

Examining Social Networking Site Behaviors: Photo Sharing and Impression Management on Facebook

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Abstract

From 2006 to 2012, Facebook membership grew to approximately 980 million users (1). For those many users, the social networking site (SNS) has become an integral part of their daily routine, and thus provides invaluable data for psychological research. The current study investigated photo-posting activity by users in the previously defined SNS typologies: Activist, Observer, Entrepreneur, Scrap Booker, and Social Butterfly (2). Data was collected from 220 Facebook profiles. Trained coders recorded each participant's age, gender, friend count, and picture posting frequency along with his/her ten most recent photo-posting actions and their respective tone -- positive, negative, or neutral. Subsequent data analysis highlighted common behavioral themes and usage patterns. As initially hypothesized, SNS users posted predominantly positive photos, possibly as a means of online impression management. Not surprisingly, such photo posts received more response than either neutral or negative photo posts. In addition, a significant difference was found in the number of *likes* received among the five typologies. Specifically, Scrap Booker photos received more responses than any of the others. This study offers a glimpse into the complex processes that underlie online photo posting behavior and, at the same time, creates a basis for further inquiry using the typologies.

Keywords: Social Networking Sites, Facebook Typology, Impression Management, Photo Sharing.

Introduction

For more than one billion active monthly users (3) Facebook, with its fast and convenient means of communication, has become an important element in daily social connection. In turn, these numbers provide an observable database of differing, but stable (4), online social interaction (5). Social networking sites (SNS), such as Facebook, provide valuable data across geographical regions, age groups, religious affiliations, socioeconomic status, and social class, in other words, for varied demographics. The varying personality characteristics and social motivations (6,7) of SNS users produce an equally variable set of observable online behaviors.

Previous research shows that SNS users rarely utilize the site to create new online relationships (8). Rather users generally use SNSs to enhance their existing real-world relationships. That is, users tend to develop relatively accurate online personas (9) while also engaging in impression management. One study (10) showed that users' online personas represent a slightly idealized version of their offline self (11). The fact that SNS users can select or emphasize characteristics they deem socially desirable, while eliminating or de-emphasizing undesirable ones, means they can create a specific online identity. In one study, SNS users reported that they chose *best-fit pictures* and *untagged* themselves from photos they deemed unflattering (12). Additionally, 24% of participants reported posting photos to communicate their self-concept "a whole lot," while 34% reported they did so to communicate same "quite a bit."

Although users are always in a position to control *text* (e.g., by deleting disliked comments), photos appear to play a more defined role in online social interaction. One study showed that adult SNS users often post photos as a "conversation starter" mainly because a picture is a way to quickly communicate much personal information (13). Clearly, SNS profile photos give a first impression; others, like those that chronicle milestones and communicate more extensive information, contribute to elements of users' online identity. Through photos, online *friends* may gain more nuanced information than that which users can provide through their written profile. Photo posting, a now ubiquitous SNS feature, represents a valuable database for aspects of social interaction and warrants further study.

The present study examined SNS social interactions and usage patterns through picture posting behavior as a function of previously validated typologies -- Activist, Observer, Entrepreneur, Scrap Booker, and Social Butterfly -- that developed out of research conducted by the California State University, Long Beach (CSULB) Psychology Department Facebook Research Group directed by Professors Martin Fiebert and Christopher Warren (2). Previous studies examined Facebook birthday greetings in relation to gender and relationship status (14); the long-term stability of the five typologies (15); and SNS behaviors according to age cohort (16).

The current research examines common behavioral patterns of online photo postings as a function of these five typologies, as well as, the tone of the picture posts. Because previous research suggested that SNS users put forward idealized (17), or partially idealized (12, 10) online identities for self-presentation (9, 17), it was hypothesized that users would post predominately positive photos to the same end. Although previous research identified various motivations for SNS usage (8) and examined the personality motivators (6, 7), few studies have examined the role of reciprocal SNS interaction within online photo posting, which we address in the current study.

Method

Participants

A convenience sample of 227 participants was randomly selected via Facebook. Seven of the participants were excluded from analyses due to missing or incomplete data, resulting in a sample of 220 participants (98 men, 122 women, $M_{\text{age}} = 26.7$, age range: 18-77 years). The mean *friend count* was 518 *friends*.

Nine trained research assistants (RAs) chose 20 to 25 of their Facebook *friends*, selecting every third individual in their *friend list* for inclusion in the sample. (Following the initial collection period, one RA coded an additional 20 profiles). Participants were chosen for inclusion in this manner primarily due to accessibility issues. RAs were required to have a minimum of 100 friends prior to the start of data collection. Facebook users that chose to hide their *friend count*, or those that posted less than 10 photos in total, were excluded from the sample. The data collection procedure was approved by the Institutional Review Board at California State University, Long Beach.

Procedure

Research Assistant Training

All coders were trained at the same time. During the training, a brief overview of the Facebook *wall* was presented, and coders were familiarized with the five distinct typologies (i.e., Social Butterfly, Entrepreneur, Activist, Observer, and Scrap Booker; 2). The training addressed experimenter biases and stressed the importance of disregarding personal assumptions.

