CYBERPSYCHOLOGY, BEHAVIOR, AND SOCIAL NETWORKING Volume 20, Number 10, 2017 
© Mary Ann Liebert, Inc. 
DOI: 10.1089/cyber.2017.0043

Personality Traits, Motivations, and Emotional Consequences of Social Media Usage

Jhih-Syuan Lin, PhD, Yen-I Lee, MA, Yan Jin, PhD, and Bob Gilbreath, MBA<sup>3</sup>

#### **Abstract**

This study explores social media users' personality traits and motivations for the usage of two different social media platforms, Facebook and Pinterest, as well as how the varied uses impact users' negative emotional experiences. The findings suggest that the intensity of social media usage is positively related to negative emotions. For Facebook users, socialization, entertainment, and information seeking motivations significantly influence their platform use intensity and, subsequently, lead to negative emotions. Self-status seeking also has a direct effect on Facebook users' negative emotions. For Pinterest users, socialization is not a significant motivation for usage of that platform. However, entertainment, information seeking, and self-status seeking significantly predict their platform use intensity, which subsequently lead to negative emotions. Similarly, all four motivations for Facebook and Pinterest uses are influenced by users' personality traits: extraversion and openness. Yet, openness has a greater impact on using Pinterest than Facebook in terms of fulfilling socialization needs. Neuroticism has a positive impact on socialization and information seeking motives for use of both platforms, while conscientiousness and agreeableness have a negative influence on fulfilling self-status seeking needs. In addition, agreeable social networking site users are less likely to use Facebook than Pinterest for fulfilling self-status related gratifications, while they are likely to use Pinterest instead of Facebook for entertainment and information needs. Implications of the findings and suggestions for future research are discussed.

**Keywords:** social networking sites, Big Five personality traits, motivations, negative emotions, Facebook, Pinterest

# Introduction

s of 2016, NEARLY 69 percent of U.S. adults use social A media. Facebook is the most popular platform among Internet users (79 percent), followed by other social media platforms, including Instagram (32 percent), Pinterest (31 percent), LinkedIn (29 percent), and Twitter (24 percent).<sup>2</sup> Pinterest, in particular, is on the rise fast and steady, as identified by a recent industry report as "a marketing game-changer."<sup>3</sup> Although Facebook continues to have the most engaged users based on frequency of platform usage, the proportion of daily Pinterest users rose from 17 percent in September 2014<sup>4</sup> to 25 percent in April 2016.<sup>2</sup> Also, the number of male users of Pinterest are rising significantly.<sup>3</sup> These industry reports provide a clear picture of the trend and future development of the social networking sites (SNSs). However, the underlying mechanism for how and why Internet users choose to engage in certain SNSs and the consequences of SNS uses remain understudied. For instance, research found that Pinterest usage is associated with taking action and replacing other media or online activities,<sup>3</sup> but what factors contribute to the observed usage and what predictions can be reasonably made are questions that have yet to be examined. Therefore, to advance knowledge about SNS usage to the next level, this study focuses on users' personality traits and motivations for the usage of two of the SNSs, Facebook and Pinterest, and considers, as well, how usage negatively impacts their emotional states.

Although extant research has documented the benefits of SNS usage, <sup>5-7</sup> some researchers have found evidence that the impact of individuals' login frequency or active time spent on Facebook diminishes their self-esteem and well-being. <sup>8-11</sup> Sagioglou and Greitemeyer<sup>12</sup> explained that the lowered mood following individuals' Facebook usage is mediated by the feeling of wasting time and the perception of Facebook activity as being less meaningful. Chou and Edge<sup>13</sup> found that the more hours individuals spend on Facebook each week, the

<sup>&</sup>lt;sup>1</sup>Department of Advertising, College of Communication, National Chengchi University, Taipei City, Taiwan.

<sup>&</sup>lt;sup>2</sup>Department of Advertising and Public Relations, Grady College of Journalism and Mass Communication, University of Georgia, Athens, Georgia.

<sup>&</sup>lt;sup>3</sup>Ahalogy, Cincinnati, Ohio.

more likely they consider others as being happier due to a correspondence bias. Aligned with that logic, Steer et al. 11 suggested the time individuals spend on Facebook is positively associated with social comparison activities that are likely to provoke or increase negative emotions and cognitions and lead to depressive symptoms.

Wise et al. 14 also examined individuals' time spent on Facebook and how different uses of Facebook influence their emotional responses by analyzing physiological signals. Their findings noted that individuals are likely to spend more time on social browsing than on social searching: with navigating of social browsing content being less likely to elicit pleasant emotions than navigating of social searching content. Because individuals are motivated to maintain a positive self-presentation on social media, especially for those high on narcissism and low on self-esteem, <sup>15</sup> consistent exposure to positive content posted by others may result in distorted perceptions<sup>13</sup> that may induce envy, lead to depression, and reduce well-being over time. <sup>11,16,17</sup> Fox and Moreland<sup>18</sup> investigated how SNS uses could lead to negative emotional experiences. Their focus group findings suggested that individuals may see inappropriate or repetitive content on Facebook as shocking or annoying, they may feel tethered to stay connected due to the constant accessibility to Facebook, they may feel lack of control and experience privacy frustrations due to Facebook's affordances, they may engage in different manners of social comparison and they may feel jealousy or dissatisfaction, and more.

Considering the importance of understanding individuals' emotional experiences of SNS usage, this study extends the scope of the literature by delving into the negative emotional consequences following the use of two different SNSs. Building on the findings of previous studies, this study posits that the greater the intensity (i.e., frequency and duration)<sup>19</sup> of individuals' Facebook or Pinterest usage, the more likely they will experience negative emotions as a result of such usage.

# H1: There is a positive relationship between the intensity of social media platform (Facebook vs. Pinterest) usage and negative emotions.

