Chapter 3
Personality and Social Media Use

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ABSTRACT

Research on digital media has mostly paid attention to users’ demographics, motivations, and efficacy, but with increasingly popular web tools like social media, it is important to study more stable psychological characteristics such as users’ personality traits, as they may significantly affect how people use the Web to communicate and socialize. Relying on the “Big Five Framework” as a theoretical approach, this chapter explores such relationships. Survey data from a national sample of U.S. adults show that more extraverted people are more likely to use social networking sites, instant messaging, and video chats, while those more open to new experiences tend to use social networking sites more frequently. Also, emotional stability is a negative predictor of social networking site use. That is, individuals who are more anxious and unstable tend to rely on these sites. When looking at a specific use of social media—to create political content—emotional stability was a negative predictor, whereas extraversion had a positive impact. These findings confirm the usefulness of combining explorations of personality and digital media usage.

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INTRODUCTION

The evolution of the Web increasingly opens more opportunities and spaces for people to interact, socialize, promote their work, create, and share material online. By early 2012, 48 hours of video were uploaded every minute to YouTube (YouTube, 2012). In 2011 the number of people in the U.S. using a social networking site had doubled from 2008; nearly half of adults and 59% of Internet users has used a social networking site like Facebook or LinkedIn at least once (Hampton, Sessions Goulet, Rainie, & Purcell, 2011).

In the early stages of the Internet, people went online seeking the anonymity it offered (McKenna & Bargh, 2000); now they use the Web to communicate, socialize with people they do know and expand their network (Jones & Fox, 2009). The tools that allow these connections are social media including social networking sites, microblogging, video-sharing sites, and blogs (Ellison, Steinfield, & Lampe, 2007; Jones & Fox, 2009; Lenhart, 2009; Raacke & Bohns-Raacke, 2008). The increasing interactivity and users’ involvement in the Web necessitates exploring the types of people who are more likely to rely on these participatory tools and their psychological characteristics.

The literature on digital media has paid significant attention to the users’ demographics and some of their psychological characteristics such as motivation, Internet self-efficacy, and life satisfaction. These psychological characteristics, however, may change over time. People may become more or less motivated, efficacious and satisfied with life. Thus, it is important to pay attention to the role of more stable psychological traits such as people’s personalities. In other words, how dispositional and stable features rooted in biology may have a significant effect on the way people engage with digital media tools and social media in particular.

Uncovering the factors that prevent or facilitate the adoption of social media enables web content producers and policymakers interested in increasing media access to have a better understanding of how to make the Internet more approachable to different kinds of users. Also, marketing professionals are increasingly using social media to connect with audiences. Therefore, understanding the characteristics of people who are likely to engage in these types of online media more intensely may help marketers to understand—and reach—their audience.

One of these characteristics is people’s personality. Personality refers to a stable psychological characteristic that predicts a wide range of attitudes and behaviors such as people’s music tastes, clothing, speech, and more. In the past two decades, psychology scholars have reached a working consensus that most individual differences in personality can be categorized in five major domains: extraversion, emotional stability, openness to new experiences, agreeableness, and conscientiousness (McCrae & Costa, 1997; John & Srivastava, 1999).

Thanks to the development of this framework, labeled the “Big Five,” research on digital media has devoted attention to the relationship between people’s personality traits and digital media use. In the beginning, scholars investigated the links between personality and Internet usage in general (e.g., Amichai-Hamburger, Wainapel & Fox, 2002; Hamburger & Artzi, 2000). Currently, this line of research is focusing on specific uses of digital media, including social media applications (Amichai-Hamburger & Vinitzy, 2010; Correa, Hinsley, & de Zúñiga, 2010; Guadagno, Okdie, & Eno, 2008; Ross et al., 2009; Zywica & Danowski, 2008).

Although research on personality and digital media is looking more thoroughly at specific social media applications (e.g., Correa, 2010; Hargittai & Walejko, 2008; Kalmus, Pruulmann-Vengerfeldt, Runnel, & Siibak, 2009), it does not take into account that most people are driven by a purpose when they engage with social media. They may interact to do some business, meet people, express their culture or thoughts, or promote their work (Correa & Jeong, 2011). Thus,
it is relevant to move the discussion forward by investigating more thoroughly the links between users’ personality and purposeful forms of participation using social media (Bachmann, Correa, & Gil de Zúñiga, 2013).

Using a national sample of U.S. adults, in this chapter we explore the relationship between people’s personality and social media use in general. In doing so, we look at the Big Five traits as well as specific social media applications and activities including social networking sites, instant messaging, and video chats. Finally, we investigate the link between personality and more purposeful social media use such as the utilization of these social tools to create political content.

PREDICTORS OF SOCIAL MEDIA USE: WHO INTERACTS ON THE WEB

The factors related to social media use have been investigated from sociological and psychological perspectives. From a sociological standpoint, research has mainly focused on structural factors such as users’ socio-demographics and has found that social media usage is not equally distributed among groups. For instance, there are consistent differences by age, race, and gender. Among individuals who have access to the Internet, it has been consistently found that teens and young adults (18 to 30-years-old) are more likely than older generations to create content (Jones & Fox, 2009; Lenhart et al., 2004). Also, contrary to the trend in which ethnic minority groups lag behind in new technology usage, early studies on content creation found that among online users there was no difference among racial groups (Lenhart et al., 2004). Recent studies in the United States, however, have consistently found that Whites are less likely than minority groups,—i.e., African Americans, Hispanics and Asians,— to use social media and create content (Correa, Hinsley, & Gil de Zúñiga; Correa, 2010; Lenhart, 2009).

