Feedback on Facebook Fails to Predict the User's Subsequent Posting

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Abstract –Facebook use is a new and complex social behavior that has stimulated research interests in psychology. Due to a distinct lack of theoretical basis for this new communication phenomenon, a number of studies established the significant association between personality traits and Facebook use. This study investigated the motivational effect of friends' feedback on the user's subsequent Facebook posting and examined the correspondence between the user's perceived motivation and actual motivation-behavior outcome using a new method. Results showed no significant association between the number of feedback and the number of subsequent posts, users' perceived motivations were consistent with their actual motivation-behavior outcomes, users' self-reports validated the new results and confirmed the previous findings that Facebook use is aimed at satisfying the individual's needs for belongingness, self-presentation, and social information-seeking. It is suggested that the amount of feedback on Facebook is an ineffective determinant of the users' frequency of subsequent postings.

Keywords -extrinsic motivation, reinforcement, social media, Facebook likes

INTRODUCTION

Facebook is a social networking site originally intended to create an online social environment for students in a university. Its popularity grew exponentially around the globe and became accessible to people of diverse backgrounds because of its userfriendly features, integrative multimedia capabilities, and the roles it plays in providing a virtual interpersonal environment for interaction. entertainment, information, and other purposes. Its versatility and responsiveness to diverse needs has inspired both old and new users to engage in online social networking, which helps to satisfy personal, work-related, economic, educational, and social needs.

Social networking sites have three major features: First, it enables the users to create their (semi-)public profiles; second, it gives the user the discretion to choose other users with whom connections are shared; third, it provides a venue for users to get updates from each other [1]. Facebook enables users to construct visible profiles, which display the user's basic information, such as name, gender, birthdate, and email address. Adding profile pictures, residence address, and other personal information is left as an option for the user [2]. Sharing information through posting status updates (live or recorded videos,

photos, and news) and multimedia contents (shared posts from persons, pages, or external webpages) is aided by technical features such as Facebook Wall, Groups, and Pages, the privacy of which can be adjusted to the desired audience. In turn, the audience (friends) viewing the contents can give feedback through reactions in the form of clicking on the emoji (i.e., like, love, haha, sad, wow, and angry), share, and comment buttons. Private person-to-person or person-to-group conversations such as video calls and chats are managed by Facebook Messenger. These features facilitate the user's interaction with his/her connections or friends.

Facebook's physical environment itself can be a source of motivation. The multimedia capabilities of Facebook that help facilitate communication and information between users are potent motivators in encouraging new sign-ups and in maintaining old user accounts. Some studies have shown that some technical features of Facebook do have motivational effects on Facebook use. For example, features such as self-disclosure settings were found to have significant association with user's satisfaction on Facebook [3]. Furthermore, students preferred using Facebook over Moodle for online discussions because

of the more conducive web-based learning environment that Facebook provides [4].

The virtual social environment on Facebook is also replete with possible variables that can be used to complement the role of personality variables in Facebook use gratifications. Specific contents of posts, post feedback measures (number of likes, comments, etc.), and other data derived from online social interactions can be useful in identifying certain extrinsic motivators that facilitate behaviors regardless of personality traits. This study is an attempt to determine whether some post "statistics" determinants of a social behavior on Facebook, holding the personality variables constant. In fact, Seidman [5] recommended the use of other motivational variables because, in many cases, "motivations mediated the relationship between personality and behavior" (p. 406).

By and large, Facebook's interactive online environment enables people to create and publish contents and to receive and give feedback. The psychology of this "give-and-take feedback" phenomenon has not yet been given much attention in the recent literature. Understanding the potential effects of feedback on online behavior is important in predicting future behaviors and in validating the claims of reinforcement and motivational theories of human behavior. Furthermore, if certain distinct relationships exist between friends' feedback on Facebook and user's subsequent posting behavior, then a new theoretical basis for explaining this emerging cyberpsychological phenomenon may be derived. Hence, this would supplement our current knowledge on the psychology of social media use.

