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Lee, Chei Sian; Nur Alifah Binte Abu Bakar; Raudhah Binti Muhammad Dahri; Sin, Sei-Ching
Joanna

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Instagram this! Sharing Photos on Instagram

**Chei Sian Lee, Nur Alifah Binte Abu Bakar,
Raudhah Binti Muhammad Dahri, Sei-Ching Joanna Sin**

Wee Kim Wee School of Communication and Information
Nanyang Technological University
{leecs, w130004, raudhah001, joanna.sin}@ntu.edu.sg

Abstract. Sharing behavior is a major element in understanding the influence of social networking services. The aim of the present study is to examine the motivations driving users to share photos on Instagram, a popular photo-sharing social networking service. This study applied the uses and gratifications approach to determine Instagram members' reasons for sharing photos. Data (N=115) were collected from an online survey. A principal component factor analysis indicated that there were four motives for sharing photos: informativeness, community support, status-seeking, and self-representation. We also conducted correlation and regression analyses. Our results indicate that age, number of followers and number of followings on Instagram are related to the gratifications users seek on Instagram. Further, we found that users' photo sharing was mainly motivated by the need for self-representation and status-seeking. Implications of our work are also discussed.

Keywords: Photo-sharing, Photo social network services, motivations

1 Introduction

Over the last few years, photo-sharing social networking services (PSNS) such as Instagram, Flickr, and Pinterest have seen significant increases in the proportion of adults sharing photos on these sites. Indeed, sharing photos on PSNS is becoming a daily routine for many people [1] [2]. PSNS offer easy sharing directly from mobile phones and enable individuals to communicate with large groups of distributed people through an image. Even though the use of PSNS has been integrated into the daily social networking activities of many adults, the motivations driving them to share these photos on PSNS are not well understood.

Conventional studies concerned with information sharing have identified some motivational factors that predict sharing behavior. For example, both social (e.g., maintain/create social relationships, information exchange) and personal (e.g., entertainment, status-seeking, prior experiences) reasons were found to be related to users' sharing behavior in social media [1] [22] [8]. Other researchers explained that content sharing activities in social and mobile media can be personally and

emotionally satisfying (e.g. [22], [14]). Different people may also interpret a photo differently depending on their backgrounds and personal experiences [1] [8]. Indeed, the gratifications people seek in social networking services (SNS) may differ among people from different demographic profiles. For instance, [5] reported that younger users were more willing to share personal information in SNS. Further, it was reported that women were more likely than men to use SNS to seek community support during difficult times [14]. Hence, individual differences are likely to influence the gratifications sought in SNS.

Due to the popularity of SNS, there is an expanding body of research related to their use. However, most of the studies focus on widely adopted SNS such as Facebook and Twitter [6] [24] and not solely on photo-sharing. Indeed, research on PSNS is limited and results obtained from general SNS may not be directly applicable to PSNS. Past works on PSNS (e.g. Pinterest, Flickr) largely focused on platform features and tools (e.g. [10], [19], [23]). Research on the social and psychological aspects of photo-sharing is only in its nascent stage. For example, there is some evidence of demographic differences in the motivations for SNS usage in general (including, but not limited to Flickr users) [20]. It is as yet unclear whether there are demographic differences in the motivations for using PSNS in particular. Since different SNS have different focuses, attract different populations and promote different activities, research on the other less studied PSNS platforms will be insightful [9].

To fill this research gap, this study examines the gratifications driving the use of a PSNS, Instagram, which is currently the one of the most popular and important PSNS platforms [4] [16] [17]. The objectives of the present study are two-fold. First, our study draws from the uses and gratifications theory (U&G) to investigate the gratification factors that influence user's photo sharing behavior on Instagram. Second, this study aims to examine the relationship between the demographic profiles of Instagram users and the gratifications sought from sharing photos. This theory is appropriate in the current study because it explains the social and psychological needs that motivate individuals to select particular media channels [22]. In sum, the present study aims to investigate the following research questions: *1) What are the gratification factors that influence users to share photos on Instagram? 2) What are the associations between gratifications sought from photos sharing and the demographic profiles of Instagram users?*

2 Literature Review

2.1 Overview of Instagram

Instagram was launched in October 2010 and hit the 150 million user mark within a short span of 3 years, gaining 128 million new users after being acquired by Facebook in 2012 [4]. As of 2015, Instagram has more than 300 million users worldwide with more than 80 million pictures shared daily. Instagram is a free photo and video-sharing SNS that can be easily accessed on smartphones of different operating systems as well as personal computers. Users can take photos within the application or share existing photos.