Regarding gender differences, girls tend to use blogs more often while boys are more likely to upload videos (Lenhart, Madden, McGill, & Smith, 2007). Also, Hargittai and Walejko (2008) found that female college students are less likely to share online content. Similarly, Correa (2010) found that among college students, men are somewhat more likely than women to participate in the Web by creating content.

From a psychological perspective, people tend to use these social tools if they are motivated (Correa, 2010), believe they have the skills to use them (Livingstone & Helsper, 2007), are happy with their lives (Valenzuela, Park, & Kee, 2009), or want to increase their personal contentment (Ellison, Steinfield, & Lampe, 2007). Further, an experiment using physical and psychological measurements—including blood volume pulse, electroencephalogram, pupil dilation, and respiratory activity—found that social network sites use induces high arousal and elevates mood. In other words, social network sites induce positive emotional experiences (Mauri, Cipresso, Balgera, Villamira, & Riva, 2011). Finally, using two different studies, Pagani and colleagues (2011) found that people’s innovativeness is related to active and passive usage of social network sites. They also found that individuals’ expression of both self-identity and social identity is correlated with active usage of these sites.

In addition to these psychological findings, it is also relevant to pay attention to a stable psychological characteristic: people’s personality.

Personality and the Big Five

Personality is a stable psychological feature that is related to a broad range of behaviors and attitudes. In the past two decades, the psychology field has developed a framework called the Big Five-Factor Model (Goldberg, 1990; McCrae & Costa, 1997; John & Srivastava, 1999), which structures most of the current studies of personality. This broad and hierarchical approach asserts that personality traits
can be categorized and reliably measured in five domains: extraversion, emotional stability (also called neuroticism, its reverse), openness to new experiences, agreeableness, and conscientiousness. Each factor is bipolar (e.g., extraversion vs. introversion) and includes specific aspects (e.g., sociability), which in turn encompass more detailed traits (e.g., talkative, outgoing). Therefore, personality differences cannot be reduced to the Big Five traits. Rather, they represent personality at the broadest level of abstraction (John & Srivastava, 1999).

The literature suggests that these five traits are rooted in genetics (Bouchard, 1997; Van Gestel & Van Broeckhoven, 2003). This means that personality affects other variables rather than being influenced by social contexts. The Big Five dimensions come from self-rating responses in which people evaluate the extent to which they possess a series of attributes, and it has consistently shown high levels of validity and reliability across languages and cultures (John, Robins, & Pervin, 2008).

Because the literature has found extraversion, emotional stability, and openness to new experience as consistently central to digital media use (Guadagno, Okdie, & Eno, 2008; Ross et al., 2009; Zywica & Danowski, 2008), this chapter will focus only on these three traits. Extraversion indicates the tendency to be active, sociable, lively, and assertive while introversion is associated with shyness and passivity. Emotional stability—also referred to as neuroticism—is linked to different levels of anxiety, instability, and excitability. Openness to experience is related to different degrees of open-mindedness, creativity, imagination, originality, curiosity, and complexity.

**Linking Personality and Social Media Use**

Early inquiries that investigated the link between people’s personality and Internet use in general found extraversion and neuroticism were associated with online activities (i.e., Amichai-Hamburger, 2002; Amichai-Hamburger & Ben-Artzi, 2003; Amichai-Hamburger, Wainapel, & Fox, 2002). Specifically, people who had lower levels of extraversion and high degrees of neuroticism were more heavy Internet users than extraverted and less neurotic individuals (Amichai-Hamburger et al., 2002). In the early 2000s, scholars hypothesized that the anonymity provided by the Internet—at that time—attracted people who were less comfortable with themselves and who otherwise had trouble making connections with others. These people might have relied on the social services provided by the Web such as online chats and discussion groups to reduce their loneliness (Hamburger & Ben-Artzi, 2000).

Studies conducted more recently, however, have seen a reversal in the relationships between people’s personality and some types of Internet uses, particularly social media applications. Social media use is defined as the consumption of digital media or Internet that is not related to the traditional informational uses. On the contrary, social media provide mechanisms to connect, communicate, and interact with each other through applications such as instant messaging, chatting, social networking sites, and microblogging.

Investigations are consistently finding that more extraverted people tend to be drawn to social media. This may occur in part because anonymity is not a characteristic in the most popular types of current online applications, such as social networking sites. Most people use these sites to interact with individuals they already know and do not tend to engage with strangers (Lampe, Ellison, & Steinfield, 2006; Valenzuela, Park, &
Kee, 2009). Therefore, these sites may be more likely to appeal to extraverts. In a similar vein, while chat rooms allow group-like conversations between individuals who are largely unknown to each other, instant messaging is generally used for conversations between single users who are familiar with each other (Quan-Haase, 2007).

Studies that have examined the link between personality and social networking have found that three dimensions of personality are consistently related to social media use: extraversion, neuroticism, and openness to experience (Ross et al., 2009; Zywica & Danowski, 2008). Extraverted people were more connected with others through social networking sites and in the “real world” (Gosling, Augustine, Vazire, Holtzmann, & Gaddis, 2011; Zywica & Danowski, 2008). Ross and colleagues (2009) found extraversion was positively associated with belonging to Facebook groups, but it was not related to how they communicated on the site. At that time, they hypothesized the lack of instant messaging in Facebook users may not have fulfilled their need for immediate communication. Since Facebook introduced an instant messaging application, extraversion has been positively correlated with social networking site use (Amichai-Hamburger & Vinitzky, 2010; Gosling et al., 2011). A recent study conducted by Quercia and colleagues (forthcoming) found that extraversion is a positive predictor of both number of friends in the real world and number of Facebook contacts. Although they expected to find that sociable people would present themselves in likable ways on Facebook and would maintain superficial relationships, they did not find evidence supporting that hypothesis. In a similar study, this team of researchers also revealed that extraversion was positively related to Twitter usage (Quercia, Kosinski, Stillwell, & Crowcroft, 2011).

