratifications					
	AF	DE	AS	SI	IS	HP
AF1: I share photos on Facebook to get more likes	.70					
AF2: I share photos on Facebook to get more comments	.68					
DE1: I share photos on Facebook to disclose happenings around me		.50				
DE2: I share photos on Facebook to disclose more about myself		.78				
DE3: I share photos on Facebook to disclose more about others around me		.54				
AS1: I share photos on Facebook to be more popular			.94			
AS2: I share photos on Facebook to gain attention			.70			
SI1: Sharing photos on Facebook is cool				.93		
SI2: Sharing photos on Facebook is trendy				.59		
IS1: I share photos on Facebook to share something informative					.82	
IS2: I share photos on Facebook to share something important					.82	
IS3: I share photos on Facebook to share something useful					.88	
HP1: Sharing photos on Facebook is part of my online activities						.98
HP2: Sharing photos on Facebook is one of my habits						.63
Eigenvalue	3.49	2.27	1.47	1.36	1.26	1.01
% of variance explained	24.93	16.21	10.51	9.77	9.02	7.22

4.2. Relationship between Gratifications & Demographics

The correlation results between age and photo sharing gratifications revealed that age has significant positive correlation with disclosure ($r = .15$, $N = 368$) and social influence ($r = .15$, $N = 368$). This shows that older SNS users tend to utilize photo sharing as means to disclose and achieve social influence gratification. No significant relationship between age and the rest of the photo sharing gratifications was found.

The independent sample t-test revealed that significant gender differences exist in the habit and disclosure gratifications of SNS photo sharing. The results suggest that males tend to seek more habit ($t = 3.37$, $p < .01$, Mean = 2.56, SD = .89 vs. Mean = 2.25, SD = .87) and disclosure ($t = 3.10$, $p < .01$, Mean = 2.97, SD = .83 vs. Mean = 2.71, SD = .74) gratifications compared to females.

The correlation results revealed that number of photos shared on SNS has significant negative correlation with habit ($r = -.41$, $N = 368$) and information sharing ($r = -.19$, $N = 368$) gratifications. Therefore, the results suggest that those SNS users who tend to seek habit and information sharing gratifications, share a smaller number of photos. Furthermore, no significant relationship between the number of photos shared on SNS and the rest of the photo sharing gratifications was found.

In order to investigate the relationship shared between six photo sharing gratifications, Pearson correlation analysis was performed. The results suggest that habit was in low positive correlation with disclosure ($r = .23$), attention seeking ($r = .24$), social influence ($r = .25$) and information sharing ($r = .17$). No relationship between habit and affection was found. Similarly, affection had low positive correlation with disclosure ($r = .14$) and attention seeking ($r = .15$). Affection gratification was not correlated with information sharing and social influence gratifications. Likewise, disclosure gratification was medium positive correlation with attention seeking ($r = .34$) and low positive correlation with social influence ($r = .24$) and information sharing ($r = .14$). Attention

seeking gratification was in medium positive correlation with social influence ($r = .36$). No correlation between attention seeking and information sharing was found. Finally, social influence was in low positive correlation with information sharing ($r = .19$).

5. Discussion

Detailed and specific studies accessing the user behavior of various activities of SNS, particularly Facebook, have recently been investigated (Baek et al., 2011; Karnik et al., 2013; Krause et al., 2014; Smock et al., 2011). Similarly, the present study contributes to determine the gratifications of Facebook-based photo sharing. A total of six photo sharing gratifications are identified, namely: affection, attention seeking, disclosure, habit, information sharing, and social influence.

Displaying affection in the form of expressing regards, being considerate and thankful to network friends has been regarded as a significant gratification of SNS users (Cheng et al., 2014; Leung, 2013; Quan-Haase & Young, 2010). However, for the current research purposes, instead of displaying affection we opted to include affection seeking gratification. We expected that, in the case of sharing content on Facebook, the users would seek for affection rather than display affection. For instance, receiving appreciation has been acknowledged as one of the main motivations for sharing photos on Flickr (Malinen, 2011). Facebook users share photos on the platform to seek affection, as they expect that other people will like and comment on their shared photos. This finding is consistent with earlier research that suggests that more likes and comments could indicate that other users of the network appreciated the photos posted by the content generator (Eftekhar et al., 2014). Furthermore, getting more likes and comments can sometimes imply that people recognize the efforts of the content generator.