In an effort to further explore how different SNS uses are related to individuals' negative emotional experiences, this study builds on the theory of uses and gratifications (U&G)<sup>20</sup> and considers broad categories of individual motivations that go beyond the focus of existing literature. The theory of U&G postulates that individuals actively consume, participate, and engage with media to fulfill their needs and desires. <sup>21,22</sup> This approach has been applied to examine individuals' goals related to their social media usage. <sup>23–25</sup> Park et al. <sup>26</sup> revealed that individuals participate in Facebook groups for socializing, entertainment, self-status seeking, and information seeking. Zhang et al.'s<sup>27</sup> study showed that individuals use Facebook to seek gratifications related to social surveillance, recognition, emotional support, entertainment, and network maintenance and extension; such gratifications have an impact on perceived importance of Facebook and Facebook usage patterns. While Facebook has received the most research attention, some studies have been conducted to explore why and how individuals use image-driven social media, such as Pinterest. Mull and Lee<sup>28</sup> found that fashion, creative projects, entertainment, virtual exploration, and organization emerged as primary

motivations for college students to use Pinterest. Sashittal and Jassawalla<sup>29</sup> discovered that college students are likely to seek authentic experiences and enrichment through their use of Pinterest.

Considering the strength of the U&G approach for exploring various motivations of different SNS usage<sup>22</sup> and the importance to advance current understanding of negative emotions that result from such usage, this study compares the needs that drive individuals' use of different SNSs and how those needs may trigger different negative emotional experiences.

RQ1: What, if any, are the different motivations for individuals to use Facebook and Pinterest?

RQ2: How do individuals' varied motivations for using Facebook and Pinterest influence the intensity of their platform usage and subsequently influence their negative emotional experiences?

Beyond examining how the U&G approach can help understand individuals' SNS usage, prior research has also explored the relationships between personality traits and different gratifications obtained.<sup>27,30</sup> One means of categorizing personality traits is in the context of the Five-Factor Model that has been widely used and extensively researched. 31,32 The "Big Five" consists of five broad factors that include extraversion (i.e., an individual's tendency to be sociable, gregarious, assertive, talkative, and active), agreeableness (i.e., an individual's tendency to be kind, considerate, likeable, cooperative, forgiving, and tolerant), conscientiousness (i.e., the degree to which an individual is careful, responsible, organized, and planful), neuroticism (i.e., an individual's tendency to be anxious, self-conscious, emotional, and insecure), and openness (i.e., the extent to which an individual is imaginative, cultured, intelligent, and artistically sensitive). 33–35

Extant research has found that extraversion, neuroticism, and openness are positively related to frequency of SNS use. 30,36 Specifically, Ross et al. 37 found that extraverted individuals are likely to belong to more Facebook groups than introverted individuals. Neuroticism is related to what information is shared on Facebook and, therefore, influences the activities individuals engage in on Facebook. Their study also found that openness is related to individuals' sociability on Facebook. Gosling et al.'s<sup>38</sup> studies found that extraversion predicts behaviors related to maintaining an up-to-date online presence, keeping social connections with others, and engagement of Facebook usage. Agreeableness is positively correlated to the frequency of page viewing, while conscientiousness is negatively correlated with time spent on Facebook. Moreover, openness is positively related to the tendency of engaging in a wide range of activities. However, they did not find neuroticism to be related to any of the Facebook behaviors examined in their studies.

Seidman<sup>39</sup> further examined the impact of personality traits on Facebook use and motivations. She found that extraverted and agreeable individuals tend to use Facebook as a way to actively supplement their offline relationships, while neurotic individuals are likely to use Facebook as a passive way to seek information about others. In addition, high agreeableness and neuroticism are predictive of belongingness-related behaviors and motivations, while low conscientiousness and high

neuroticism are predictive of self-presentational behaviors and motivations. Extraversion, agreeableness, and neuroticism are positively related to actual self-presentation. While neuroticism is positively related to hidden and ideal self-presentation, conscientiousness is negatively associated with hidden and ideal self-presentation. Adding to this line of research, Wang<sup>40</sup> confirmed positive relationships between extraversion and self-disclosure on Facebook and between agreeableness and self-related sharing on Facebook. However, the role of openness in Facebook use remains unclear as SNS use has become ubiquitous. <sup>39,40</sup> Because personality traits may serve as antecedents that reinforce motivations related to different SNS usage and ultimately trigger the intensity of usage, <sup>41,42</sup> this study further examines and compares how personality traits affect motivations for Facebook and Pinterest usage.

RQ3: How do individuals' personality traits influence varied motivations for using Facebook and Pinterest, respectively?

#### Method

## Participants and procedure

To test the proposed hypothesis and research questions, an online survey was conducted using a nationally representative sample of U.S. adults recruited through the Qualtrics Panel. A total of 940 participants (50 percent,  $M_{\rm age} = 37$ ) comprised the sample, including Anglo-Americans (82.4 percent), Hispanics (5.6 percent), African Americans (5.1 percent), Asian (4.4 percent), and others (1.8 percent). The majority (55.9 percent, n = 525) reported a \$30,001–\$90,000 annual household income range and about 62.4 percent (n = 699) of the participants attended college. Participants were

first instructed to fill out questions pertaining to personality traits. Next, they were asked to select specific SNSs that they had been actively using. While 100 percent of the participants were Facebook users, 72.02 percent of them were also Pinterest users. Based on participants' current platform use, they were then randomly assigned to answer Facebook- or Pinterest-specific questions (470 participants in each group), including the frequency and duration of platform usage, motivations, and negative emotional experiences of such usage.

