# ResearchGate

See discussions, stats, and author profiles for this publication at: http://www.researchgate.net/publication/222530363

# Who Blogs? Personality Predictors of Blogging

ARTICLE in COMPUTERS IN HUMAN BEHAVIOR · MAY 2013

Impact Factor: 2.69 · DOI: 10.1016/j.chb.2007.09.001 · Source: DBLP

CITATIONS	READS
91	341

# 3 AUTHORS, INCLUDING:

Rosanna E. Guadagno National Science Foundation 74 PUBLICATIONS 998 CITATIONS

SEE PROFILE



Bradley M. Okdie The Ohio State University 21 PUBLICATIONS 207 CITATIONS

SEE PROFILE

Available from: Rosanna E. Guadagno Retrieved on: 18 October 2015



Available online at www.sciencedirect.com



Computers in Human Behavior

Computers in Human Behavior xxx (2007) xxx-xxx

www.elsevier.com/locate/comphumbeh

# Who blogs? Personality predictors of blogging

Rosanna E. Guadagno \*, Bradley M. Okdie, Cassie A. Eno

Department of Psychology, University of Alabama, P.O. Box 870348, Tuscaloosa, AL 35487-0348, United States

#### Abstract

The Big Five personality inventory measures personality based on five key traits: neuroticism, extraversion, agreeableness, openness to experience, and conscientiousness [Costa, P. T., Jr., & McCrae, R. R. (1992). Normal personality assessment in clinical practice: The NEO Personality Inventory. Psycho*logical Assessment 4*, 5–13]. There is a growing body of evidence indicating that individual differences on the Big Five factors are associated with different types of Internet usage [Amichai-Hamburger, Y., & Ben-Artzi, E. (2003). Loneliness and Internet use. Computers in Human Behavior 19, 71-80; Hamburger, Y. A., & Ben-Artzi, E. (2000). Relationship between extraversion and neuroticism and the different uses of the Internet. Computers in Human Behavior 16, 441-449]. Two studies sought to extend this research to a relatively new online format for expression: blogging. Specifically, we examined whether the different Big Five traits predicted blogging. The results of two studies indicate that people who are high in openness to new experience and high in neuroticism are likely to be bloggers. Additionally, the neuroticism relationship was moderated by gender indicating that women who are high in neuroticism are more likely to be bloggers as compared to those low in neuroticism whereas there was no difference for men. These results indicate that personality factors impact the likelihood of being a blogger and have implications for understanding who blogs. © 2007 Elsevier Ltd. All rights reserved.

Keywords: Internet; Big Five; Blog; Blogging; Individual differences

# 1. Introduction

Who remembers life before the Internet? While there is a long history of technological advances enhancing the nature of interpersonal interaction (see Joinson, 2003 for a

<sup>\*</sup> Corresponding author. Tel.: +1 205 348 7803; fax: +1 205 348 8648. *E-mail address:* Rosanna@ua.edu (R.E. Guadagno).

<sup>0747-5632/\$ -</sup> see front matter @ 2007 Elsevier Ltd. All rights reserved. doi:10.1016/j.chb.2007.09.001

Please cite this article in press as: Guadagno, R. E. et al., Who blogs? Personality predictors of blogging, *Computers in Human Behavior* (2007), doi:10.1016/j.chb.2007.09.001

#### R.E. Guadagno et al. / Computers in Human Behavior xxx (2007) xxx-xxx

review), the Internet is different in many ways. It has changed the nature of human social interaction in a way that allows us to connect with many individuals, whether they are coworkers down the hall or strangers from the other side of the world. No other communications technology has facilitated such widespread social interaction with such relative anonymity (Bargh & McKenna, 2004; McKenna & Bargh, 2000). As the Internet has evolved, the degree of anonymity has decreased and the personalization of the Internet has increased. At the forefront of these two changing trends are blogs, (also known as weblogs) which are a regularly updated and personalized web page that contains entries dated an in reverse chronological order (Herring, Scheidt, Wright, & Bonus, 2005b). Blogs are seen as existing within the "blogosphere". The blogosphere encompasses the idea that all blogs are part of an interconnected web, although this has not been supported with empirical research (Herring et al., 2005a). A blog is one of the newest forms of online self-presentation and self-expression that has been facilitated by the age of the Internet. As such, it is a topic ripe for investigation by social scientists.