Previous research on notable SNS, including Facebook and MySpace, indicate that their users engage with these platforms to seek attention from their friends and other network users (Park et al., 2009; Urista et al., 2009). For instance, receiving comments on their content aids them

in gaining attention, which ultimately makes them popular among their social circle (Urista et al., 2009). Similarly, on Flickr, one of the popular photo sharing platforms, users share their photos with an aim of gaining attention from other members (Malinen, 2011). Results from our study indicate that photos are shared on Facebook with an intention to gain popularity and attention among the network users. Sharing photos that are useful, relevant and meaningful can make the users popular among the peer group as well as the extended social circle. Sharing photos with attention seeking purposes not only leads to gaining popularity and presence among the network, but also helps in building the social capital (Urista et al., 2009). As SNS are considered important platforms for gaining attention, in the form of quick response, or igniting discussion around a subject, sharing photos on these services provides an excellent opportunity to fulfil this gratification. Seeking affection and attention are highly related to each other as both of these gratifications relate to users' expectations in the form of comments and likes on their photos, leading, ultimately, to gaining popularity among the network.

The majority of SNS are designed and developed in a way that encourages their users to disclose information about themselves and others around them. Previous literature on SNS gratifications recognizes disclosure as one of the prominent gratifications (Hollenbaugh & Ferris, 2014; Mendelson & Papacharissi, 2010; Quan-Haase & Young, 2010). Furthermore, numerous platforms for sharing photos online encourage users to disclose information about themselves as well as their surroundings (Lee, 2009; Stefanone & Lackaff, 2009). Despite the fact that there is an increasing privacy concern among Facebook users (Fogel & Nehmad, 2009; Orito, Fukuta, & Murata, 2014; Torres, 2012), study results interestingly suggest that users engage in photo sharing activities to disclose more about themselves, as well as those close to them, through their Facebook profile. This finding is in line with previous findings that many users share private and sensitive information on SNS, and particularly on Facebook (Dwyer et al., 2007; Litt & Hargittai, 2014; Madden, 2012). This phenomenon is often referred to as "privacy paradox", as has been explained

by the Privacy calculus theory (Dinev & Hart, 2006) whereby users usually weigh the potential risks against the perceived benefits of their disclosure activity. Hence, it could be inferred that the perceived benefits of sharing photos on Facebook are higher than the potential threats on the platform. As Facebook has become a new medium for communication, users frequently employ the platform for disclosing personal and sensitive information in the form of photos. Sharing photos on Facebook with disclosure purposes also acts as a communication method for informing others about one's life. Hence, Facebook provides an excellent ground for expressing oneself, friends, family and activities to close contacts, as well as the general public, in the form of sharing photos (Oeldorf-Hirsch & Sundar, 2010).

Habitual pastime has been recognized as another principal gratification users seek from general Facebook use (Quan-Haase & Young, 2010; Smock et al., 2011). Similarly, many web users regularly view and share photos on photo sharing websites, making the activity an important online pastime (Ames et al., 2010; Miller & Edwards, 2007). Results from our study validate that photo sharing activity on Facebook specifically contributes to fulfilling this gratification. Facebook users engage in sharing their digital photos with others, as, over the period, intentionally or unintentionally, they develop attributes of content generators. It becomes one of the habits that they engage in as part of their online activities. In some cases, this habitual pastime might also turn into addictive behavior, leading to regular photo sharing and frequently checking for received likes and comments on those photos (Urista et al., 2009). Earlier research also proposes habit as one of the significant gratifications in other forms of photo related activities on Facebook. For instance, browsing through photos uploaded by others, as well as searching for photos of specific persons (Bumgarner, 2007)