Theoretical and Conceptual Frameworks

Reinforcement Theory posits that attitude changes result from an opinion change produced through such reinforcement in areas attention. comprehension and acceptance [6]. On Facebook, the status posts represent the user's opinions (attitude), which are messages received by his/her friends. If these messages receive reinforcement in the form of feedback, reactions and comments, then the user's opinions are either discarded or accepted (attitude change). The number of reactions in a posted message determine the attention given to the opinion, comprehension and eventual acceptance by the user's friends. More reactions would possibly mean higher peer-approval, and therefore the opinion posted for 'review' is finally accepted by the user. Upon seeing Facebook posting as a good means of self-expression and receiving reinforcement, the user becomes *motivated* to use it in seeking peer-approval, and this study assumes that the user's frequency of subsequent posting (*behavior*) will increase. It is hypothesized that, holding the personality of user constant: 1) the more number of reactions a post has, the more subsequent posts will be expected from the user; and 2) the number of reactions in a post has a motivational effect on the user's Facebook use.

Another theory used in this study is the Two-Need Model proposed by [7]. In this model, they posited that "[Facebook] use is primarily motivated by two basic social needs: (1) the need to belong, and (2) the need for self-presentation. The need to belong refers to the intrinsic drive to affiliate with others and gain social acceptance, and the need for self-presentation to the continuous process of impression management. These two motivational factors can co-exist, but can also each be the single cause for [Facebook] use" (p. 5). In this study, the users' self-reports about their gratifications in using Facebook contain words that may represent or convey particular types of need. Using the two-need model, the frequently occurring words or terms in the self-reports that are associated with social behaviors can be categorized under two major types of need or motivations.

The main variables of interest in this study are reinforcement (independent) and behavior (dependent). These variables were quantified by representing them by observable and measurable variates; that is, reinforcement is defined by the friends' reactions on the user's post, which may be further categorized into three sub-variates (post popularity, reaction rate, post and interestingness), and behavior is defined by the posting frequency. Post here is operationally defined as a self-made, not shared, status update of a user in the form of texts, pictures with captions (excluding profile and cover photo updates), activities or memories. Reaction rate is the average number of reactions obtained by a post in an hour. Its value is obtained by dividing the number of friends' reactions by the post recency in hours. Post popularity is the ratio of the number of friends who reacted to a post to the total number of friends. Interestingness is the number of main comments in a post, whether form friends or replies from the post author. It does not include the number of sub-comments or replies within comments. Posting frequency is the number of posts created by the user within the week or between the

first observation and the second observation. The recording of posting frequencies of the subject/users (second observation) was done in the same order as was done in the first observation. (It must be noted at this point that the terms subject, author, and user will be used interchangeably throughout this paper to mean the same individual as Facebook user.)

OBJECTIVES OF THE STUDY

Many studies have found explanations on why people use Facebook. Research results indicate significant association between Facebook use and personality. However, there is a dearth of studies which focused on the effects of extrinsic motivators on social behaviors on Facebook. Thus, this study examined whether post reactions (reinforcement) are predictors of the frequency of posting (social behavior) in a computer-based social environment or social networking site Facebook. Specific objectives include: To find the correlation between reaction rate (average number of reactions per hour) and posting frequency (number of posts between observations); To find the correlation between post popularity (number of reactions out of number of friends) and posting To find the correlation between interestingness (number of comments) and posting frequency; To derive a regression equation (if any) that predicts subsequent postings on Facebook using the three variables; To assess the user's subjective assessment of the relationship between their own social behavior (posting) and motivation (friends' reactions) and determine its correspondence with actual behaviors; To gather qualitative data about the motivations and gratifications in using Facebook and search for themes and commonalities.

The predominant use of personality and intrinsic motivations in explaining users' social behaviors on Facebook has resulted to a partial view of underlying motivations of the behaviors. So far, there have been no studies that illuminate the potential effects of extrinsic motivations on Facebook use. It is deemed significant that research on this topic be conducted; hence, the results of this study would bridge this research gap.