When looking at emotional stability (or neuroticism), the literature has found that more neurotic people prefer instant messaging use than face-to-face interactions (Ehrenberg et al., 2008). The scholars hypothesize this preference occurs because instant messaging allows more time to contemplate responses. Thus, for people who are more emotionally unstable it is easier to communicate with others. Other studies of adolescents and young adults show support for this finding and, for instance, among younger adolescents, those who were more likely to experience social anxiety used webcams less frequently (Peter et al., 2007). Similarly, in an experiment, college-aged women were more likely to experience feelings of shyness when they used webcams to converse with others (Brunet & Schmidt, 2007). This finding also suggests that whereas more neurotic people may prefer instant messaging, they may also avoid video chats.

Finally, evidence also suggests people who are open to new experiences are heavier users of social media (Guadagno et al., 2008; Ross et al., 2009). High openness to experience is reflected in curiosity and novelty-seeking; low levels are evident in preferences for adhering to convention and established patterns (John & Srivastava, 1999). Therefore, because social media are relatively new applications of Internet technology those who are more open to experiences are more likely to experiment with creating online profiles and chatting using instant messages and videos.

A very recent study conducted by Hughes and colleagues (2012) examined the relationship between the traditional five dimensions of people’s personality (extraversion, neuroticism, openness to experience, conscientiousness, and agreeableness) as well as sociability and need for cognition and social and informational uses of both Facebook and Twitter. These researchers demonstrated that personality is related to both informational and social uses of these sites, although the relationships were not as strong as previous literature suggested. Results also showed that differences in personality were related to preferences for either Facebook or Twitter.
EXPLORING PERSONALITY AND SOCIAL MEDIA WITH A NATIONAL SAMPLE

In order to explore the relationship between personality traits and social media use, we used data from an online survey conducted in the United States a few weeks after the 2008 election. The Media Research Lab at the University of Texas at Austin collected the data, based on a panel of U.S. adults. As a means to favor an accurate representation of the national population, a sample of 10,000 randomly-drawn participants was matched to fit the distribution of two variables from the U.S. Census: age (18-34: 30%; 35-54: 39%; 55 and older: 31%) and gender (male: 50.2%; female 49.8%). Past research suggests that such a procedure can help overcome the generalizability limitations of Web-based surveys (Bennett & Iyengar, 2008; Vavreck, 2007).

On December 15, 2008, we sent an email invitation with the survey URL to the 10,000 selected panel members. In an effort to increase the response rate, we included information about a monetary incentive drawing for their participation and we also sent up to three reminders in the following weeks. The final message was sent January 5, 2009. Almost 1,500 email addresses turned out to be invalid and we ended up with 1,482 valid cases for a 17.3% response rate. For the analyses presented in this chapter, we rely on a subsample of 959 cases, the number of participants who consistently answered the questions relevant for study. In the end, the sample had a gender skew: 67% of respondents were females, and 33% were men. In addition, participants’ ages went from 18 to 84 (M=46, SD=12.4). Regarding race/ethnicity, 84.4% of respondents were White/Caucasian, 5% African American, 4.5% Hispanic, 3% Asian, and 1% accounted for Native American, Pacific Islander, and Other. On average, the highest level of education completed was 2-year college degree, and the average annual income ranged from $50,000 to $59,999.

We used several variables in our analyses. We wanted to tap into different online applications that allow for social interactions and thus we asked respondents’ on a 10-point scale—ranging from never to all the time—how often they used social networking sites, instant messages and video chats. Eventually the latter variable was dichotomized, as more than 70% of respondents said they never used this kind of application.

Because the relationship between using social networking sites and instant messaging was strong and the literature suggests they relate to personality in a similar manner, we created a construct of social media use adding these two online applications (r=.41, p<.001, M=8.03, SD=5.79). First, we explored how personality is related to social media use as a construct. Then, we investigated how personality is associated with each application (social networking sites, instant messaging, and video chats) to have a more nuanced understanding of role of personality on social media use.

Finally, we explored a more purposive usage of social media. Thus, we investigated how personality is related to social media for political purposes. We created a construct of social media use for political purposes. It was an additive index of four items that asked participants how often they wrote or posted on their own blogs, posted comments on somebody else’s blog, created and posted online their own videos about current events, and contributed their own news reports to a user-generated website. While the first three items had a 10-point scale, the last one used a seven-point scale. This index had a Cronbach’s alpha of .76 (M=6.81, SD=5.81).

