



AN EXAMINATION OF FACEBOOK *LIKES* AS A FUNCTION OF GENDER, AGE, RELATIONSHIP STATUS, AND TYPOLOGY OF POST

¹Martin S. Fiebert, ²Brianna Cole, ²Leana Farris, ²Bryan Vu & ²Margo Kasdan

¹Department of Psychology, California State University, Long Beach

²California State University, San Francisco

ABSTRACT

Facebook *likes* as a function of gender, age, relationship status, and typology were collected and tabulated over a four-month period. An individual's posts that received the greatest number of *likes* were obtained from 100 Facebook users-- 50 men and 50 women; half younger than thirty, half over fifty; 43 single, 57 in a relationship. They were classified into one of four typological categories devised in previous research; viz., Scrap Booker, Social Butterfly, Activist, and Entrepreneur. The dependent variable, "*likes* received," was calculated as a percentage of the number of an individual's Facebook friends. Results from an analysis of variance and subsequent t-tests revealed significant differences for the variables of age, gender and typology. Specifically, women and older subjects received proportionately more *likes* than their opposites. No significant difference was found between single individuals and those in a relationship in terms of *likes* received. The most common type of post was the Scrap Booker.

Key Words: Facebook, Social Networking, Facebook Typology, Gender differences.

INTRODUCTION

The on-line social network site Facebook (FB) provides a rich arena for social science research (Wilson, Gosling & Graham, 2012). Approximately 71% of all Internet users -- more than one billion individuals -- have FB accounts (Pew Research, 2013), and more than 655 million of them use their accounts daily (Tifferet & Vilnai-Yavetz, 2014). The Facebook Research Group (FBRG) at California State University, Long Beach developed a 5-category typology of FB users (Fiebert, 2013; Dorethy, Fiebert & Warren, 2014); examined their stability over time (Stahl & Fiebert, 2013), along with similarities and differences among older and younger age cohorts (Luevano, Fiebert & Warren, 2013). The FBRG studied birthday greetings on FB as a function of gender, and relationship status (Fiebert, Tilmont, & Warren, 2013) photo sharing on FB as a means of online impression management (Dorethy, et al., 2014), and the effects of age and gender on the Life Span of a FB post (Fiebert, Aliee & Yassami, 2014).

The present investigation examines *likes* as a function of typology, gender, age and relationship status. FB *likes* are an important dependent variable for study because they are a basic response to a post. *Likes* function to inform the sender that his/her post has, at the least, been noted, rather than ignored or simply observed. The posts were classified into one of four typological categories defined in previous research; viz., Scrap Booker, Social Butterfly, Activist, and Entrepreneur. Previous research suggested that Scrap Booker posts would garner the most *likes*, postulating that they put forward relatively "safe" material on self and family members, and therefore are easy to respond to.

Another previous study indicated that women are more active on FB than men (Thompson & Lougheed, 2012) and engage in more interpersonal communications (McAndrew & Jeong, 2012; Junco 2013). Consequently we predicted that women's FB posts would receive more *likes* than those of men. Similarly, because young people are more active than older ones and have significantly more FB friends -- on average three times more, 300 vs. 75 (Smith, 2014), we predicted that the posts of younger subjects would receive more *likes* than those of older ones. An earlier study found that individuals in a relationship received significantly more birthday greetings than single ones; therefore, once again, we predicted that FB users in a relationship would receive more *likes* than single ones.

METHOD

Participants

Participants were randomly selected from a convenience sample of students in an undergraduate psychology course along with FBRG faculty advisers. Data was collected from 100 subjects, 50 men, 50 women, 25 of each between the ages of 18 and 30, and 25 of each above the age of 50, of whom 43 were single and 57 in a relationship -- dating, engaged or married.

Procedures

During a four-month period, every FB post was reviewed. Those that received *likes* were noted and assigned to a typological category: Scrap Booker -- archival and current photographs of self, family and friends; Social Butterfly -- information and photos of current life events; Activist -- political, cultural, societal issues; Entrepreneur -- business or professional activity. To ensure that the raw number of *likes* would not simply be a function of the overall number of FB friends, the number of *likes* was divided by the total of a subject's friends to produce a percentage.

RESULTS

In terms of popularity of response, the number of *likes* varied from a low of 3 to a high of 370 (M=50.81, SD=53.65). Subjects' friends ranged from a low of 46 to a high of 4820 (M=539.40, SD=725.76). The percentage of

likes ranged from .02 to .75 ($M=.13$, $SD=.10$).

The typology that garnered the most *likes* was the Scrap Booker: 73 of the 100 ($F=41$, $M=32$); 20 in the Social Butterfly category ($F=7$, $M=13$); 6 in the Activist category ($F=1$, $M=5$); and one in the Entrepreneur Category ($F=1$). Analysis revealed that the majority of Scrap Booker photos depicted one individual ($n=28$). Somewhat smaller numbers included either one other -- a partner, child, or pet ($n=16$), or a group ($n=14$).

To test the predictions regarding gender and age, a two-way ANOVA was performed, which revealed highly significant differences for both variables [$F(2, 96)=4.93$, $p<.003$]. Furthermore t-tests of the differences between the percentage of friends liking posts for men and women revealed that women received significantly more *likes* than men: $t=2.85$, $p<.006$.