MATERIALS AND METHODS

This study employed a correlational research design. In this approach, researchers attempt "to determine whether, and to what extent, different variables are related to each other. This involves carefully measuring each variable, and then

performing appropriate statistical tests to determine whether and to what degree the variables are correlated" [8] (p. 22). In this study, the dependent variable posting frequency was correlated with the three independent variables (post reaction rate, popularity, and interestingness) and tested for their causal relationships. All research hypotheses were tested at $\alpha = 0.05$.

The selection of subjects employed a purposive sampling procedure. The criteria for selecting subjects are as follows: 1) The user must have responded to a survey question posted by the researchers; 2) The user must have posted a status update within 24 hours prior to the first observation; 3) The user's profile shows the total number of connections or friends. Upon identification of the qualified subjects, the researchers visited the wall of each of the users and sampled some status updates. The number of reactions, number of comments, and recency in hours of each sampled post were recorded, and the total number of friends of each user was also noted. The interval of observation was done at convenient times of the day. It is assumed that the posts that appear on the news feed are random regardless of time of the day. A total of only forty-six (46) subjects were selected.

In the second observation, a week after the first observation, the researchers visited the wall of each user to record the number of posts created starting from the time data from sample posts were obtained. (It is assumed that the users' cycle of Facebook use and posting has a period of one week, coinciding with the rhythms of their social interaction[9].) There was no problem encountered in counting the frequency of wall posts, since the post statistics were available in the user's wall. It was easy to trace the first sampled posts and the subsequent posts by noting the dates and hours of publication. However, there was a difficulty in locating the first post of one user due to the large number of posts tagging him on his wall, and the wall's history could not be loaded to an earlier date. Another user could not be found due to account deactivation. So, these two users were excluded from the list of subjects in this study. The number of subjects used in data analysis was reduced to fortyfour (44)—fifteen (15) were males and twenty-nine (29) were females. This highly disproportionate distribution of male and female Facebook users is consistent with previous findings that females tend to use Facebook more frequently than do males [7][10] [11], but contrary to the findings of Baek, Holton, Harp, and Yaschur [12].

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At the beginning of the observation, the researcher asked the users to indicate their level of agreement or disagreement with the attitude statement: "When many of my friends react to my post, I become motivated to create more posts". The data collected in this simple survey was considered important in determining the consistency between the users' perceptions or attitudes and their actual behaviors. Since many studies on attitude-behavior correspondence according to Wicker [13] found only a modest association between attitude and behavior, this study is also interested in understanding the degree of relationship between the users' perceived motivation (i.e., Facebook likes) and their actual motivation and behavior (Facebook posting). This study further conjectured that there is significant association between actual motivation-behavior outcome and perceived motivation of users.

To accomplish this task, the researchers randomly selected twenty-four (24) subjects out of the total sample subjects. These users had been previously asked to rate their extent of agreement with the abovementioned attitude question using a 5-point Likert Scale (5 strongly agree, 4 agree, 3 undecided, 2 disagree, 1 strongly disagree). They posted their answers as comments in the post containing the attitude question. Their responses in the form of discrete values from 1 to 5 were collected and paired with the data derived from post reaction rate and posting frequency. To analyze the paired data set and to determine the degree of correspondence between the users' perceived motivation and actual motivationbehavior outcome, the researcher assumed the following:

- 1. Users with low post reaction rates and low posting frequencies are expected to have high perceived motivation score.
- 2. Users with low post reaction rates and high posting frequencies are expected to have low perceived motivation score.
- 3. Users with high post reaction rates and low posting frequencies are expected to have low perceived motivation score.
- 4. Users with high post reaction rates and high posting frequencies are expected to have high perceived motivation score.