For the personality traits, we focused on the three dimensions that past research has singled out as important regarding digital media—namely, extraversion, emotional stability (a.k.a. neuroticism), and openness to new experiences. We relied on the 10-Item Personality Inventory, a scale showing acceptable validity and reliability levels and thus can serve as a proxy for the longer Big-Five instruments (Gosling, Rentfrow, & Swann, 2003). Two
items were used to measure each trait, with every item asking respondents to assess on a 10-point scale the extent to which respondents agreed that different pairs of characteristics described them well. They were told to rate these pairs even if they thought one the descriptors applied to them to a greater degree. Using this approach, we computed extraversion by adding the scores of the pairs reserved-quiet (reversed) and extraverted-enthusiastic (r=.43, p<.001, M=11.35, SD=4.56). The sum of anxious-easily upset (reversed) and calm-emotionally stable resulted in a skewed variable so we recoded the outliers (the scores below 5, representing 3.7% of the sample) to compute the emotional stability measure (r=.47, p<.001; M=13.73; SD=4.16). Similarly, openness to new experiences is the summation of the conventional-creative (reversed) and open to new experience-complex pairs, after recording the outliers, which accounted for 3.2% of the sample (r=.29, p<.001; M=14.28; SD=3.53).

Finally, as controls, we used the respondents’ socio-demographic characteristics: age, education level, gender, annual household income and race/ethnicity (recoded as White =1 and non-Whites=0). We also used as control a measure for life satisfaction, as the literature shows that personal contentment levels are strongly correlated to the three personality traits under study here (Chen, 2008; Schimmack, Shigehiro, Furr, & Funder, 2008). In this study, we used three items from the Satisfaction with Life Scale (Diener, Emmons, Larson, & Griffin, 1985) to compute the variable as an additive scale. Accordingly, respondents had to rate their agreement on with three separate assertions: “In most ways my life is close to my ideal,” “Things in my life are difficult,” later reversed, and “I’m satisfied with my life.” This scale reached a Cronbach’s alpha of .83 (M=16.88, SD=7.01).

RESULTS ON PERSONALITY AND SOCIAL MEDIA

First, we analyzed the relationships between personality traits and social media use in general. Consistent with the literature, our survey revealed that the usage of social media is extensive. Of the total sample, almost three fourths (72.5%) of the respondents use social media (74.8% of women and 67.7% of men). On a scale from 1 to 10, where 1 means never/rarely and 10 means very often, people rated their average social media use at 8.03 (SD=5.79). This number suggests that, generally, Internet users rely on these social applications quite often.

When we look at simple correlations among personality traits and social media use, Table 1 shows that personality traits were positively related with each other, just as the literature suggests (Gosling et al., 2003). The strongest association was openness with extraversion (r=.35, p<.001). In other words, people with high levels of extraversion tend to be more emotionally stable and open to new experiences. Simple associations also suggest that personality traits are significantly associated with social media use; more extraverted people tend to use social media more often and people who are open to new experiences are also more likely to use social media. However, emotional stability is negatively related to social media use. This means that people who are more neurotic tend to rely on these social applications rather than those who have greater levels of emotional stability.

To see whether these relationships are maintained when controlling for life satisfaction, socio-demographic variables and the remaining personality traits, we conducted multiple regressions, where block 1 contains the control variables (i.e., socio-demographics and life satisfaction) and block 2 shows the prediction of the three personality traits on social media use (see Table 2). We found that three personality traits are still associated with social media use, even when taking into account the demographic characteristics of the
Table 1. Correlations among social media use, personality, demographics, and life satisfaction (N = 959)

<table>
<thead>
<tr>
<th>Variables</th>
<th>1</th>
<th>2</th>
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<th>5</th>
<th>6</th>
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<th>9</th>
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<tbody>
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<td>1. Social media use</td>
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<tr>
<td>2. Extraversion</td>
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<tr>
<td>3. Emotional stability</td>
<td>- .12***</td>
<td>.09**</td>
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<td>4. Openness</td>
<td>.10**</td>
<td>.35***</td>
<td>.18***</td>
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<tr>
<td>5. Life satisfaction</td>
<td>- .09**</td>
<td>.14***</td>
<td>.39***</td>
<td>.07</td>
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<td>6. Gender (male)</td>
<td>-.04</td>
<td>-.08</td>
<td>.09**</td>
<td>-.05</td>
<td>.04</td>
<td></td>
<td></td>
<td></td>
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<td>7. Race (white)</td>
<td>.06</td>
<td>-.07</td>
<td>-.00</td>
<td>-.03</td>
<td>-.02</td>
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<td></td>
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<tr>
<td>8. Education</td>
<td>.09**</td>
<td>.04</td>
<td>.12***</td>
<td>.06</td>
<td>.26***</td>
<td>.12***</td>
<td>.04</td>
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<td>9. Income</td>
<td>-.04</td>
<td>.07</td>
<td>.15***</td>
<td>.06</td>
<td>.32***</td>
<td>.13***</td>
<td>.01</td>
<td>.45***</td>
<td></td>
</tr>
<tr>
<td>10. Age</td>
<td>-.34***</td>
<td>-.05</td>
<td>.16***</td>
<td>.02</td>
<td>.04</td>
<td>.11**</td>
<td>.06</td>
<td>.15%</td>
<td>.02</td>
</tr>
</tbody>
</table>

**p < .01, ***p < .001


Table 2. Personality predicting social media use using multiple regression (N = 959)

<table>
<thead>
<tr>
<th>Control Variables</th>
<th>Beta</th>
<th>s.e.</th>
<th>p value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>.02</td>
<td>.38</td>
<td>.63</td>
</tr>
<tr>
<td>Race</td>
<td>-.10</td>
<td>.49</td>
<td>.001</td>
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<tr>
<td>Education</td>
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<td>.14</td>
<td>.35</td>
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<tr>
<td>Income</td>
<td>-.01</td>
<td>.05</td>
<td>.87</td>
</tr>
<tr>
<td>Age</td>
<td>-.29</td>
<td>.02</td>
<td>.000</td>
</tr>
<tr>
<td>Life Satisfaction</td>
<td>-.06</td>
<td>.03</td>
<td>.11</td>
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<table>
<thead>
<tr>
<th>Personality Traits</th>
<th>Beta</th>
<th>s.e.</th>
<th>p value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extraversion</td>
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<td>.04</td>
<td>.000</td>
</tr>
<tr>
<td>Emotional Stability</td>
<td>-.08</td>
<td>.05</td>
<td>.02</td>
</tr>
<tr>
<td>Openness</td>
<td>.08</td>
<td>.05</td>
<td>.01</td>
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</tbody>
</table>

R²: 15.7%

Betas are standardized coefficients.