Three unique features of Instagram will be elaborated here. First, Instagram caters for self-expression, which is not surprising as visual images have become synonymous with self-expression. Specifically, users can create, edit, and contribute photos and short videos. Second, Instagram enables the editing of photos through the use of photographic filters. This function allows users to choose different ‘filters’ that can enhance the photo and provides a creativity outlet for users. Third, like other SNS, Instagram is based around the concept of social connections. On the user’s profile page, besides the username and profile picture, users are able to track the number of uploaded photos, followers and followings. Instagram users can also connect their Instagram account to other SNS, such as Facebook and Twitter.

2.2 Uses and Gratifications Theory

The uses and gratifications theory attempts to explain what social and psychological needs motivate audiences to select particular media channels and content [21] [22]. This theory has been widely applied to investigate audience’s gratifications in a variety of media channels and content, including mobile gaming applications (e.g. [13]), and specific information such as news content (e.g. [15]). From a uses and gratifications perspective, selecting a media channel is an actively involved procedure in which audiences evaluate the potential benefits of media usage.

In addition, past research has provided evidence to suggest that the gratifications people seek in SNS may differ among people from different demographic profiles (e.g. age, gender, educational background). For instance, it was reported that men and women have different information behaviors in SNS. Past research reported that individual differences (e.g. gender, age, number of connections) significantly influence why people use SNS [21].

2.3 Seeking Gratification through Photo Sharing on Instagram

In this study we argue that the act of sharing photos can be gratifying to the sharer. The use of photos has fundamentally changed due to digitization. Specifically, photos are no longer about preserving special memories and are fast becoming chronicles of the fleeting moments of an individual’s everyday life [18]. Social media, in particular PSNS, allow users to share their photos and document their daily lives. Instead of sharing photos in thick albums on special occasions, photos are being uploaded online regularly to be shared with family and friends, regardless of geographical boundaries.

Prior studies on mobile content-sharing applications have shown that people are able to anticipate theirs or others’ potential information needs and share content in order to facilitate future information seeking [8]. This means that social media can help users to seek information and satisfy future information needs. In other words, users may share photos to provide relevant and timely information to meet potential information needs. This gratification factor is known as the informativeness gratification. Next, [7] examined photo contribution on Facebook and found that

postings lead to interactions with the online community and ultimately garnering support from them. This means that continued participation and content contribution from members are crucial for the ongoing success of social interaction and gathering support in online communities. In this case, sharing photos is a means for users to get community support. Third, it has been recognized that users share information to obtain peer recognition [11]. Likewise in the case of Instagram, users share photos because they enjoy the feeling of being important and looking outstanding among other Instagram users. Thus, we propose that users share photos to seek status. Last but not least, photos are a way of self-expression and present the information individuals would like to convey to others [8]. Social media in general has enabled users to create an online persona separate from their real selves. The creation of such a persona can be viewed as a form of self-representation [12]. On Instagram, users create this self-representation through the types of photos they share. Hence, sharing photos on Instagram is a form of creating and experimenting with identities and allows users to create impressions of themselves in the minds of others. Here we term this as the self-representation gratification.

3 Methodology

3.1 Sample

A self-administered online questionnaire was developed to collect data. The sample consisted of adult Instagram users (>21 years old) in Singapore. Snowball sampling was used to recruit respondents, as members of the Instagram population were difficult to locate [3]. In this study, Instagram users were contacted through emails, Facebook messages and Instagram Direct messages which included a link to the online survey. A total of 129 survey responses were collected, with 115 usable ones. The demographic profiles of the respondents are summarized in Table 1.