It is assumed that users who believe that they are motivated not because of reactions from friends but because of other factors either have few likers but still create more posts or have more likers but still are not motivated to create more posts. On the other hand, users who consider Facebook reactions as motivating factors in the subsequent social behaviors online either tend to create less posts after getting only few likes or tend to create more posts after getting more likes. These assumed relationships are summarized in Table 1

Table 1.The assumed relationship between actual motivation-behavior outcome and perceived motivation

Actual motivation-behavior		Expected
outcome		perceived
Motivational	Social behavior	motivation
factor (post	(posting	(perception
reaction rate)	frequency)	score)
LOW	LOW	HIGH
LOW	HIGH	LOW
HIGH	LOW	LOW
HIGH	HIGH	HIGH

Another set of data that was gathered for this study is the transcript of self-reports made by the users. Users were also asked about their true motivations in using Facebook to validate the results of the quantitative aspects of this study. Individual self-reports were pasted in a single document, in which corrections were made such as translating Filipino words to English, rectifying misspelled words and wrong abbreviations, etc. This is to facilitate thematic analysis or word frequency counting of qualitative data using online word count software.

To answer the research questions involving quantitative variables, a variety of statistical tools were used. The data on post reactions and frequency of posting was analyzed using Pearson correlation and linear regression. Each independent variable (post popularity, and interestingness) reaction, correlated with the dependent variable (post frequency) using Pearson. To determine whether the variables are best predictors or to select the best explanatory variables for post frequency, a simple regression analysis was performed. The data on actual and perceived motivation and behavior was analyzed by a new method converting the raw post reaction rate and post frequency scores into standard scores (with the assumption that the data are normally distributed), adding the standard z-scores, and then correlating with the corresponding perception scores.

By and large, three types of analysis were used in this study. These analyses play complementary roles

in validating the results from quantitative and qualitative data observed and taken from the subjects.

RESULTS AND DISCUSSION

In this section, the results of the analyses are presented in three parts. The first part presents the result of correlation and regression analyses, testing the linear association and causal relationships between the number of feedback (reinforcement) and the frequency of posting (behavior). The second part introduces a new method of measuring attitude-behavior consistency by analyzing linear relationship between actual feedback-posting outcomes and perceived motivation. The third part presents the themes and commonalities that emerged in the self-reports of subjects.

Reinforcement-Behavior Relationship

A simple regression and correlation was performed to determine the explanatory effects of post reaction rate, popularity, and interestingness on posting frequency and the strength of linear association between them. It was hypothesized that there is no significant linear relationship between feedback and posting frequency. Using SAS® University Edition the data were analyzed, and the results are shown in Table 2.

Table 2. Results of correlation and linear regression on posting frequency

on posting frequency				
Parameters	Independent Variable (i)			
	Reaction	Popularity	Interestingness	
	Rate	(2)	(3)	
	(1)			
Correlation	0.0431	0.089	0.0992	
coefficient (ρ_i)	p=0.781	p=0.564	p=0.5219	
Regression	-0.0668	68.229	0.194	
coefficient (β_i)	t=0.27	t=0.49	t=0.57	
Intercept=8.675 <i>p</i> <0.05	p=0.789	p=0.627	p=0.571	

Note: All parameter estimates are not significant at α =0.05 except the intercept.

Results show the low correlations between posting frequency and each of the identified motivational factors (all p>0.05). This implies that the number of reactions in Facebook posts is not linearly related to the number of subsequent posts a user will create in a week. In other words, high reaction rate, high post popularity, or high interestingness obtained in Facebook posts does not guarantee more frequent

subsequent posting. Furthermore, the estimates of regression coefficients were found to be insignificant (p>0.05), which means that the explanatory effects of the motivational factors are negligible. In addition, a collinearity exists among the the independent variables. Therefore, no predictive regression equation can be derived from this study that will explain the dependence of posting frequency on friends' feedback. Surprisingly, the estimated intercept which is significant (β_0 =8.68, p<0.05) shows that even if there are no Facebook feedback obtained in an earlier post, the user is still expected to create about nine (9) subsequent posts in the succeeding week. These results suggest the weak motivational effects of Facebook reactions, likes, and comments on the user's Facebook postings. These results did not support our anticipated outcomes; hence, we failed to reject our null hypotheses.