As suggested by earlier studies on different types of photo sharing for informational purposes (Goh et al., 2009; Kindberg et al., 2005; Naaman et al., 2008; N. Van House et al., 2005), our results confirm that photos on Facebook are also shared to fulfil this gratification. Information

sharing gratification has been highlighted as another important gratification in general Facebook usage (Papacharissi & Mendelson, 2010; Park et al., 2009; Smock et al., 2011). From the features perspective, Facebook users share photos with an intention of providing useful and informative content to others, as photos provide rich information that is easy to grab instead of going through a lot of texts. Own photos, family photos, as well as photos of various events and activities, can also provide latest information to the network. Hence, it is plausible to say that, among the Facebook activities that contribute to information sharing gratification, photo sharing activity is one of the most significant.

Past research also suggests that SNS users seek social influence gratification to follow a societal trend or be part of a peer group (Papacharissi & Mendelson, 2010; Quan-Haase & Young, 2010). Likewise, online photo sharing activity also helps the users in fulfilling the social influence gratification (Oeldorf-Hirsch & Sundar, 2010). Results from our study endorse that people also engage in photo sharing activity on Facebook to be an active part of the peer group. As photo sharing activity on Facebook is one of the popular activities on the platform (M Duggan & Brenner, 2012; Joinson, 2008; Madden et al., 2013; Pai & Arnott, 2013), it is highly likely that the activity might also be popular among the respondents' peer groups. Photo sharing on Facebook can be strongly linked to peer communication (Lucero et al., 2011; N. A. Van House, 2009; Vartiainen & Väänänen-Vainio-Mattila, 2010) and sense of belonging, as being part of the friends' network is considered highly significant among Facebook users. The high rate of acceptance and adoption among peers enforces the users to follow the current societal trend, as well as their peers. Hence, the people not actively involved in sharing photos on Facebook might be left out of discussions among peers around certain topics or trends. In some instances, it might become challenging to stick to the peer group if one is not posting photos or engaging in concurrent discussion on posted photos.

The study results also reveal interesting relationships between age, gender, and number of photos shared on Facebook and the photo sharing gratifications. Results from the study

suggest that the level of disclosure and social influence gratifications of photo sharing increases with the increase in age. As compared to younger users, older users seek higher longing for disclosure and social influence from sharing photos. The possible reasons could be the difference in awareness and influence of technology between these two groups. As younger Facebook users are more technology-oriented and use Facebook and its features more frequently, and the topic is often part of their routine discussions with their fellows, they are rather more aware of what to disclose and to whom (Madden et al., 2013; Quan-Haase & Young, 2010). Furthermore, displaying vigilance and consciousness by young adults can be one of the other assumptions behind this finding. This finding is also in line with an earlier study suggesting younger Facebook users share content more carefully, as they consider the possibility of the data being reachable by their friends, employers, co-workers and others (Madden, 2012). Similarly, social influence gratification among older users can be attributed to the novelty of Facebook. Compared to older respondents, the younger respondents might have less of a social influence impact, as photo sharing and other activities on Facebook are a common phenomenon for them. In general, the younger generation has heard from and discussed a lot with their peers and has been engaged in photo sharing activity on Facebook for a long time. Most of the younger generation possibly consider the activity as normal and routine, hence making photo sharing less cool and trendy for them. On the other hand, for older users, photo sharing on Facebook is something new, cool and trendy. Engagement with photo sharing on Facebook, for most of the older respondents, can be considered a trend to follow that helps them to be a part of the social groups, especially those of their children and grandchildren who have been using these services since they were young.