In general, more friends meant more *likes*; therefore, since younger subjects have more friends they received more overall *likes* than older subjects. However when we calculated the *likes* as a percentage of the number of friends we found that older subjects received a significantly greater percentage of friends' *likes* than younger ones $t=2.48$, $p<.015$.

No significant differences were found between the percentage of *likes* received by single individuals ($M=.132$, $SD=.120$) compared to those in a relationship ($M=.133$, $SD=.081$) $t=-.027$, $p<.980$.

DISCUSSION

The finding that the Scrap Booker received the largest number of *likes* is consistent with previous research that examined more than 2200 photo posts from 227 subjects, of which the modal response was that of the Scrap Booker constituting slightly less than half of the total posts (Dorethy, Fiebert, & Warren, 2014).

Similarly, the prediction that women's posts would receive significantly more *likes* was confirmed, consistent as it is with previous research showing that women spend more time on FB, share feelings, personal stories and concerns, discuss intimate issues, and consistently respond to posts (McAndrew, & Jeong, 2012).

Younger FB users have more friends than older ones. However, subjects aged 50 or older received a larger percentage of *likes* than subjects under 30, a finding that is both significant and interpretable. One reason for these numbers may lie in the differential use of FB by people depending on their age: younger people have a large number of but a looser connection with their contacts. Older users appear to use FB to maintain more regular contact with family members and valued friends and acquaintances. As a consequence these relationships may make them and their cohort more attentive and responsive to posts, to which they would be inclined to select and elicit a *like*.

The prediction that individuals in a relationship would receive more *likes* than single ones was not confirmed, as the percentage of *likes* received by both groups in this data set was almost identical, indicating that relationship status is not associated with the dependent variable.

Pressing the *like button* elicits an actual, if small, connection by showing the sender that he/she has had a positive effect. It is interesting to note that one tech company involved in electronic connectivity, called Ambient Devices, has designed, among other devices that they call "enchanted objects," a "jacket that gives you a hug every time someone *likes your Facebook post*." [My italics] (Halpern, 2014). Interestingly, by choosing to correlate a *like* with a hug, the designers seem to have decided that the physical equivalent of the *like* is not an impersonal or formal handshake, nor an intimate and physical kiss; they chose a mere acknowledgement one that neither engages nor requires further interaction -- just a friendly hug.

Further research in this area might include: 1) a wider sample of subjects; 2) a longer time period of examination; 3) an examination of the most selected posts in the Social Butterfly, Activist and Entrepreneurial categories in an individual's profile; and 4) the way in which FB *likes* in particular may be impacting the wider culture.

ACKNOWLEDGEMENT

The authors wish to thank Professor Christopher Warren for his assistance in methodological and statistical analysis.

REFERENCES

- Dorethy, M.D., Fiebert, M.S., & Warren, C.R. (2014). Examining social networking site behaviors: Photo sharing and impression management on Facebook. *International Review of Social Sciences and Humanities*, 6(2), 111-116.
- Fiebert, M.S. (2013). The origins and development of a typology of Facebook users. *International Review of Social Sciences and Humanities*, 5(2), 115-116.
- Fiebert, M.S., Aliee, A., & Yassami, H. (2014). The life span of a Facebook post: age & gender effects. *International Review of Social Sciences and Humanities*, 7(2), 140-143.
- Fiebert, M., Tilmont, L., & Warren, C. (2013). It's your birthday! Greetings as a function of gender and relationship status on Facebook. *International Review of Social Sciences and Humanities*, 4(2), 206-208.
- Halpern, S. (2014). The creepy new wave of the internet. *New York Review of Books*, 61(18), 22-24.
- Junco, R. (2013). Inequalities in Facebook use. *Computers in Human Behavior*, 29, 2328-2336.
- Luevano, L., Fiebert, M.S., & Warren, C.R. (2013). Examining the differences in social networking behaviors between an older and younger cohort. *Journal of Scholastic Inquiry: Behavioral Sciences and Humanities*, 1(1), 64-72.
- McAndrew, F., & Jeong, H. (2012). Who does what on Facebook? Age, sex, and relationship status as predictors of Facebook use. *Computers in Human Behavior*, 28, 2359-2365.
- Pew Research. (December 27, 2013). Social networking fact sheet. Retrieved from <http://www.pewinternet.org/fact-sheets/social-networking-fact-sheet/>.
- Smith, A. (February 3, 2014). Six new facts about Facebook. Retrieved from <http://www.pewrsr.ch/1dm5Nm>
- Stahl, M. & Fiebert, M.S. (2013.) Changes in Facebook behavior over time. *Global Journal of Computer Science and Technology*, 13(2), 1-4.
- Thompson, S.H., & Loughheed, E. (2012). Frazzled by Facebook. An exploratory study of gender differences in social network communication among undergraduate men and women. *College Student Journal*, 46(1), 88-98.

Tifferet, S., & Vilnai-Yavetz, I. (2014). Gender differences in Facebook self-presentation: An international randomized study. *Computers in Human Behavior*, 35, 388-399.

Wilson, R.E., Gosling, S.D., & Graham, L.T. (2012). A Review of Facebook Research in the Social Sciences, *Perspectives on Psychological Science*, 7(3), 203-220.