Previous research revealed the multiplicity of motivations that influence users on Facebook. Baek et al [12] found that users have different primary incentives for viewing and posting contents on Facebook. In other words, there are several layers of motivations that take place within each Facebook activity. These distinct layers, on account of the established ones, may further be determined in future studies.

Actual-Perceived Motivations Correspondence

To determine the degree of correspondence between attitude and behavior, a new method was devised, which we denote here as Direct Motivator-Behavior Relations Perception Test (DMBRPT). This method assumes that the motivation scores and behavior scores have direct relationship (i.e., when *X* increases, *Y* also increases) and are normally distributed. On this premise, the scores are each converted into standard *z*-scores. The transformation

of scores X and Y with means μ_x and μ_y and standard deviations σ_x and σ_y , respectively, is given by the equation,

$$Z_x = \frac{X - \mu_x}{\sigma_x}$$
 and $Z_y = \frac{Y - \mu_y}{\sigma_y}$

Since we have the assumed relationships between motivation-behavior outcome and expected perception in Table 1, the *z*-scores are added such that those scores with like signs add up and those with unlike signs cancel out. High-motivation more-frequent-behavior (HH) pairs and low-motivation and less-

frequent-behavior (LL) pairs, for example, have greater net motivation-behavior scores compared to high-motivation less-frequent-behavior (HL) pairs or low-motivation more-frequent-behavior (LH) pairs. To implement correlation, the net z-scores are expressed as absolute values and then tested for association with the perception scores. High degree of correlation would mean that there is a strong actual motivation (behavior) and perceived motivation (attitude) correspondence. We conjectured previously that there is significant linear association between actual motivation-attitude outcome and perceived motivation. In Table 3, we can note that the result supports our conjecture (ρ =0.51, p<0.05) and suggests that the perception of Facebook users about feedback as motivators of their online social behaviors such as posting is consistent with the actual motivatorbehavior net outcomes. Results of this test, however, should be interpreted with caution since the assumption of normality of random variables may not always be met. As such, it must be assumed that the significant correlation for this study is only a "modest" association between the two variables being compared. This confirms the claims of Wicker [13] and Kraus [14].

This result of correspondence, however, should not be confused with the result of association between feedback and posting. It must be clear to the reader that the purpose of this correspondence is to show the consistency between the users' perception and their actual behaviors on Facebook, while the earlier correlation and regression tests were intended to describe the motivational effect of friends' reactions on the user's social behavior on Facebook or the causal relationship between friends' feedback and user's posting.

Users' Self-Reports on Their Gratifications

To complement or validate the quantitative results of this study, qualitative data analyses were performed. A survey question was posted on Facebook asking about the users' motivations in using Facebook. The users posted their responses as comments to the attitude question.

Table 3. Result of actual-perceived motivations correspondence test involving data transformation into absolute-valued standard scores and correlation

Reaction (X)	Posting (Y)	Z_x	Z_{y}	$ Z_x+Z_y $	Attitude Score(W)
26.00	4	3.4208	-0.3958	3.0250	5
13.00	10	1.3408	0.8670	2.2082	4
1.67	17	-0.4725	2.3410	1.8685	5
4.00	14	-0.0992	1.7095	1.6103	4
2.55	0	-0.3319	-1.2379	1.5698	4
20.00	1	2.4608	-1.0274	1.4334	4
3.45	0	-0.1865	-1.2379	1.4244	4
2.70	1	-0.3072	-1.0274	1.3346	4
0.20	3	-0.7072	-0.6060	1.3135	4
0.44	3	-0.6681	-0.6060	1.2744	4
2.08	2	-0.4069	-0.8168	1.2237	4
3.67	12	-0.1525	1.2884	1.1359	4
2.23	13	-0.3823	1.4989	1.1167	4
2.60	3	-0.3232	-0.6063	0.9295	3
3.00	3	-0.2592	-0.6063	0.8655	2
1.77	4	-0.4561	-0.3958	0.8519	4
1.83	4	-0.4470	-0.3958	0.8428	5
0.61	5	-0.6418	-0.1853	0.8271	4
2.00	11	-0.4192	1.0779	0.6587	3
3.78	4	-0.1348	-0.3958	0.5305	3
2.86	5	-0.2821	-0.1853	0.4673	4
1.00	10	-0.5792	0.8674	0.2882	2
5.80	6	0.1888	0.0253	0.2141	4
3.60	6	-0.1632	0.0253	0.1379	4
Mean=4.62	Mean=5.87		_		r=0.51
SD=6.25	SD=4.75				p < 0.05