The results also highlight that males more tend to seek for habit and disclosure gratifications from photo sharing compared to females. Men are likely to disclose more about themselves, their family members and friends, as they are possibly less concerned about the privacy issues related to photos. This finding is in line with previous studies reporting that females,

compared to males, are more cautious about online privacy and adopt more strategies to steer their self-disclosures (Joinson, 2008; Litt & Hargittai, 2014; Madden, 2012). A possible reason for males displaying a higher tendency to habitual pastime gratification from photo sharing activity might be that males share more photos and spend more time on photowork-related activities on Facebook. However, this probable justification needs to be confirmed, as it is somewhat contrary to earlier research that points to higher habitual SNS gratifications and usage among females (Barker, 2009; Hargittai, 2007; Madden et al., 2013). This contradiction can be justified by the fact that the general and features-specific Facebook gratifications vary among users (Joinson, 2008; Krause et al., 2014; Smock et al., 2011). Hence, in line with the above reported results, we argue that, compared to females, males engage more with photo sharing activity with an aim to fulfill their habitual pastime and disclosure gratifications.

Finally, results also suggest that users who share photos on Facebook for fulfilling habit and information sharing gratifications tend to share a fewer number of photos. As the intention of sharing photos on Facebook is to fulfill information sharing gratification, the users carefully select and share photos that are deemed useful and informative for other people (Urista et al., 2009). If the users start sharing photos that are considered useless and uninformative, they might be unable to fulfill the information sharing gratification and their reputation as an information sharer might get damaged. A smaller number of photos captured, and selectiveness, could possibly explain the relationship of habit and sharing a smaller number of photos. However, these assumptions need to be tested further.

6. Study Implications

The study results have both practical and academic implications for researchers and practitioners interested in the field of social media research. (1) Understanding these gratifications could help the SNS providers, and more specifically the content producers on SNS, in developing new solutions for users and expanding their digital reach. (2) SNS and digital photo services practitioners can

utilize the reported results to increase the number of users, as well as the shared content. Thorough insight into and understanding of photo sharing uses and gratifications offer them the opportunity to work on fresh ideas as well as refine existing photowork features. Photo sharing activity on SNS could incorporate various novel features to facilitate the highlighted gratifications pointed out in our study. For instance, recognizing and rewarding the users actively involved in sharing photos by granting virtual badges or virtual gifts could further facilitate social influence and attention seeking gratifications. (3) Appropriately considering the identified gratifications while developing future photowork-related applications, services and features could make the photo-related activities more attractive for SNS users. For instance, addressing the privacy concerns of female users by simplifying the privacy settings could potentially engage, not only females, but other groups of users to share more photos on Facebook. (4) For the academic community, by employing a U&G framework to identify various photo sharing gratifications, the present research contributes to the growing body of knowledge around SNS behaviors, interactions and usage. The identified gratifications could also be utilized to develop, prototype and test new concepts and features related to photowork. Moreover, the study also lays down possible themes for researchers to be studied further.

7. Limitations and suggestions for future research

Despite the number of contributions of this study, limitations also exist. Although a comprehensive number of photo sharing gratifications have been identified in this study, it may not be exhaustive. Future studies could extend the gratifications of photo sharing by addressing further gratifications pointed out by previous literature on SNS. Similarly, a limited number of demographic variables were dealt with by this study. In future research, additional variables, including continued use, intention to use, time spent and participation, as well as their relationship, could be analyzed further to understand which of these variables affect photo sharing activity on Facebook and how.

As the online survey was promoted on limited forums, it is possible that the data collection is biased towards a particular set of Facebook users and may not represent general Facebook users. Due to the exploratory nature of our study, the study was not targeted towards any specific age or demographic group, thus the results might be too generalized and not be explicitly applicable to a particular group. Furthermore, the study solely focused on sharing photos and overlooked forwarding photos, which is another important feature offered by Facebook. We believe that forwarding photos shared by others might have distinct gratifications as compared to sharing photos. Analyzing these differences could be an interesting topic to explore further.

As various SNS offer distinct gratifications to their users, photo sharing gratifications can also be compared among different SNS platforms, for instance Facebook, Twitter, Pinterest and Instagram. Furthermore, a comparative analysis of SNS gratifications with gratifications on these channels could also bring valuable insights. Finally, a longitudinal study targeting specific user groups, such as adolescents or old users, to study their photo sharing activities on different platforms could also be an extremely valuable extension to the current study.

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