3.2 Operational Measures

Photo sharing is operationalized by asking users to indicate the frequency with which they use Instagram to share photos as well as their intention to continue to share photos on Instagram [13], [15]. The measurements assessing gratifications were drawn from previous U&G studies [21], [22]. Factors including informativeness, community support, status-seeking, and self-representation were incorporated into the survey instrument to explore potential predictors of photo sharing on Instagram. A total of 24 questions were developed to assess the different gratification dimensions and were measured using a 5-point Likert scale with a range of 1 (Strongly disagree) to 5 (Strongly agree). The entire set of 24 items was analyzed by a principal component factor analysis using Varimax rotation. Two items were dropped due to low factor loadings and two items were dropped due to high cross factor loadings.

The remaining 20 items fell into four groups representing the four gratification factors: informativeness, community support, status-seeking and self-representation (see Table 2). We also used Cronbach's alpha as an indicator to test for reliability and all factors exhibited adequate reliability requirement ($\alpha > .7$).

- “Informativeness” describes the extent to which photos shared on Instagram can provide other users with relevant and timely information.
- “Community Support” measures the extent to which sharing photos on Instagram makes users feel part of a community.
- “Status-seeking” describes how sharing photos helps one to attain status among peers.
- “Self-representation” measures the extent to which sharing photos on Instagram is a form of creating and experimenting with identities.

Table 1. Sample demographics (N=115)

Demographic variables		N	%
<i>Gender</i>	Men	39	33.91
	Women	76	66.01
<i>Educational Level</i>	Junior College/Polytechnic	44	38.26
	Bachelor's Degree	64	55.65
	Master's Degree and above	3	2.60
	Others	4	3.48
<i>Age</i>	21-30	82	71.30
	31-40	32	27.83
	41-50	1	0.87
<i>No. of Followers</i>	1-50	47	71.30
	51-100	14	12.17
	101-150	18	15.65
	>150	29	25.00
	Missing values	7	6.09
<i>No. of Followings</i>	1-50	43	37.39
	51-100	13	11.30
	151-200	10	8.70
	>200	20	16.14
	Missing values	5	4.35

Table 2. Factor Analysis Results (N=115)

	Factors				Alpha (α)
Informativeness					.88
To share tips on photography.	.81	.08	-.14	.07	
To provide situational awareness. (e.g. earthquake region)	.80	-.15	.10	-.08	
To communicate with people from all over the world.	.76	.32	-.10	-.01	
As a form of encouragement to others.	.74	.05	.22	.04	
To provide first-hand accounts of events to others.	.71	.13	.34	-.30	
To participate in photo competitions/contests.	.65	.04	.19	-.07	
Because I can link it to other social networking sites, e.g. Facebook/Twitter.	.63	-.20	.31	-.13	
To get anonymous feedback about my photos.	.61	.18	-.14	.33	
So that my followers will post content as well.	.57	.07	.11	.50	
Self-Representation					.86
To express myself as an individual.	.06	.85	.26	.19	
To contribute my own experience.	.08	.80	.07	.03	
To express my creativity.	.18	.79	.14	.13	
To tell stories about my life.	-.09	.74	.34	.13	
Community Support					.86
Because I think my followers will like the photos.	.24	.25	.78	.20	
Because it makes me happy when others comment on my photos.	.05	.26	.75	.31	
Because I feel like people can understand me through my photos.	.13	.35	.74	.19	
To feel a part of a community.	.37	.04	.50	.40	
Status-Seeking					.74
Because it helps me feel important when sharing content.	-.17	.15	.20	.82	
So that my followers will not be disappointed with my lack of updates.	.14	.00	.06	.70	
Because it helps me look good.	-.05	.22	.32	.62	
Eigenvalue	7.04	3.95	1.96	1.66	
Variance explained (%)	29.35	16.45	8.17	6.90	

4. Analyses and Results

First, we utilized regression analysis to examine the relationship between the four gratification factors and sharing of photos on Instagram (RQ1). The results are shown in Table 3. The regression analysis results show that self-representation and status-seeking were found to be significant and positive factors in predicting sharing of photos. However, community support and informativeness were not significant.

Next, a correlational analysis was conducted to explore if there were any relationships between the gratifications sought and individual differences (RQ2). From Table 4, the results indicate that older respondents were more likely to share photos on Instagram to seek gratifications of informativeness, while younger respondents sought status. The number of followers was also associated with the types of gratifications sought. Respondents with more followers were more likely to seek status. However, the higher the number of people they followed, the more likely they were to seek both community support and status. There were no statistically differences in the gratifications sought between men and women Instagram users or among users with different educational levels.