Sample and people’s personal contentment. This means that people’s personality matters independently of their gender, race, income, education, and level of satisfaction with their lives.

Specifically, more extraverted people tend to be heavier users of social media. Also, people who are more emotionally stable will use social media less frequently. In other words, anxious and worrisome individuals tend to use social media more frequently than those who are emotionally stable. Finally, people who are open to new experiences, innovative, and creative will use social media more frequently (see Table 2). It is also important to note that among the personality traits, extraversion was the strongest predictor of social media use. The block of the demographic variables and life satisfaction of the model explained 12.5% of the variance of social media use (F(6,957) = 22.59, p < .001). The relationship between life satisfaction and social media use was negative and statistically significant (b = .06, p = .05). When personality traits were included in the model, they explained 3.2% of the variance of social media usage (F(9,957) = 19.61, p < .001), and life satisfaction was no longer significant (b = .06, p = .11).
This result shows that although personality is definitely related to social media usage, the associations are not strong as the literature is increasingly suggesting (e.g., Hughes et al., 2012).

In the next section, we look in more detail the relationships between personality and three social media applications: social networking sites, instant messaging, and video chats.

LOOKING DEEPER: PERSONALITY AND SPECIFIC SOCIAL MEDIA APPLICATIONS

When investigating specific social media applications, the survey revealed respondents used instant messaging more frequently followed by social networking sites. Video chatting was the least frequent activity of them all. On a scale from 1 to 10, where 1 means never/rarely and 10 means often, respondents rated their average instant message use at 4.37 (SD=3.56), social networking site use at 3.66 (SD=3.34), and video chat use at 2.23 (SD=2.45). Of the total sample, 51.8% use social network sites, 99.9% use instant messages, and 29% use video chats.

To test whether there is a relationship between personality traits and use of social networking sites and instant messaging, controlling for demographic variables, life satisfaction, and the remaining personality traits, we conducted multiple regressions. To analyze the association among personality traits, life satisfaction and video-chat use, we performed a logistic regression because video chat use was dichotomized between use and no-use.

The analyses revealed that people who are more extraverted will use social networking sites, instant messaging, and video chats more frequently, even after controlling for respondents' socio-demographic characteristics and life satisfaction (see Table 3 for social networking sites and instant messaging and Table 4 for video chats). That is, people with higher levels of extraversion tend to be heavier users of different social media applications.

When analyzing the relationship between emotional stability and the three social media

<table>
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<th>Control Variables</th>
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<th>Instant Messaging</th>
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<td>Income</td>
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<tr>
<td>Life Satisfaction</td>
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<tr>
<td>Extraversion</td>
<td>.09</td>
<td>.04</td>
</tr>
<tr>
<td>Emotional Stability</td>
<td>-.11</td>
<td>.05</td>
</tr>
<tr>
<td>Openness</td>
<td>.08</td>
<td>.05</td>
</tr>
<tr>
<td>R²</td>
<td>17.1%</td>
<td></td>
</tr>
</tbody>
</table>

Betas are standardized coefficients.
applications, the results did not follow the same pattern. Specifically, people who are more anxious and worrisome use social networking sites more frequently than those who are more emotionally stable (see Table 3). The results showed that the relationships between emotional stability, instant messaging and video chatting were not significant (see Table 3 and Table 4).

Finally, people who are more open to new experiences use social networking sites more frequently. This means that people who use social networking sites more often tend to be more innovative and creative. However, being open was not associated with instant messaging and video chatting.

In the following section, we explore how people’s personality is associated with a more purposive usage of social media, namely for political purposes.

### Satisfying Motivations: Personality and Use of Social Media for Political Purposes

A separate examination of the relationship between personality traits, demographics and social media use for political purposes sheds further light on the factors influencing individuals’ behaviors in online settings—in this case, political life. Recent studies suggest that online conversations are as effective in influencing political activities as face-to-face discussions (Kerbel & Bloom, 2005; Shah et al., 2005). There is evidence that Internet users are increasingly embracing online technology to engage in public life (Gil de Zúñiga & Valenzuela, 2011; Jennings & Zeitner, 2003; Wellman et al., 2003; Williams & Tedesco, 2006). Some active online behaviors are related to participation (Rojas & Puig-i-Abril, 2009), and arguably social media use for political purposes may lead people to be engaged in political and civic spheres, as new user-generated technologies of the Web, such as blogs, citizen journalism sites, and video-sharing sites, should facilitate engaging in horizontal discussions where anyone can potentially participate in the public discourse. Recent investigations have found that active usage of the Web, such as messaging over the Internet, has positive effects on, for example, civic participation (Shah et al., 2005). The reason behind this finding is that online conversations often are text-based, purposive, and goal-oriented (Berger, 2009), thus they effectively mobilize people.