#### Measures

Participants' personalities were measured using the 44-item Big Five Inventory<sup>31,43</sup> on a seven-point scale (1=strongly disagree; 7=strongly agree). Each item was then divided into five personality dimensions: extraversion, agreeableness, conscientiousness, neuroticism, and openness. A total of 17 items were used to measure participants' motivations for using Facebook or Pinterest, including items adapted from Park et al.'s26 study and additional items created for the current context (Table 1). Four types of motivation were assessed: socialization ( $\alpha = 0.90$ ), entertainment ( $\alpha = 0.80$ ), self-status seeking ( $\alpha = 0.88$ ), and information seeking ( $\alpha = 0.84$ ). All items were measured on a seven-point scale (1=strongly disagree; 7 = strongly agree). Participants also reported the frequency and duration of their weekly use of Facebook or Pinterest on a seven-point scale. Following Paek et al.'s<sup>19</sup> procedure, an index score was calculated by multiplying the frequency and duration to determine the intensity of their SNS usage. The correlations of personality traits, motivations, and SNS use intensity are reported in Table 2. Eight types of negative emotions<sup>44</sup> were used to measure how participants feel when they use Facebook or Pinterest (Table 3). The items were assessed using a seven-point scale (1 = never; 7 = all the

TABLE 1. MOTIVATIONS OF FACEBOOK AND PINTEREST USE

	Face	book	Pint		
Motivations	M	SD	M	SD	t
Socialization	4.92	1.29	3.08	1.67	18.87***
To get peer support from others	3.81	2.08	2.83	1.86	7.64***
To meet interesting people	4.13	2.09	2.95	1.95	8.95***
To feel like I belong to a community	4.00	2.10	3.25	1.96	5.61***
To talk about something with others	4.19	2.09	3.36	1.96	6.27***
To stay in touch with people I know	5.00	1.85	3.01	1.96	16.04***
Entertainment	5.20	1.26	4.50	1.49	7.84***
Because it is entertaining	5.32	1.63	5.24	1.66	0.77
Because it is funny	4.74	1.85	3.76	1.93	7.91***
Because it is exciting	4.67	1.78	4.50	1.83	1.48
Self-status seeking	3.41	1.85	2.33	1.54	9.71***
Because I feel peer pressure to participate	3.07	2.10	2.12	1.61	7.80***
Because it makes myself look cool	3.44	2.20	2.37	1.73	8.31***
To develop my career through the participation	3.43	2.17	2.50	1.82	7.07***
Information seeking	5.11	1.19	5.00	1.14	1.50
To get information about events	4.24	2.08	3.37	2.02	6.45***
To learn about what's going on	4.71	1.89	3.90	2.03	6.39***
To get useful information about product/services	4.14	2.08	5.02	1.78	-7.02***
To look for ideas	4.50	1.97	6.13	1.25	-15.21***
To look for inspiration	4.51	1.95	5.81	1.56	-10.97***
To plan for new projects	3.92	2.09	5.74	1.48	-15.41***

<sup>\*\*\*</sup>p < 0.001.

Table 2. Descriptive Statistics

		Correlations										
	Mean (SD)	1	2	3	4	5	6	7	8	9	10	
1. (P1) Extraversion	4.15 (0.94)	1.00										
2. (P2) Agreeableness	5.06 (0.86)	0.05	1.00									
3. (P3) Conscientiousness	4.99 (0.92)	0.23**	0.53**	1.00								
4. (P4) Neuroticism	3.76 (1.15)	-0.41**	-0.41**	-0.48**	1.00							
5. (P5) Openness	4.54 (0.72)	0.29**	0.03	0.14**	-0.06	1.00						
6. (M1) Socialization	4.01 (1.75)	0.28**	-0.10**	-0.06	-0.04	0.29**	1.00					
7. (M2) Entertainment	4.86 (1.42)	0.23**	-0.00	-0.03	0.01	0.31**	0.62**	1.00				
8. (M3) Self-status seeking	2.87 (1.79)	0.20**	-0.32**	-0.24**	0.06	0.30**	0.69**	0.48**	1.00			
9. (M4) Information seeking	5.05 (1.17)	0.21**	0.06	0.08*	0.01	0.33**	0.52**	0.60**	0.45**	1.00		
10. Intensity of usage	22.53 (16.29)	0.14**	-0.09**	-0.03	0.08*	0.21**	0.54**	0.46**	0.37**	0.35**	1.00	

p < 0.05; \*\*p < 0.01.

time) and computed to create an index that represents individuals' overall negative emotional consequence of using Facebook ( $\alpha$ =0.96) or Pinterest ( $\alpha$ =0.94).

#### Results

Two regression models were first performed to understand the relationship between individuals' SNS use intensity and negative emotions (Facebook:  $R^2 = 0.06$ , F = 10.47, p < 0.001; Pinterest:  $R^2 = 0.15$ , F = 27.50, p < 0.001). Gender and age were controlled due to their effects on SNS usage as documented in the literature. Results indicated that males were more likely to experience negative emotions than females when using Facebook ( $\beta = -0.10$ , p < 0.05;  $M_{male} =$ 2.59,  $SD_{male} = 1.60$ ;  $M_{female} = 2.27$ ,  $SD_{female} = 1.30$ ) and Pinterest ( $\beta = -0.27$ , p < 0.001;  $M_{male} = 1.79$ ,  $SD_{male} = 1.44$ ;  $M_{female} = 1.28$ ,  $SD_{female} = 0.48$ ). In addition, there was a significant negative relationship between age and negative emotions across platforms (Facebook:  $\beta = -0.12$ , p < 0.01; Pinterest:  $\beta = -0.16$ , p < 0.001). It is important to note that, while the mean scores of negative emotions were relatively low, envy emerged as the most prominent negative emotion (see Table 3 for details). The regression results further indicated that the more participants used the SNS, the stronger their negative emotions (Facebook:  $\beta = 0.21$ , p < 0.001; Pinterest:  $\beta = 0.22$ , p < 0.001). However, Pinterest users were

significantly less likely to experience negative emotions than Facebook users ( $M_{Facebook} = 2.50$ ,  $SD_{Facebook} = 1.52$ ;  $M_{Pinterest} = 1.44$ ,  $SD_{Pinterest} = 0.92$ ; t = 12.73, p < 0.001). Thus, H1 was supported.