# 1.1. Characteristics of the blogosphere

Blogging is an American pastime, with data suggesting that the majority of bloggers today are from the United States (Herring et al., 2005b). Current research on blogging indicates that 8 million US citizens keep a blog (Lenhart & Fox, 2006) and 57 million US citizens report reading blogs. Compared to the general population of the United States, bloggers are younger, better educated, more likely to be urban dwellers, and avid online shoppers. Outside the United States, research on blogging is just starting to emerge primarily because the blogging adoption rates are lower in other countries (Trammell, Tarkowski, Hofmokl, & Sapp, 2006). However, the existing research suggests that motivations for blogging inside and outside of the Unite States are similar.

Although the statistics vary, most blogs have one author and the main reason cited for maintaining a blog is to express personal content (Herring et al., 2005b; Lenhart & Fox, 2006). Another aspect of blogging is that many bloggers post highly personal information but are also at least somewhat identifiable – studies have cited self report data indicating that somewhere from 33% to 70% of all bloggers provide identifying information such as their names on their blogs (Herring et al., 2005b; Huffaker & Calvert, 2005; Viegas, 2005).

# 1.2. Psychological aspects of Internet usage

While blogging is a relatively new form of online behavior, there is a large body of literature on the psychological aspects of Internet use that may be helpful in understanding why people blog. Specifically, McKenna and Bargh (2000) proposed four domains in which social interaction via computer mediated communication (CMC) differs from other more conventional interaction mediums: relative anonymity, reduced importance of physical appearance, attenuation of physical distance, and greater control over the time and pace of interactions.

Of particular relevance to the present investigation is the notion of relative anonymity. When individuals interact with others online, they may choose how much or how little information to reveal about themselves, allowing for some level of anonymity. Anonymity is possible in some forms of online communication (e.g., chatrooms, email, online discussion groups, and blogs), although these days, a fair amount of online interaction is non-

anonymous. When individuals perceive themselves to be anonymous, it may change the way in which individuals interact while on the web because they experience a sense of depersonalization and deindividuation (Postmes, Spears, & Lea, 2002). Applied to the concept of blogging, this suggests that individuals may report information on their blogs that is more revealing than they realize.

Additionally, the reduced self-awareness in online interaction is relevant to blogging as well. Specifically, there is evidence that individuals who communicate online experience a reduced awareness of the other individuals they are communicating with (Joinson, 2001; Matheson & Zanna, 1988). There are two types of self-awareness that individuals experience: public and private. Public self-awareness occurs when individuals attend to themselves as a social object (Prentice-Dunn & Rogers, 1982). Thus, individuals experiencing high public self-awareness are likely to be concerned with their public appearance and impression management. Contrary to public self-awareness, private self-awareness is characterized by an individuals' intense focus on their own thoughts and feelings (Franzoi & Davis, 1985; Prentice-Dunn & Rogers, 1982). An individual high in private self-awareness is less focused on other individuals due to his or her spotlight of attention being focused on internal states thus limiting attentional resources that can be devoted elsewhere. It is heightened private self-awareness that is reported in anonymous online interactions. Because of the absence of others' nonverbal cues when interacting online individuals focus more on themselves and less on their audience or discussion partners. Applied to blogging, this suggests that individuals may report information on their blogs with less regard to how others may perceive it.

Reflecting the issues of relative anonymity and reduced self-awareness, there have been myriad instances where an individual has been fired from his or her job or arrested after confessing to committing a crime on their blog. A search of headlines on news of the blog-osphere will reveal stories of people fired for blogging about their jobs (Perez, 2005; Twist, 2004); admitting to the crimes they committed (Healy, 2007; Poulsen, 2005); attacking others (Valenti, 2007) and admitting to affairs and betrayals (Bailey, 2004). Additionally, many individuals post information and photos in their blogs without considering the possible repercussions if prospective employers can view these spaces (Lewis, 2006). One such study indicated that 36% of participants reported that they had experienced social sanction for something they had posted in their blog (Viegas, 2005).