Much of the political research on the Big Five has focused on political ideology and attitudes (Alford & Hibbing 2007; Carney et al., 2008; Gerber et al., 2010). Now, scholars are moving toward political behavior such as political participation and civic engagement (e.g., Anderson, 2009; Mondak & Halperin, 2008; Mondak et al., 2010). Evidence suggests that extraversion and openness to experience are positively related to political participation (Gerber et al., 2011). The

---

**Table 4. Looking in more detail: personality predicting video chat use (N = 959)**

<table>
<thead>
<tr>
<th>Control Variables</th>
<th>B</th>
<th>Wald</th>
<th>s.e.</th>
<th>p Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>.50</td>
<td>9.80</td>
<td>.16</td>
<td>.002</td>
</tr>
<tr>
<td>Race</td>
<td>-.14</td>
<td>.48</td>
<td>.20</td>
<td>.49</td>
</tr>
<tr>
<td>Education</td>
<td>.05</td>
<td>.94</td>
<td>.05</td>
<td>.33</td>
</tr>
<tr>
<td>Income</td>
<td>-.04</td>
<td>2.62</td>
<td>.02</td>
<td>.11</td>
</tr>
<tr>
<td>Age</td>
<td>-.04</td>
<td>32.50</td>
<td>.01</td>
<td>.000</td>
</tr>
<tr>
<td>Life Satisfaction</td>
<td>.004</td>
<td>.10</td>
<td>.01</td>
<td>.75</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Personality Traits</th>
<th>B</th>
<th>Wald</th>
<th>s.e.</th>
<th>p Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extraversion</td>
<td>.06</td>
<td>11.91</td>
<td>.02</td>
<td>.001</td>
</tr>
<tr>
<td>Emotional Stability</td>
<td>.02</td>
<td>.72</td>
<td>.02</td>
<td>.40</td>
</tr>
<tr>
<td>Openness</td>
<td>-.01</td>
<td>.37</td>
<td>.02</td>
<td>.54</td>
</tr>
</tbody>
</table>

Nagelkerke R²: 8.5%
positive relationship between extraversion and political participation may be explained by the fact that social interaction is a key characteristic of extraverted people and, at the same time, a condition of many political participatory acts, including attending to a political rally, signing a petition, and involvement in a political discussion. The positive link between openness and political participation is also expected because people who are more open to experience are more likely to be interested in politics, attentive to the opportunities to be exposed to new ideas and experiences (Mondak & Halperin, 2008).

The results of the effects of emotional stability on political participation have been mixed. Some findings suggest the emotional stability is associated with, for example, lower turnout in voting and rallies (Anderson, 2009; Mondak et al., 2010), other studies found the opposite association (Gerber et al., 2011). There are explanations for both results. The cool “keep-to-themselves” feature of emotionally stable people make less likely that they engage in often-heated political interactions. At the same time, more anxious and worrisome individuals may tend to avoid political meetings or group-based political acts.

Within this context, for our study we integrated two lines of research: personality and politics and personality and social media usage. An analysis of simple correlations shows that younger people and those with lower income are more likely to use social media for political purposes, such as uploading a political video, posting on a blog about politics or submitting a news report to a user-generated website about politics or current affairs (see Table 5). Indeed, social media use for political purposes was negatively correlated with age and with income (see Table 5). The results showed no significant association between political social media use and gender, race, or education.

Furthermore, and in line with the results described above, the correlations also showed that two personality traits were significantly associated with political social media use: extraversion and emotional stability. In other words, those with higher levels of extraversion tend to be more frequent users of social media for political purposes. People who blog, post comments, submit

Table 5. Correlations among social media use for political purposes, personality, demographics, and life satisfaction

<table>
<thead>
<tr>
<th>Variables</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Social media use for politics</td>
<td>...</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Gender (male)</td>
<td>-.04</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Race (white)</td>
<td>-.04</td>
<td>-.02</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Education</td>
<td>-.05</td>
<td>.12***</td>
<td>-.05</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Income</td>
<td>-.10*</td>
<td>.13***</td>
<td>-.02</td>
<td>.42***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Age</td>
<td>-.16***</td>
<td>.12**</td>
<td>.18***</td>
<td>.06*</td>
<td>-.03</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Extraversion</td>
<td>.10*</td>
<td>-.08*</td>
<td>.06#</td>
<td>.06#</td>
<td>.07*</td>
<td>-.06#</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Emotional stability</td>
<td>-.10**</td>
<td>.10**</td>
<td>-.10*</td>
<td>.13***</td>
<td>.15***</td>
<td>.16***</td>
<td>.10**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Openness</td>
<td>.06#</td>
<td>-.05</td>
<td>-.01</td>
<td>.06#</td>
<td>-.01</td>
<td>.02</td>
<td>.35***</td>
<td>.18**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Life satisfaction</td>
<td>-.10*</td>
<td>.04</td>
<td>-.02</td>
<td>.25**</td>
<td>.33***</td>
<td>.05</td>
<td>.14***</td>
<td>.40***</td>
<td>.10*</td>
<td></td>
</tr>
</tbody>
</table>

N = 959

# p < .10, * p < .05, ** p < .01 *** p < .001

Note: This table was previously published by the authors in Bachmann, I., Correa, T., & Gil de Zúñiga, H. (2012). Profiling political online content creators: Advancing the paths to democracy. *International Journal of E-Politics*. 3(4), 1-19

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their own news reports and both create and post their own videos about current affairs also tend to be less stable. These characteristics could explain these users' draw to social media and political life online—arguably, these users are counteracting their discontent by creating content and expressing themselves. While positive, the correlation between the third trait, openness to new experiences, and social media use for political purposes only approaches significance.