Independent sample *t*-tests were conducted to understand participants' varied motivations for SNS usage (Table 1). It is important to note that, while participants were more likely to use Facebook (vs. Pinterest) to gratify their needs related to socialization ( $M_{Facebook} = 4.92$ ,  $SD_{Facebook} = 1.29$ ;  $M_{Pinterest} = 3.08$ ,  $SD_{Pinterest} = 1.67$ ; t = 18.87, p < 0.001), entertainment ( $M_{Facebook} = 5.20$ ,  $SD_{Facebook} = 1.26$ ;  $M_{Pinterest} = 4.50$ ,  $SD_{Pinterest} = 1.49$ ; t = 7.87, p < 0.001), and self-status seeking ( $M_{Facebook} = 3.41$ ,  $SD_{Facebook} = 1.85$ ;  $M_{Pinterest} = 2.33$ ,  $SD_{Pinterest} = 1.54$ ; t = 9.71, p < 0.001), they used the two platforms for different informational needs. That is, while Facebook uses were more focused on seeking information about events and updates, Pinterest uses were more focused on seeking information about products or services, new ideas, inspiration and new projects.

Next, a hierarchical regression model ( $R^2$ =0.42, F=74.14, p<0.001) was performed to examine the relationship between SNS use intensity and the motivations identified in this study. Participants' gender (-1 = male, 1 = female) and age (centered) were controlled by entering data in the first step of the regression. Platform use intensity was then regressed onto types of SNSs (0=Facebook, 1=Pinterest),

Table 3. Native Emotional Consequences of Facebook and Pinterest Use

	Face	book	Pint			
Negative emotions	M	SD	M	SD	T	
Anger (frustrated, angry, and irritated)	2.05	1.74	1.35	1.02	7.52***	
Discontent (unfulfilled and discontented)	2.05	1.66	1.48	1.07	6.29***	
Worry (nervous, worries, and tense)	1.96	1.71	1.35	1.00	6.72***	
Sadness (depressed, sad, and miserable)	2.05	1.72	1.41	1.03	6.97***	
Fear (scared, afraid, and panicky)	1.89	1.68	1.29	0.96	6.65***	
Shame (embarrassed, ashamed, and humiliated)	1.89	1.65	1.29	0.94	6.88***	
Envy (envious and jealous)	2.56	1.92	1.94	1.52	5.48***	
Loneliness (lonely and homesick)	2.27	1.86	1.44	1.14	8.27***	
Overall	2.50	1.53	1.44	0.92	12.84***	

<sup>\*\*\*</sup>p<0.001.

M, motivation; P, personality trait.

TABLE 4. THE EFFECT OF SOCIAL MEDIA PLATFORMS AND TYPES OF MOTIVATION ON INTENSITY OF USAGE

Model	β	SE	t	$R^2$	F	$\Delta R^2$	F change
1							
Gender	-0.16***	0.52	-4.86	0.06	30.25***		
Age	-0.18***	0.52	-5.51				
2							
Gender	0.07*	0.48	2.31	0.41	91.34***	0.35	108.72***
Age	-0.04	0.44	-1.52				
Platforms (Facebook or Pinterest)	-0.37***	1.08	-11.29				
Socialization	0.17***	0.75	3.67				
Entertainment	0.18***	0.58	5.13				
Self-status seeking	0.02	0.60	0.50				
Information seeking	0.13***	0.57	3.69				
3							
Gender	0.06*	0.48	2.17	0.43	61.51***	0.02	5.91***
Age	-0.04	0.44	-1.33				
Platforms (Facebook or Pinterest)	-0.35***	1.09	-10.58				
Socialization	0.40***	1.15	5.66				
Entertainment	0.18***	0.86	3.42				
Self-status seeking	-0.05	0.72	-1.14				
Information seeking	0.10*	0.77	2.02				
Pl×socialization	-0.31***	1.58	-4.44				
Pl×entertainment	0.002	1.17	0.03				
Pl×self-status seeking	0.13**	1.25	2.66				
Pl×information seeking	0.05	1.13	0.93				

<sup>\*\*\*</sup>p < 0.001; \*\*p < 0.01; \*p < 0.05.

motivations (centered), and the cross-product variables (Table 4). Results suggest that Facebook users used the platform more intensely than Pinterest users did ( $\beta$ =-0.35, p<0.001;  $M_{Facebook}$ =30.64,  $SD_{Facebook}$ =14.8;  $M_{Pinterest}$ =14.35,  $SD_{Pinterest}$ =13.27). Socialization ( $\beta$ =0.40, p<0.001), entertainment ( $\beta$ =0.18, p<0.001), and information seeking ( $\beta$ =0.10, p<0.05) significantly predicted participants' SNS use intensity, but not their self-status seeking. The plat-

form×socialization interaction ( $\beta$ =-0.31, p<0.001) further revealed that socialization significantly predicted Facebook users' use intensity ( $R^2$ =0.23, F=35.46, p<0.001,  $\beta$ =0.32, p<0.001), but not Pinterest users' ( $R^2$ =0.21, F=30.46, p<0.001,  $\beta$ =-0.08, p=0.28). In addition, the platform×self-status seeking interaction ( $\beta$ =0.13, p<0.01) suggests that status seeking significantly predicted Pinterest use intensity ( $\beta$ =0.16, p<0.01), but not Facebook use intensity ( $\beta$ =-0.07, p=0.17).

Table 5. Standardized Direct and Indirect Effects of Motivations on Negative Emotions