One unanswered question is that of whether individual difference characteristics can differentiate bloggers from non-bloggers. While research has examined individual differences in Internet use (Amichai-Hamburger & Ben-Artzi, 2003; Hamburger & Ben-Artzi, 2000), no research has yet examined the blogosphere for predictors of being a blogger. This begs the question: Why do people blog? And, are there individual differences in bloggers or blog content? To examine this issue, we started our investigation of personality and blogging by using the five-factor model (McCrae & Costa, 1986) to predict blogging both because it is the most widely accepted model of personality (Digman, 1990; John & Srivastava, 1999; McCrae & Costa, 1997) and because the prior work on personality and Internet use mentioned above also started by examining five-factor traits.

# 1.3. Individual differences in Internet usage

Within the field of personality psychology there is mounting consensus that one model of personality that best represents the basic structure of personality: the five-factor model

#### R.E. Guadagno et al. / Computers in Human Behavior xxx (2007) xxx-xxx

(Digman, 1990; John & Srivastava, 1999; McCrae & Costa, 1997). According to the fivefactor model of personality, also called the "Big Five", individuals vary on five key dimensions: neuroticism, extraversion, openness, agreeableness, and conscientiousness (McCrae & Costa, 1986). Individuals who are high in neuroticism tend to be emotionally unstable: they are anxious, insecure, and self-pitying, whereas those who are low in neuroticism are emotionally stable: they are calm, secure and self-satisfied. Individuals who are high in extraversion are sociable, fun-loving, and affectionate, whereas individuals who are high in openness are imaginative, prefer variety, and independent, whereas those who are low in openness are down to earth, prefer routine, and tend to be conformers. Individuals who are high in agreeableness tend to be soft-hearted, trusting, and helpful, whereas those who are low in agreeableness tend to be ruthless, suspicious, and uncooperative. Finally, individuals who are high in conscientiousness tend to be well-organized, careful, and selfdisciplined, whereas those who are low in conscientiousness are disorganized, careful, and selfdisciplined, whereas those who are low in conscientiousness are disorganized, careful, and weak willed.

Research has also revealed that these five factors emerge across a number of contexts and age groups and are fairly stable across time (Digman, 1989) and culture (McCrae & Costa, 1997). Additionally, these factors emerge on self-report measures (Costa & McCrae, 1988), in the traits we ascribe to friends and acquaintances (Botwin & Buss, 1989; Goldberg, 1990), in the terms teachers use to describe their students (Digman & Inouye, 1986), and also emerge in children (Digman, 1989).

There is also a growing body of literature on the relationship between the factors of the Big Five and Internet usage. For instance, Amichai-Hamburger, Wainapel, and Fox (2002) found that individuals low in extraversion and high in neuroticism felt that they were more able to express their real selves when communicating with others online as opposed to offline. Hamburger and Ben-Artzi (2000) examined individual differences in Internet usage of extroverts and neurotics to see if those low in extroversion (i.e., the introverts) and those high in neuroticism would be more likely to use the social services (e.g., seeking people, chatting, participating in discussion groups) of the Internet. They found support for this hypothesis but only among the women in the sample. Men who were extroverted were more likely to use leisure services and those men who were high in neuroticism were less likely to use information services. Although the results varied by gender, overall, these results provide evidence for the idea that personality may moderate the types of Internet usage individuals engage in.

Along these same lines, Amichai-Hamburger and Ben-Artzi (2003) reported similar patterns of Internet use for men and women as reported above indicating that neuroticism was significantly correlated with loneliness. These authors also reported that, for women, loneliness mediates the relationship between neuroticism and Internet use. This provided evidence that lonely women use the Internet to assuage their loneliness and not the reverse relationship. More relevant to the present investigation, this research suggests that neuroticism may be one individual difference characteristics that predicts likelihood of blogging, particularly for women. This is particularly relevant to bloggers as demographics data indicate that, while most blogs contain personal information, women and teenagers are more likely to blog on personal topics (Herring et al., 2005b).