Wanting to see if these results would hold with a more stringent multivariate test, we opted for a multiple regression analysis that used the socio-demographic variables and life satisfaction as controls. The results, however, offer mixed evidence for the relationship between political social media use and personality, as none of the personality traits stay as significant predictors in the regression (see Table 6). Extraversion was the only trait that approached significance, and did so in the expected positive direction. While both blocks in the regression model were significant, the only significant variable with a significant effect was age. In other words, younger people are more likely to write on blogs, upload videos about public affairs and submit news reports and thus use social media with political purposes.

**CONCLUSION**

This chapter advances the literature on the factors affecting uses of new technologies in society by exploring the relationship between people’s personality and uses of the user-generated Web. In particular, it focuses on social media use, a concept that captures the ways in which Internet users connect, communicate and interact with each other through different applications including social networking sites, instant messaging, video chatting, and video-sharing. We wanted to see to what extent people’s personality was related to social media use based on the psychological Big-Five framework (Amichai-Hamburger et al., 2002; John & Srivastava, 1999; Ross et al., 2009). Currently, this is the most accepted approach to measure individuals’ personality characteristics because research has reached a consensus that most individual personality differences can be classified in a broad and hierarchical approach that categorizes personality in five domains: extraversion, emotional stability (or neuroticism), openness to new experiences, agreeableness, and conscientiousness. Because the literature has consistently found that three traits are related to Internet and social media use, we focused on extraversion, emotional stability, and openness to experience.

Overall, we found that characteristics rooted in genetics such as people’s personality traits—extraversion, emotional stability and openness to experience—are related to the uses of interactive social media. These findings are in line with the investigations conducted in the early stages of the Internet diffusion by Amichai-Hamburger and Ben-Artzi (2000; 2002; 2003), who tested how personality played a role in Internet use. They

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**Table 6. Personality predicting social media use for political purposes (N = 959)**

<table>
<thead>
<tr>
<th></th>
<th>Beta</th>
<th>s.e.</th>
<th>p value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Control Variables</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>-14</td>
<td>.15</td>
<td>.000</td>
</tr>
<tr>
<td>Education</td>
<td>-01</td>
<td>.21</td>
<td>.742</td>
</tr>
<tr>
<td>Gender (male)</td>
<td>.01</td>
<td>.41</td>
<td>.933</td>
</tr>
<tr>
<td>Income</td>
<td>-04</td>
<td>.07</td>
<td>.236</td>
</tr>
<tr>
<td>Race (white)</td>
<td>-02</td>
<td>.53</td>
<td>.531</td>
</tr>
<tr>
<td>Life satisfaction</td>
<td>-06</td>
<td>.03</td>
<td>.135</td>
</tr>
<tr>
<td><strong>Personality Traits</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extraversion</td>
<td>.07</td>
<td>.05</td>
<td>.058</td>
</tr>
<tr>
<td>Emotional stability</td>
<td>-05</td>
<td>.05</td>
<td>.174</td>
</tr>
<tr>
<td>Openness to new experiences</td>
<td>.05</td>
<td>.06</td>
<td>.122</td>
</tr>
<tr>
<td><strong>Total R²</strong></td>
<td></td>
<td></td>
<td>4.3%</td>
</tr>
</tbody>
</table>
are also consistent with studies that examined more current online applications that involved some level of social interaction such as blogs and Facebook (Amichai-Hamburger & Vinitzky, 2010; Guadagno et al., 2008; Ross et al., 2009).

Perhaps our most consistent finding was that extraversion was positively related to social media use. We not only found this when analyzing social media as a construct but also when we analyzed three different social media applications such as social networking sites, instant messaging and video chatting. This finding is both interesting and quite relevant because it contradicts the results of the early studies that linked personality and Internet use in general.

Early studies that investigated the association between personality and different uses of the Internet revealed extraversion was negatively related to uses of social services such as chat rooms (Hamburger & Ben-Artzi, 2000). That is, more introverted people were more likely to rely on those tools. The explanation was that social interactions via those social services were different from offline interactions because physical appearance and physical proximity was not relevant (McKenna & Bargh, 2000). Therefore, people who tend to be more anxious, lonely, and introverted used the Internet to compensate their real-world isolation in these early studies of Internet use (Amichai-Hamburger & Ben-Artzi, 2003; Bargh, McKenna, & Fitzsimons, 2002).

Currently, the results of studies that involve social media tools including social networking sites, instant messaging, and video chatting differ from early investigations on social services because they do not necessarily provide anonymity. This fact may explain why extraved, rather than introverted, individuals are more likely to rely on social media use (Correa, Willard Hinsley, & Gil de Zúñiga, 2010). This result is line with other investigations that have explored the link between personality traits and Facebook use (Ross et al., 2009; Hughes et al., 2012).

We also found emotional stability was negatively associated with social media use. That is, individuals with higher levels of neuroticism and negative affectivity are more likely to engage in these social activities. Interestingly, the relationship between lower levels of life satisfaction and greater social media use that we found when analyzing simple correlations disappeared when emotional stability was taken into account in the analysis (see regression in Table 2). This phenomenon suggests that greater degrees of anxiety, and not level of personal well-being, actually predict social media use. Our result supports previous investigations that have found higher levels of neuroticism were related to the uses of social services of the Internet such as chat rooms (Hamburger & Ben-Artzi, 2000) and instant messaging (Ehrenberg et al., 2008). Because neuroticism is associated with loneliness, one could argue that nervous and anxious individuals use these services to seek support and company. They also give more time for contemplation before acting compared to offline or face-to-face interactions (Ehrenberg et al., 2008; Ross et al., 2009).