Direct effect	Indirect effect	Mediation	
Facebook			
Socialization $\rightarrow$ NE 0.008 (SE: 0.06, CI: -0.118 to 0.120)	Socialization $\rightarrow$ Intensity $\rightarrow$ NE 0.038**(SE: 0.016, CI: 0.013 to 0.077)	Full	
Entertainment $\rightarrow$ NE $-0.026$ (SE: 0.045, CI: $-0.116$ to 0.061)	Entertainment $\rightarrow$ Intensity $\rightarrow$ NE .021**(SE: 0.012, CI: 0.004 to 0.050)	Full	
Status seeking $\rightarrow$ NE 0.314*** (SE: 0.054, CI: 0.198 to 0.409)	Status seeking $\rightarrow$ Intensity $\rightarrow$ NE $-0.009$ (SE: 0.008, CI: $-0.028$ to 0.002)	No	
Information seeking → NE 0.034 (SE: 0.058, CI: -0.076 to 0.152)	Information seeking $\rightarrow$ Intensity $\rightarrow$ NE 0.014* (SE: 0.010, CI: 0.001 to 0.041)	Full	
Pinterest			
Socialization $\rightarrow$ NE -0.017 (SE: 0.058, CI: -0.127 to 0.105)	Socialization $\rightarrow$ Intensity $\rightarrow$ NE -0.011 (SE: 0.013, CI: -0.044 to 0.010)	No	
Entertainment $\rightarrow$ NE 0.035 (SE: 0.037, CI: -0.043 to 0.104)	Entertainment $\rightarrow$ Intensity $\rightarrow$ NE 0.037* (SE: 0.017, CI: 0.008 to 0.076)	Full	
Status seeking → NE 0.336*** (SE: 0.067, CI: 0.190 to 0.455)	Status seeking $\rightarrow$ Intensity $\rightarrow$ NE 0.024* (SE: 0.015, CI: 0.003 to 0.062)	Partial	
Information seeking $\rightarrow$ NE $-0.051$ (SE: 0.055, CI: $-0.164$ to 0.047)	Information seeking $\rightarrow$ Intensity $\rightarrow$ NE 0.032** (SE: 0.015, CI: 0.009 to 0.070)	Full	

<sup>\*\*\*</sup> $p \le 0.001$ , \*\*p < 0.01, \*p < 0.05.

SE, standard error.

NE, negative emotions.

A mediation analysis using a bootstrap procedure (N=2,500samples) was then conducted to understand the influence of motivations on negative emotions (Table 5). The results suggest that the effects of Facebook users' socialization (indirect:  $\beta = 0.03$ , p < 0.005), entertainment (indirect:  $\beta = 0.02$ , p < 0.01), and information seeking (indirect:  $\beta = 0.01$ , p < 0.05) motivations on negative emotions were fully mediated by SNS use intensity. Status seeking only had a significant direct effect on Facebook users' negative emotions (direct:  $\beta = 0.31$ ,  $p \le 0.001$ ). However, neither the direct nor indirect effects of Pinterest users' socialization motivation on negative emotions were significant. Their entertainment (indirect:  $\beta = 0.04$ , p < 0.05) and information seeking (indirect:  $\beta = 0.03$ , p < 0.01) motives were fully mediated by Pinterest use intensity. The influence of status seeking (direct:  $\beta = 0.34$ , p < 0.001, indirect:  $\beta$  = 0.02, p < 0.05) on Pinterest users' negative emotions was partially mediated by use intensity.

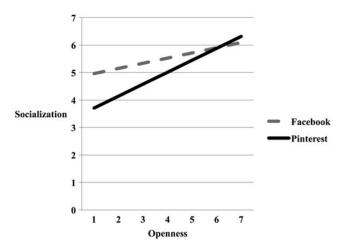
To delve into the influence of personality traits on motivations for using different platforms, four hierarchical regression models were conducted. As shown in Table 6, participants' gender and age were controlled by entering data in the first step of the regression models. The motivations were then regressed onto types of SNSs (0=Facebook, 1=Pinterest), personality traits (centered), and the cross-product variables. Overall, extraversion and openness consistently predicted all four motivations for SNS usage, while different patterns emerged for different motivations for using Facebook and Pinterest.

First, extraversion ( $\beta$ =0.16, p<0.001), neuroticism ( $\beta$ =0.10, p<0.05), and openness ( $\beta$ =0.11, p<0.01) had a significant positive influence on individuals' socialization motivation. In addition, the interaction effect between platform and openness ( $\beta$ =0.10, p<0.05) showed that the effect of openness was stronger for Pinterest usage ( $R^2$ =0.20, F=16.36, p<0.001,  $\beta$ =0.23, p<0.001) than for Facebook usage ( $R^2$ =0.13, F=9.54, p<0.001,  $\beta$ =0.18, p<0.001, Fig. 1). Second, extraversion ( $\beta$ =0.21, p<0.001) and openness ( $\beta$ =0.22, p<0.001) positively predicted individuals' entertainment motivation, while the platform×agreeableness interaction ( $\beta$ =0.13, p<0.05) suggested that only agreeableness significantly predicted Pinterest uses for gratifying entertainment-related needs (Facebook:  $R^2$ =0.15, F=12.03, p<0.001,  $\beta$ =0.03, p=0.64, Pinterest:  $R^2$ =0.14, F=10.09, p<0.001,  $\beta$ =0.21, p<0.001, Fig. 2).