These comments were copied and pasted in another document file for corrections. After rectifying the transcript of responses, the whole text was copied on the clipboard and then pasted on an online word count software for analysis. The result of the word frequency analysis is shown in Table 4.

Table 4.Top most frequently appearing words from

the transcripts

Word	f	Word	f
Friends	32	Way	9
communicate	23	Others	9
Relatives	17	Express	8
Updated	16	Current	7
Updates	16	Update	7
Family	12	thoughts	7
Communication	12	Keep	6
News	11	Know	6
information	10	Connect	5
Share	10	latest	5
		feelings	5

Total word count: 1103 words

Primary keywords (no common words): 593 words

Common words count: 510 words (46.24%)

The social needs of Facebook users. Using the Nadkarni and Hofmann's [7] model, we can categorize each term according to two social needs being implied: the need for self-presentation and the need for belongingness. From the table, we can say that the terms "share", "express", "thoughts", and "feelings" convey the users' need for self-presentation on Facebook. We can see here an internal motive to share posts on Facebook, which is consistent with the findings of Baek et al [12] that the more likely users are to use Facebook to share information, the more likely their posting frequency will increase. Whereas, "friends", "relatives", terms "family", "communicate/ion", and "connect" convey the users' need for belongingness. The latter category also indicates the collectivist orientation of Filipinos like the neighboring Asian cultures [15], which puts much premium on maintaining connections with family and friends.

The two-need model seems to provide an inadequate number of major categories of Facebook use gratifications. Additional category can be used to include the remaining terms, which we referred to here as the need for information-seeking [16]. One can note that the terms "update", "news", "information", "current", "latest", and "keep" represent the users'

need for being informed of recent developments. It is not sure whether the desired information is about their family and friends or comes from news about local and world events. If the updates or information they seek are about family and friends, then it is a need for social information or a need to feel involved with what is going on with others [17]; otherwise, they only take advantage of the Facebook's technical features for past time or entertainment [18]. Finally, what the users meant by the term "way" is the medium or features that Facebook provides to facilitate satisfaction of those needs. Therefore, the gratifications that users experience in social media is the user-friendly features and social environment that Facebook provides to satisfy their social needs for self-presentation and belongingness and personal need for information or entertainment.

In the second observation of the study, the number of posts created by each user within the week was counted. Those users with the most number of posts were chosen as respondents in an interview which asks about their personal gratifications in using Facebook and their perceptions about friends' reactions on their posts. The researcher sent requests to five (5) top users with the most number of posts, but unfortunately only three (3) accepted the request. The respondents were interviewed via Facebook Messenger. The responses of the top users confirm the three-need model deduced from the thematic analysis above.

The need for belongingness. Philippines being one of the countries with the most number of migrant workers called Overseas Filipino Workers (OFW) has some social implications. For example, as more family members are leaving the country and their families, there is a growing need for transnational families to connect via telecommunication to maintain familial bonds and to keep updated of national affairs. And Facebook has served to satisfy this social need by providing an all-in-one package of technical features, such as calls, messaging and news feeds. The following self-report shows the need for belongingness of an OFW:

"Since 2010 kasi nagsimula na ako mag-FB. Kaya lang hindi naman lagi. Unlike nang andito na ako sa Korea, halos araw-araw na, kasi sa sobrang homesick dito at stress, sa FB ko binabaling ang atensyon ko. Nakakapraning kasi dito lalo na nung wala pa akong kakilala. Ang FB talaga ang isang way na nagpapagaan sa pakiramdam ko." (I've been using Facebook since 2010, but not regularly. When I worked here in South Korea, I used Facebook more often because of

homesickness and stressful situations. I divert my attention by using Facebook. It almost lost my mind when I first set foot here, with no acquaintances. Facebook really served to ameliorate the difficulties.) (OFW, Female, 33)

Being in an unfamiliar place far away from home, OFWs find consolation through using Facebook. The need to belong, therefore, is the primary motivation of this user because she seeks the virtual presence of her old acquaintances to ease her feelings of alienation and homesickness in the host country.

This need to belong is also exemplified by another interviewee in her statements below:

"Una, gusto ko mag-FB kasi nagku-communicate kami ni hubby. Nakakakonek ako dili lang sa asawa ko kundi pati na rin sa mga kamag-anak o kaibigan ko na nasa malayo na lugar." (First, I use FB to communicate with my husband. I also use FB to connect with my relatives and friends from distant places.) (Housewife, Female, 31)

Facebook has really enabled people and families to get connected with each other. The vast number of users and searchability of people's names on Facebook have helped many people find their long lost friends and relatives. The social networks or mutual friends feature of Facebook have also facilitated the reunification of close friends and relatives who have not kept in touch for a very long time through automatic Facebook friend suggestion features. This particular user finds Facebook as a place to belong and as a bridge that connects her and her family and friends from afar.

The need for self-presentation. On Facebook, anyone is free to post any content as long as it does not violate the Facebook community standards [19]. This feature facilitates free expression of the users' thoughts, feelings, advocacies, business interests, and sharing of life experiences; thus, satisfying the users' need for self-presentation. The following reports made by interviewees exemplify this need.

"Kag dako naibulig san FB na kumita ako sa akon online business. Imagine, nasa balay lang ako pero pira na libo kinita ko dahil lang sa FB!" (FB help me a lot in my online business. Imagine, I am working at home and then making more money through FB!) (Housewife, 31)

This housewife uses Facebook to advertise products using testimonials, photos, and videos to entice potential customers online, and the good thing is it is for free. Another motivation of this particular user is to meet her financial needs by the earnings she gets from an online networking business and by the free "hosting" services offered by Facebook. It is possible that the high posting frequency attained by this user was motivated by the need to reach more people through advertisements to persuade more potential customers.

The need for self-presentation is also met on Facebook through media capabilities on the site which enables publication of contents intended to influence people for a cause. The next interviewee is one with the most number of posts in a week. He has two Facebook pages being managed for his advocacies, both of which are on the promotion of the study of linguistics and native Philippine languages. Because of this, his motivations can be the need for self-presentation, the need to be known for his nationalistic ideals and passion forPhilippine languages, and the need to reach out for more followers. Here is the self-report:

"Mainly, Facebook is for information dissemination, esp[ecially] for my advocacies. I've also used Facebook for my classes in the past. It's easy to use and readily accessible. It's also one of my main references since most of media networks have their online versions." (Linguist, Male, 26)

Similar to the motivation of the online businesswoman above, this interviewee finds Facebook as a "readily accessible" site to connect with potential supporters. The frequency of posting, therefore, was largely influenced by the networking capability of Facebook, conducive environment on the SNS, and the user's strong desire to air his noble advocacies.

Expressing one's thoughts and feelings through Facebook posting also satisfies the need for self-presentation. From the self-report below, we can see that Facebook serves as an outlet to voice one's emotions and state of mind, thus satisfying the user's need for self-presentation.