Coding Procedures

Profiles included in the study were randomly selected via each coder's *friend list*. To commence profile coding, each coder accessed his or her *friend list* via Facebook and selected every third friend displayed. The Facebook *friend list* randomizes each time a person leaves the page for another webpage; therefore, coders were instructed to access their *friend list* only once and subsequently open each individual profile in a separate window. Participants remained anonymous on the coding sheet, represented only by a number (1 through 20, respectively).

To begin data collection, the coder recorded demographic data (e.g., age, gender and friend count) and began to code the user's 10 most recent Facebook picture posts (see Appendix A). Picture typology, tone, and number of *likes* received was recorded for each picture posting event. To ensure picture posts had adequate opportunity for social interaction, coders disregarded posts that were within 7 days of the coding date. In the same vein, coders were instructed to code only pictures accompanied with text in order to ascertain the general tone of the post. Any picture posted without text or posted by someone other than the participant was not recorded.

Results

According to analyses, 69% of photo posts were positive in nature ($n = 1521$), 26% were neutral ($n = 581$), and 5% were negative ($n = 108$). A one-way Analysis of Covariance (ANCOVA) indicated a significant main effect of Tone when *friend count* was held constant, $F(2, 2206) = 27.33$, $p < .01$. Pairwise comparisons utilizing the Bonferroni correction

indicated that positive photos ($M = 10.03$, $SE = .30$) received more *likes* than both neutral ($M = 6.00$, $SE = .45$) and negative ($M = 6.66$, $SD = 1.13$) photos, $p < .01$ and $p < .001$, respectively.

Scrap Booker type photos represented the majority of picture posts ($n = 1033$), followed by Observer ($n = 427$), Social Butterfly ($n = 427$), Activist ($n = 215$), and Entrepreneur ($n = 107$). A one-way ANCOVA revealed a significant main effect of Typology when *friend count* was held constant, $F(4, 2204) = 17.08$, $p < .001$. On average, following covariance with *friend count*, Scrap Booker posts received 10.95 ($SE = .36$) likes. Observer, Social Butterfly, Activist, and Entrepreneur posts received, on average, 7.15 ($SE = .57$), 7.35 ($SE = .56$), 5.96 ($SE = .79$), and 6.07 ($SE = 1.13$) likes, respectively. Subsequent simple comparisons analysis utilizing a Bonferroni test revealed a significant difference between the Scrap Booker typology and each of the other four typologies, $p < .001$.

Discussion

Although the results support some of our predictions, the links between photo sharing activity and subsequent response rate variability warrant further study. In line with our hypotheses, picture posts were predominately positive in tone, and positive photos elicited greater online social interaction - *likes*- than either neutral or negative ones. Scrap Booker photos received significantly more interaction than Observer, Activist, and Entrepreneur posts, but contrary to our prediction, Social Butterfly photos did not receive significantly more interaction than the other categories. These results point towards a general trend of responding, at least in some cases. And, as in social interactions, it seems online behaviors elicit differential responses based on the type of behavior, or persona, represented.

The current study capitalizes on a few conceptual and methodological advantages and, as with any study, presents several limitations. With approximately 2,000 data points, the current study provides an expansive analysis of behavioral patterns and usage habits for the given sample. In addition, the methodology and findings provide a framework for future research on picture posting behaviors adding to a new and emerging field in social psychology. Although other studies have examined SNS behavior according to the Big Five personality dimensions (6, 7), the current study is one of very few that examines SNS behavior regarding online photo posting based on tone of pictures and through the five typologies (2). However, with archival coding procedures, limitations exist as to the robustness of the findings. Most notably, although self-report biases are eliminated, self-presentation or self-monitoring may cloud the true validity of the information coded. Importantly, however, the current study focused its efforts on capturing self-presentation to some degree; therefore, the online behavior patterns observed may generalize not only to future online behavior, but also across a variety of social networking media.

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Appendix A

Facebook Picture Coding Sheet

Student Number _____ City _____

FACEBOOK PICTURE CODING SHEET

Personal Info
 Sex: M _____ Age (in years) _____

Profile Info
 User name: Inactive _____

Last 10 Photo Posts

Instructions: For each photo, please check each of the boxes that best represent the post according to the descriptor below. Please record the number of "likes" the post received and identify the "owner" of the post. Photos were used pictures of users' tags in the post.

Category Descriptions:
 (Owner: photos of users' daily lives and/or activities)
 Self-portraits: mainly "I" and photos of photos (i.e. selfies)
 Activity: pictures of recreational activities, sporting events, formal occasions, "special"
 Entertainment: various related activities, sales, products, advertisements, interviews
 Social Interactions: photos of social events

Date	Profile	Impression	Avatar	Entertainment	Social	Self-Portrait Post (check for post)	Likes	Mood	
								-	+
10/10	15	X					25		X

Note: Most coded as = negative, 0 = neutral, + = positive in nature.

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