TABLE 6. THE EFFECT OF SOCIAL MEDIA PLATFORMS AND PERSONALITY TRAITS ON MOTIVATIONS

	Socialization			Enter	tainme	ent	Self-sta	tus se	eking	Information seeking		
	β	SE	t	β	SE	t	β	SE	t	β	SE	t
Model 1												
Gender	-0.37***	0.05	-11.98	-0.14***	0.05	-4.28	-0.35***	0.05	-11.45	0.01	0.04	0.31
Age	-0.10***	0.05	-3.22	-0.11***	0.05	-3.28	-0.14***	0.06	-4.42	-0.01	0.04	-0.14
$R^2$		0.15			0.03			0.15			0.00	
F	:	32.14*	***		16.26	***		81.75*	***		0.06	
Model 2												
Gender	-0.16***	0.05	-5.29	-0.02	0.05	-0.59	-0.19***	0.06	-6.01	0.08*	0.04	2.41
Age	0.04	0.05	1.41	-0.03	0.05	-1.00	-0.01	0.05	-0.34	0.03	0.04	0.81
Platforms	-0.43***	0.10	-14.81	-0.19***	0.10	-5.55	-0.15***	0.11	-4.70	-0.05	0.08	-1.35
Extraversion	0.20***	0.05	6.47	0.20***	0.05	5.63	0.13***	0.06	4.07	0.18***	0.04	5.06
Agreeableness	0.03	0.06	0.77	0.11**	0.05	2.93	-0.19***	0.06	-5.59	0.07	0.05	1.91
Conscientiousness	-0.06	0.06	-1.91	-0.09*	0.05	-2.41	-0.17***	0.06	-4.81	0.01	0.05	0.13
Neuroticism	0.07*	0.06	2.21	0.11**	0.06	2.82	-0.00	0.06	06	0.12**	0.05	3.09
Openness	0.17***	0.05	6.11	0.24***	0.05	7.47	0.23***	0.05	7.82	0.30***	0.04	8.99
$R^2$		0.38			0.18			0.31			0.15	
F		71.27	***		24.73	***		51.58	***		19.39	***
$\Delta R^2$		0.23			0.14			0.16			0.14	
F change		57.59*	***		26.65	***		35.43	***		25.83	***
Model 3												
Gender	-0.16***	0.05	-5.50	-0.02	0.05	-0.62	-0.19***	0.06	-5.95	0.08*	0.04	2.34
Age	0.04	0.05	1.46	-0.04	0.05	-1.16	-0.03	0.05	-0.96	0.02	0.04	0.56
Platforms	-0.43***	0.10	-14.75	-0.19***	0.10	-5.50	-0.14***	0.11	-4.64	-0.04	0.08	-1.26
Extraversion	0.16***	0.08	3.64	0.21***	0.07	3.95	0.11*	0.08	2.35	0.16**	0.06	3.03
Agreeableness	0.01	0.08	0.25	0.02	0.08	0.30	-0.28***	0.09	-5.57	-0.01	0.07	-0.23
Conscientiousness	-0.01	0.09	-0.17	-0.04	0.08	-0.70		0.09	-3.31	0.08	0.07	1.47
Neuroticism	0.10*	0.09	2.11	0.08	0.08	1.45	0.04	0.09	.72	0.14*	0.07	2.45
Openness	0.11**	0.07	2.76	0.22***	0.06	4.80	0.27***	0.07	6.55	0.30***	0.05	6.42
Pl×extraversion	0.05	0.11	1.17	-0.01	0.10	-0.26	0.02	0.11	.43	0.02	0.08	0.47
Pl×agreeableness	0.01	0.11	0.30	0.13*	0.11	2.41	0.11*	0.12	2.30	0.11*	0.09	2.05
P1×conscientiousness	-0.08	0.12		-0.07	0.11	-1.20	0.02	0.12		-0.10	0.09	-1.76
Pl×neuroticism	-0.03	0.12	-0.59	0.05	0.11		-0.06	0.12	-1.07	-0.02	0.09	-0.36
Pl×openness	0.10*	0.10	2.55	0.04	0.09		-0.06	0.10	-1.60	0.00	0.08	0.05
$R^{2}$		0.39			0.18			0.32			0.15	
F		45.15	***		15.82	***		33.48*	***		12.37	***
$\Delta R^2$		0.01			0.01			0.01			0.01	
F change		2.45	k		1.48			3.43*	**		1.11	

<sup>\*\*\*</sup>p < 0.001; \*\*p < 0.01; \*p < 0.05.

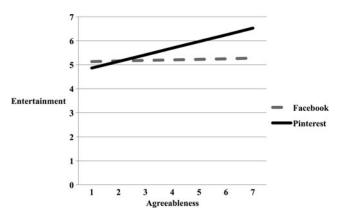


**FIG. 1.** Socialization (motivation) as a function of social media platforms and openness (personality).

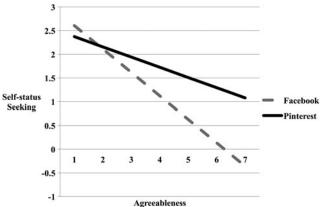
Third, extraversion ( $\beta = 0.11$ , p < 0.05) and openness  $(\beta = 0.27, p < 0.001)$  were positively related to individuals' self-status seeking motivation, whereas agreeableness  $(\beta = -0.28, p < 0.001)$  and conscientiousness  $(\beta = -0.17,$ p < 0.001) were negatively related to such motivations. The interaction effect between platform and agreeableness was significant ( $\beta$ =0.11, p<0.05), indicating that the negative effect of agreeableness on self-status seeking was stronger for Facebook ( $R^2 = 0.29$ , F = 27.07, p < 0.001,  $\beta = -0.27$ , p < 0.001) usage than for Pinterest usage ( $R^2 = 0.24$ , F = 20.72, p < 0.001,  $\beta = -0.10$ , p < 0.05, Fig. 3). Fourth, extraversion  $(\beta = 0.16, p < 0.01)$ , neuroticism  $(\beta = 0.14, p < 0.05)$ , and openness ( $\beta = 0.30$ , p < 0.001) had a positive effect on individuals' information seeking motivation, while the platform × agreeableness ( $\beta$  = 0.11, p < 0.05) further indicated that the effect of agreeableness on such motivation was significant only for Pinterest users (Facebook:  $R^2 = 0.15$ ,  $F = 11.50, p < 0.001, \beta = 0.002, p = 0.98$ , Pinterest:  $R^2 = 0.16$ , F = 12.40, p < 0.001,  $\beta = 0.15$ , p < 0.01, Fig. 4).

### **Discussion and Conclusions**

Considering that Internet users engage with a diverse array of social media platforms daily,<sup>2</sup> this study provides



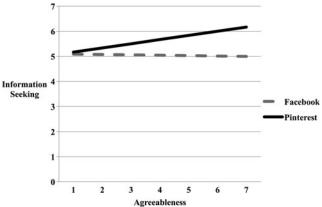
**FIG. 2.** Entertainment (motivation) as a function of social media platforms and agreeableness (personality).