"Sa mga post naman naisi-share ko ang saya, galit, lungkot, at disappointment, which is mali kasi marami ang makakaalam kaya lang parang hindi mapigil. [Laughs]. Para sa akin, isa lang ang masasabi ko:

nakakaadik ang Facebook. Parang part na s'ya ng daily routine ko—paggising, Facebook; at bago matulog, Facebook." (Through posts I could express my feelings of joy, anger, sadness, and disappointment. Although it would seem inappropriate because many people would know about my feelings, but I could not help it. [Laughs] For me, there is one thing I could tell: Facebook is addictive. It became part of my daily routine—when I wake up and before I go to bed, I check updates on Facebook.) (OFW, Female, 33)

However, the "Facebook addiction" that this user refers to is not an exaggeration nor an "urge-driven disorder" [20] but a distinct gratification in the use of social network site where her emotions are expressed and problems shared to alleviate the emotional burdens of being separated from family. This self-report is consistent with the findings of Quan-Haase and Young [17] that people use Facebook to share problems.

On the issue of friends' feedback. The above selfreports indicate the diverse gratifications of users of diverse backgrounds. Some commonalities, however, were observed: The three interviewees agree on the significant role that Facebook plays in facilitating their communication with family and friends, thereby satisfying their need for belongingness. Facebook offers an integrative environment which combines all known forms of communication media: radio, television, telephone, and text messaging [21]. This enables the user to freely and effectively connect with others, promote advocacies, do online business, and express thoughts and feelings, thereby satisfying their need for self-presentation. Nonetheless, on the issue of the importance of friends' reactions on their post, they have varying perceptions. The first interviewee does not consider friends' reactions as an important measure of gratification on Facebook.

"Di man actually importante kun damo likes o dyutay." (Actually, it does not matter whether you got few or many likes.) (Housewife, 31)

The second one views the number of likes and comments as an important measure of influence.

"Re [sic] likes and shares, they are indication[s] that your post is accepted or has impact to the readers. More likes and shares could mean more people reached and informed about your post." (Linguist, 26)

The third one admits that she feels good when friends react to her posts.

"Ok lang, pero nakakatuwa siyempre pag may nagla-like." (It's OK, it makes me feel glad when my friends like my post.) (OFW, 33)

None of whom, however, viewed friends' reactions on Facebook as important motivational factor in their continued engagement in social media use. This confirms the above findings on the weak association between the number of reactions and the frequency of posting on Facebook.

CONCLUSION AND RECOMMENDATION

This present study investigated the motivational effect of friends' feedback on the user's subsequent Facebook posting and examined the correspondence between the user's perceived motivation and actual motivation-behavior outcome using a new method. Results showed no significant association between the number of feedback and the number of subsequent posts. Furthermore, the users' perceived motivations were consistent with their actual motivation-behavior outcomes. Users' self-reports validated the weak association between feedback and posting and confirmed the previous findings that Facebook use is at satisfying the individual's aimed (belongingness and self-presentation) needs [7] and personal (information and entertainment) needs [16]. Finally, it is suggested that personality variables and some internal motives remain as the major determinants of Facebook use, and friends' feedback (post reactions, comments, and likes) on Facebook cannot significantly predict the user's subsequent postings. Thus, reinforcement has a weak motivational effect on users' future behaviors in an online social networking environment.

Few limitations were observed in this study. First, the small number of subjects who were selected conveniently may not be representative of the intended population to which the results of this study is to be generalized. Second, measurement errors that have been committed in the observations of behavioral variables, which could have been minimized in controlled environments, may have exceeded the allowable precision levels and reduced the validity of results of this study. Third, some statistical assumptions for normality of random variables (number of reactions, number of posts, and perception scores) were not met due to limited sample size and

skewed data distributions, for which statistical results may not accurately provide true estimates of parameters that define the theoretical model of motivation and behavior.

It is recommended that further studies on the effects of certain external motivators on Facebook use be conducted to elucidate the role of these factors on subsequent social behaviors. These future studies should implement, if possible, a more controlled environment, and additional socio-demographic variables be included in the regression models to increase the models' explanatory effects on the identified social behavioral variables. Furthermore, selection of samples and measurements of random variables should be done with utmost precision and accuracy to satisfy certain statistical assumptions, such as normality and independence, in order to implement a more appropriate analytical procedure. Through all of these, the true explanatory effects of extrinsic motivators or reinforcement on social media use can be modelled with high level of predictability and confidence.

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