It is important to note, however, that our more detailed analysis revealed that the negative relationship between emotional stability and social media use was evident only for social networking site usage than the other two applications analyzed in this chapter. In the case of instant messaging and video chats, the relationship was not significant. These results may suggest that, as the literature has demonstrated, people with greater levels of neuroticism or less emotional stability tend to be drawn to online social applications that allow some reflection before acting such as social networking sites but not to those applications that resemble face-to-face interactions where physical appearance and auditory cues become important such as video chats (McKenna & Bargh, 2000; Peter et al., 2007).

We found a positive association between openness to experiences and social media use,
particularly social networking site use. This is expected because of the novel nature of these technologies, particularly at the time the data of our survey was collected—at the end of 2008 and beginning of 2009. Although the first recognizable social networking site was launched in 1997 (Six-Degrees.com), the most widely used sites in the U.S.—MySpace and Facebook—were introduced much later. MySpace was launched in 2003 and Facebook in 2004 to Harvard students. Only in 2006 it became available to everyone. Twitter, an increasingly popular microblogging service, was launched in 2006.

Finally, it is important to move the discussion forward by including the purpose and content of the social media interaction. People use social media to promote something, to do some networking, to express themselves or their culture. In this case, we investigated the usage of social media for political purposes. We found an association between people’s personality and political social media use. Consistent with the findings on personality and social media use in general as well as personality and politics, more extraverted people tend to post on blogs and upload videos with political content. Social interaction, a key feature of extraverted individuals, explains that people want to participate in politics even in the online arena. The literature on emotional stability and politics has been mixed but this study found that people who are less emotionally stable tend to use social media for political purposes, which is in line with the literature on personality and social media in general. These findings do not remain significant when including socio-demographics and life satisfaction in the analyses. It is possible that the relationship between personality and social media for politics is stronger for a demographic group. Future studies should explore the how these relationships work for different socio-demographic groups.

The consistency of the relationships between individual’s personality traits and a wide range of social media applications, including purpose usage of certain tools, show that it is safe to conclude that, nowadays, more extraverted people tend to take advantage of the user-generated Web that provide venues for communication and socialization. It is also relatively safe to suggest that users of social media tend to have higher degrees of neuroticism and anxiety. Perhaps they use these social tools to assuage their anxiety by seeking company. Although the findings are less consistent than the other two traits, people who use social media also tend to be more open to new experience, innovative.

These findings suggest that given the influence of these social media on today’s social interactions —more than half of America’s adults use them (Hampton et al., 2011)—Internet designers should take into account users’ characteristics and need. From a marketing standpoint, marketers are increasingly relying on these tools. Studies like this one help to disentangle the characteristics of the users and understand the audience. The results show that people who are more open to new experiences are more likely to rely on social media, which helps to identify a very useful segment for marketers. Also, the fact that more extraverted people use social media and that they connect with people they already know suggests that the boundaries between offline and online networks are blurring. Therefore, these social tools become very useful to transmit ideas, concepts, and brands.

This study has taken this line of research a step further in various ways. First, the survey was conducted among a national sample of U.S. adults and not only college students, which provide a broader and more reliable snapshot of social media users and their personality. In addition, the analyses have controlled for the effect of a set of socio-demographic variables (age, gender, race, education and income) and levels of life satisfaction to isolate the predicting relationships among our variables of interest. The inclusion of these factors as controls was relevant because
previous evidence had identified some personality traits were related to demographic variables and personal well-being.

Although in this chapter we analyzed different applications of social media, including social media use for political purposes, future investigations should explore the link between personality and other motivations or purposes when using these social tools, such as networking, promotion of oneself or a brand, or self-expression. Our data was based on online participants’ recruitment. Although we intended to assure the most accurate representation of U.S. national population, the final subsample yielded a larger proportion of women taking the survey than males, which should be noted as one limitation of this study.

We did not explore all possible dimensions of personality. We decided to include those traits that, according to the literature, were relevant for digital media use. We examined the Big-Five model with a brief index specially designed for studies that cannot test a large instrument because of time and space constraints. This instrument, however, has showed consistency. Future research, however, should also include other personality traits that might predict social media use such as conscientiousness and agreeableness. Overall, this chapter contributes to the understanding of how individual’s personality features predict their social media use on the Internet. Scholars need to keep uncovering the psychological factors that lead people to engage in these participatory media. This line of research is relevant in an ever-increasing user-generated Web where people’s engagement and participation may become key for advancing in social spheres.

REFERENCES


**ADDITIONAL READING**


**KEY TERMS AND DEFINITIONS**

**Big Five**: A broad model that uses five domains to categorize and reliably measure individual’s personality traits—extraversion, emotional stability, openness to new experiences, agreeableness, and conscientiousness.

**Emotional Stability**: Personality trait related to different levels of anxiety, instability, and excitability. Its reverse is called neuroticism.

**Extraversion**: Personality trait that indicates one’s tendency to be active, sociable, lively, and assertive. Its reverse is introversion, which is associated with shyness and passivity.

**Openness to New Experiences**: Personality trait linked to different degrees of open-mindedness, creativity, imagination, originality, curiosity, and complexity.

**Personality**: Stable psychological feature related to a wide range of an individual’s attitudes and behaviors.

**Social Media Use**: Consumption of digital media or Internet related to communication and interaction purposes, rather than informational uses. This includes services such as chatting, instant messaging, microblogging and social networking sites.