**FIG. 3.** Self-status seeking (motivation) as a function of social media platforms and agreeableness (personality).

evidence for several as yet unstudied relationships among personality and motivational antecedents, and emotional consequences of different SNS usage. In line with the literature, <sup>11,13</sup> this study reveals that frequent SNS users were more likely to experience negative emotions, even though the magnitude of such emotions was relatively low. They were most likely to feel envious and jealous, followed by feelings of loneliness, anger, and depression. It is important to note that Pinterest users rated lower than Facebook users on their negative emotional states as a consequence of SNS usage, which may be due to the nature and different uses of the platforms. <sup>2,3,18</sup>

For Facebook users, those seeking to gratify needs related to socialization, entertainment, and information about events and updates were likely to use the platform more, which subsequently led to negative emotions. As the literature suggests, 11,16,17 the more time individuals spend on Facebook, the greater opportunities they have to socially compare themselves to others, therefore resulting in negative emotions. However, using Facebook to seek and maintain personal status did not have a significant impact on platform use intensity. Instead, Facebook uses related to self-status seeking directly influenced negative emotions. For Pinterest users, those seeking to fulfill needs related to entertainment, personal status, and information related to product, services,



**FIG. 4.** Information seeking (motivation) as a function of social media platforms and agreeableness (personality).

ideas, and inspirations were likely to use the platform more intensely, therefore resulting in negative emotional experiences. As a visual discovery platform, socialization did not emerge as a significant driver of Pinterest users' platform use intensity and had no impact on inducing negative emotions. With regard to the types of activities an individual may engage in on Facebook and Pinterest, the findings of this study provide valuable explanations as to how SNS users' negative emotional experiences are induced and why fewer negative emotional consequences were found relative to Pinterest uses than to Facebook uses.

The convergent evidence further suggests that SNS users' personality traits may repeatedly formulate the motivations needed for SNS usage. Generally speaking, extraversion and openness play a significant role in determining Facebook and Pinterest uses pertaining to socializing, entertainment, selfstatus seeking, and information seeking across platforms. Agreeable and conscientious SNS users were less likely to use both social media platforms for self-status seeking needs. Anxious and nervous SNS users were more likely to use the platforms for seeking social support and companionship, 30 and for information related gratifications. The differences in how personality traits impacted motivations for Facebook and Pinterest uses also emerged. Building on the notion that openness is associated with one's tendency to be sociable and the willingness to use social media for seeking novel experiences, 36 the findings suggest that openness had a greater impact on using Pinterest than Facebook for fulfilling socialization needs. In addition, agreeable SNS users were particularly less likely to use Facebook than Pinterest for fulfilling self-status related needs, such as developing a career through the platform usage. Moreover, agreeable SNS users were likely to use Pinterest instead of Facebook for seeking entertainment and information related gratifications. Because personality traits are important ways to differentiate individuals in their interpersonal, experiential, motivational, attitudinal, and enduring emotional styles, 27,30 this study adds important insights to the understanding of individuals' Facebook and Pinterest usage.

While this study focuses on SNS users in the United States, future research should be conducted to determine if the relationships observed in this study can explain individuals' SNS usage in different countries. This study discovers the mechanism underlying the relationships between personality traits, motivations, SNS use intensity, and negative emotions across platforms (i.e., Facebook and Pinterest). Followup research may employ qualitative methods, such as focus groups or in-depth interviews, to uncover the platform differences that emerged in this study and further examine the nature of emotional consequences associated with different SNS uses. Because this study explores similar typologies of motivations across platforms, <sup>22</sup> future research may go beyond the current list of motivations and investigate how and why individuals use different SNSs and the resulting emotional consequences. Since SNSs, such as Pinterest, have garnered growing interest among SNS users, more research attention should be devoted to understanding the psychological and motivational underpinnings and consequences of SNS usage. Although the negative emotions observed in this study were not at a severe level, we believe it is important to explore the negative experiences tied to individuals' SNS usage and consider how the drawbacks of SNS usage may be avoided, given that individuals spend nearly 20 percent of their time on SNSs.<sup>48</sup>

#### **Author Disclosure Statement**

No competing financial interests exist.

#### References

- Pew Research Center. (2017) Social media fact sheet. www. pewinternet.org/fact-sheet/social-media (accessed May 29, 2017).
- Greenwood S, Perrin A, Duggan M. (2016) Social media update 2016. www.pewinternet.org/2016/11/11/socialmedia-update-2016 (accessed May 29, 2017).
- 3. Ahalogy.com. (2016) 2016 Pinterest media consumption study. www.ahalogy.com/research (accessed Nov. 7, 2016).
- Duggan M. (2015) The demographics of social media users. www.pewinternet.org/2015/08/19/the-demographics-of-social-media-users (accessed May 29, 2017).
- Ellison NB, Steinfield C, Lampe C. The benefits of Facebook "friends": social capital and college students' use of online social network sites. Journal of Computer-Mediated Communication 2007; 12:1143–1168.
- Grieve R, Indian M, Witteveen K, et al. Face-to-face or Facebook: can social connectedness be derived online? Computers in Human Behavior 2013; 29:604–609.
- Rutledge CM, Gillmor KL, Gillen MM. Does this profile picture make me look fat? Facebook and body image in college students. Psychology of Popular Media Culture 2013; 2:251.
- Kalpidou M, Costin D, Morris J. The relationship between Facebook and the well-being of undergraduate college students. CyberPsychology, Behavior, and Social Networking 2011; 14:183–189.
- Kross E, Verduyn P, Demiralp E, et al. Facebook use predicts declines in subjective well-being in young adults. PLoS One 2013; 8:e69841.
- Pantic I, Damjanovic A, Todorovic J, et al. Association between online social networking and depression in high school students: behavioral physiology viewpoint. Psychiatria Danubina 2012; 24:90–93.
- Steers MLN, Wickham RE, Acitelli LK. Seeing everyone else's highlight reels: how Facebook usage is linked to depressive symptoms. Journal of Social and Clinical Psychology 2014; 33:701–731.
- Sagioglou C, Greitemeyer T. Facebook's emotional consequences: why Facebook causes a decrease in mood and why people still use it. Computers in Human Behavior 2014; 35:359–363.
- Chou HTG, Edge N. They are happier and having better lives than I am": the impact of using Facebook on perceptions of others' lives. Cyberpsychology, Behavior, and Social Networking 2012; 15:117–121.
- Wise K, Alhabash S, Park H. Emotional responses during social information seeking on Facebook. Cyberpsychology, Behavior, and Social Networking 2010; 13:555–562.
- Mehdizadeh S. Self-presentation 2.0: narcissism and selfesteem on Facebook. Cyberpsychology, Behavior, and Social Networking 2010; 13:357–364.
- Tandoc EC, Ferrucci P, Duffy M. Facebook use, envy, and depression among college students: is facebooking depressing? Computers in Human Behavior 2015; 43:139–146.
- Verduyn P, Lee DS, Park J, et al. Passive Facebook usage undermines affective well-being: experimental and longitudinal