Table 3. Results from Regression Analysis (N=115)

Gratification factors	Standardized β	t-values
Informativeness	-.01	-.10
Community Support	.01	.09
Status-Seeking	.20	1.85*
Self-Representation	.23	2.13*
F (3.240)	28.60*	
Adjusted R Square	.11	

Note: a. Dependent Variable is Photo Sharing

b. * $p < 0.0$

Table 4. Results from Correlation Analysis (N=115)

Demographic Factors	Gratification Factors			
	Informativeness	Community Support	Status-Seeking	Self-Representation
Gender	.05	.15	-.01	.15
Age group	.41**	.08	-.27**	.08
Education level	-.13	-.07	.02	-.04
No. of followers	.07	.17	.27**	.09
No. of followings	.14	.29*	.31**	.08

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

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

5. Discussion and Conclusion

Drawing from the U&G perspective, the purpose of this research is to investigate the gratification factors driving users to share photos on Instagram. We found that Instagram users who shared photos were mainly motivated by self-representation and status-seeking. Our second objective is to examine individual differences' effect on the gratifications sought via photos shared in PSNS.

Overall, we found that self-representation was the strongest motivator driving users to share photos on Instagram. Instagram's filters and tools allow users to present the best photos to their followers [12],[16], which allow them to present and manage their online personas on the platform. It should be noted that a search on Instagram with the hashtag “#selfportrait” returned 2 million hits, indicating the proliferation of self-representation images on Instagram. The other two gratification factors were likely not significant in our study because other well-established SNS, such as Facebook and Twitter, were able to gratify the needs for informativeness and community support. Indeed, many respondents indicated the use of several other SNS concurrently.

To shed light on the sharing behaviors of adult users, the focus of this study was restricted to adults who are twenty-one years and above. Our results suggest that younger adults share photos for status and self-representation, while older users are more motivated by information exchange. Young adults, especially those who are in the early 20s, are in the midst of exploring and finding their own identities, and hence their use of Instagram reflects their developmental goals. With regards to the influence of the number of online connections, we also identified that users with a larger number of followers were more motivated to seek status. On the other hand, users with more followings were more motivated by both community support and status-seeking. It should be noted that on many SNS platforms, more connections in terms of more followers and followings may result in information overload because of

the constant stream of updates posted online. The information overloading problem may be of a lesser concern for sharers on PSNS such as Instagram, as the content shared are photos, images and videos.

The present study contributes to SNS research in several aspects. Our findings provide insights on the features that PSNS should include (e.g. features for self-expression, content-related features for older users) as sustained participation and content contribution from users are critical for the viability and success of any SNS. Second, our findings on the effects of age and the gratifications sought have major implications for the business use of Instagram, especially for marketing of products and services. In terms of contribution to libraries, this study provided insights on how to motivate library users to contribute content since Instagram is one of the latest platforms that libraries are experimenting with. Specifically, this platform allows libraries to introduce a little more fun into their online profiles and interact with users in new ways. Ultimately, the findings from this study will benefit photo digital libraries (e.g. PhotoGeo) as well as libraries and higher educational institutions as they move towards the direction of building a collaborative digital library to enable their users to share a variety of content including photographs to participate on their collaborative platform.

There are some limitations in the present study. First, we investigated the usage of one photo-sharing social networking site, which may limit the generalizability of our findings. Indeed, different PSNS platforms have distinct features, which may be used to satisfy different user gratifications [10]. Future studies need to include different PSNS. We acknowledge the limitation of the snowball sampling used in the current study. Specifically, snowball samples should not be considered to be representation of the population being studied. However, as members of the Instagram population were difficult to locate at the point of data collection, snowballing sampling is an alternate means to recruit respondents [3]. In addition, the respondents of the present study were from Singapore and there may exist cultural and national differences in the use of PSNS which may limit the generalizability of our findings to users in other countries. This warrants future investigation. Nonetheless, despite these shortcomings, the present study contributes to a better understanding of photo-sharing behavior on Instagram.

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