- evidence. Journal of Experimental Psychology: General 2015; 144:480.
- 18. Fox J, Moreland JJ. The dark side of social networking sites: an exploration of the relational and psychological stressors associated with Facebook use and affordances. Computers in Human Behavior 2015; 45:168–176.
- Paek HJ, Hove T, Jung Y, et al. Engagement across three social media platforms: an exploratory study of a causerelated PR campaign. Public Relations Review 2013; 39: 526–533.
- Katz E. Mass communication research and the study of popular culture: an editorial note on a possible future for this journal. Studies in Public Communications 1959; 2:1–6.
- 21. Katz E, Blumler JG, Gurevitch M. Uses and gratifications research. The Public Opinion Quarterly 1974; 37:509–523.
- 22. Ruggiero TE. Uses and gratifications theory in the 21st century. Mass Communication & Society 2000; 3:3–37.
- 23. Shao G. Understanding the appeal of user-generated media: a uses and gratification perspective. Internet Research 2009; 19:7–25.
- 24. Smock AD, Ellison NB, Lampe C, et al. Facebook as a toolkit: a uses and gratification approach to unbundling feature use. Computers in Human Behavior 2011; 27:2322–2329.
- Whiting A, Williams D. Why people use social media: a uses and gratifications approach. Qualitative Market Research: An International Journal 2013; 16:362–369.
- Park N, Kee KF, Valenzuela S. Being immersed in social networking environment: facebook groups, uses and gratifications, and social outcomes. Cyberpsychology & Behavior 2009; 12:729–733.
- Zhang Y, Tang LST, Leung L. Gratifications, collective self-esteem, online emotional openness, and traitlike communication apprehension as predictors of Facebook uses. Cyberpsychology, Behavior, and Social Networking 2011; 14:733–739.
- 28. Mull IR, Lee S. "PIN" pointing the motivational dimensions behind Pinterest. Computers in Human Behavior 2014; 33: 192–200.
- Sashittal HC, Jassawalla AR. Why do college students use Pinterest? A model and implications for scholars and marketers. Journal of Interactive Advertising 2015; 15:54–66.
- Correa T, Hinsley AW, De Zuniga HG. Who interacts on the Web?: the intersection of users' personality and social media use. Computers in Human Behavior 2010; 26:247–253.
- 31. John OP, Srivastava S. The Big Five trait taxonomy: history, measurement, and theoretical perspectives. Handbook of Personality: Theory and Research 1999; 2:102–138.
- 32. McCrae RR, Costa PT. Personality trait structure as a human universal. American Psychologist 1997; 52:509–516.
- 33. Barrick MR, Mount MK. The big five personality dimensions and job performance: a meta-analysis. Personnel Psychology 1991; 44:1–26.
- 34. Ehrenberg A, Juckes S, White KM, et al. Personality and self-esteem as predictors of young people's technology use. Cyberpsychology & Behavior 2008; 11:739–741.
- 35. Gosling SD, Rentfrow PJ, Swann WB. A very brief measure of the Big-Five personality domains. Journal of Research in Personality 2003; 37:504–528.
- Zywica J, Danowski J. The faces of Facebookers: investigating social enhancement and social compensation hypotheses;

- predicting Facebook<sup>TM</sup> and offline popularity from sociability and self-esteem, and mapping the meanings of popularity with semantic networks. Journal of Computer-Mediated Communication 2008: 14:1–34.
- 37. Ross C, Orr ES, Sisic M, et al. Personality and motivations associated with Facebook use. Computers in Human Behavior 2009; 25:578–586.
- 38. Gosling SD, Augustine AA, Vazire S, et al. Manifestations of personality in online social networks: self-reported Facebook-related behaviors and observable profile information. Cyberpsychology, Behavior, and Social Networking 2011; 14:483–488.
- 39. Seidman G. Self-presentation and belonging on Facebook: how personality influences social media use and motivations. Personality and Individual Differences 2013; 54:402–407.
- 40. Wang SS. "I share, therefore I am": personality traits, life satisfaction, and Facebook check-ins. Cyberpsychology, Behavior, and Social Networking 2013; 16:870–877.
- 41. Amichai-Hamburger Y, Vinitzky G. Social network use and personality. Computers in Human Behavior 2010; 26: 1289–1295.
- 42. Błachnio A, Przepiórka A, Rudnicka P. Psychological determinants of using Facebook: a research review. International Journal of Human-Computer Interaction 2013; 29: 775–787.
- 43. Goldberg LR. The structure of phenotypic personality traits. American Psychologist 1993; 48:26.
- 44. Richins ML. Measuring emotions in the consumption experience. Journal of Consumer Research 1997; 24:127–146.
- 45. Barker V. Older adolescents' motivations for social network site use: the influence of gender, group identity, and collective self-esteem. Cyber Psychology & Behavior 2009; 12:209–213.
- 46. Brandtzæg P, Lüders M, Skjetne J. Too many Facebook "friends"? Content sharing and sociability versus the need for privacy in social network sites. International Journal of Human-Computer Interaction 2010; 26:1006–1030.
- 47. Krishnan A, Hunt DS. Influence of a multidimensional measure of attitudes on motives to use social networking sites. Cyberpsychology, Behavior, and Social Networking 2015; 18:165–172.
- 48. Adler E. (2016). Social media engagement: the surprising facts about how much time people spend on the major social networks. www.businessinsider.com/social-media-engagement-statistics-2013-12 (accessed Nov. 7, 2016).

Address correspondence to:
 Dr. Jhih-Syuan Lin
 Department of Advertising
 College of Communication
National Chengchi University
 No. 64, Section 2
 Zhinan Road
 Wenshan District
 Taipei City 116
 Taiwan

E-mail: jslin@nccu.edu.tw