To examine the relationship between personality and blogging, we surveyed two samples of undergraduates. We assessed their personality characteristics and examined the differences between those who blog and those who do not. Based on the prior research findings, we predicted that we would find significant differences in Big Five dimensions and blogging, particularly with neuroticism.

# 2.1. Study 1

The purpose of Study 1 was to gather some initial data on bloggers and non-bloggers to see if there were any personality differences between the two groups.

# 2.1.1. Method

2.1.1.1. Participants. Participants were 89 (25 males and 57 female) students from a large Southeastern University who received extra-credit for their participation. Ethnicity was self-reported: 62 participants identified themselves as Caucasian, 14 as African–American, and four as other. The age of the participants ranged from 19 to 37 with a mean age of 21.32 (SD = 2.53). The data from one participant was removed because he or she did not know what a blog was. Of the 89 participants, 22 (25%) reported writing blogs and 43 (48%) reported reading blogs.

2.1.1.2. Procedure. In a large classroom setting, participants completed a pencil and paper survey that asked them about their experiences of writing and reading of blog. Those who reported writing a blog also reported the following: hours spent maintaining the blog, number of blogs written, frequency of updating, use of real name or screen name, and content of the blog written. Those who reported reading a blog reported the following: hours spent reading blogs, number of blogs read, and content of blogs read. To examine individual differences, participants also completed the Big Five Inventory-Short Form (Benet-Martinez & John, 1998).

# 2.1.2. Results

The Big Five Personality Inventory produced reliable composites of the following five traits: neuroticism ( $\alpha = .79$ ), extraversion ( $\alpha = .86$ ), agreeableness ( $\alpha = .85$ ), openness to experience ( $\alpha = .78$ ), and conscientiousness ( $\alpha = .71$ ).

2.1.2.1. Blog content. Consistent with prior research, most bloggers reported keeping only one blog (82%, N = 18); the remainder of bloggers reported keeping two blogs (14%, N = 3). The majority of participants in this sample who blog reported blogging mostly about personal experiences (themselves, relationships, friends, daily experiences) (See Table 1). When asked how they identify themselves on their blog, a majority bloggers in the current sample reported using their real name (55%, N = 12); the remainder of the sample reported using a screen name (41%, N = 9). Most bloggers reported updating their blog either weekly (46%, N = 10) or monthly (41%, N = 9); very few reported updating their blog daily (9%, N = 2) or yearly (5%, N = 1).

We conducted a logistic regression to examine whether any of the Big Five factors predicted whether or not the participants reported keeping a blog. The regression model

# **ARTICLE IN PRESS**

# 6

#### R.E. Guadagno et al. / Computers in Human Behavior xxx (2007) xxx-xxx

Content	Yes	No	
Fictional stories	18.2% (4/22)	81.8% (18/22)	
Yourself	81.8% (18/22)	18.2% (4/22)	
Sports	18.2% (4/22)	81.8% (18/22)	
Your relationship	68.2% (15/22)	31.8% (7/22)	
Your friends	81.8% (18/22)	18.2% (4/22)	
Celebrities	13.6% (3/22)	86.4% (19/22)	
Politics	31.8% (7/22)	68.2% (15/22)	
Your family	54.5% (12/22)	45.5% (10/22)	
Your daily experiences	72.7% (16/22)	27.3% (6/22)	

Table 1

Percentage of bloggers in	Study 1 who re	ported discussing ea	ch topic in their blog

included scores on each of the Big Five subscales as criterion variables and whether or not participants reported keeping a blog as the dependent variable. Because of the low to moderate inter-correlations among the predictors, all variables were entered simultaneously. Results of the logistic regression indicated that openness to experience was a significant predictor of blogging, b = .53, se<sub>b</sub> = .26, Wald (1, df) = 4.25, p = .04. Additionally, there was a non-significant trend with neuroticism predicting blogging, b = .34, se<sub>b</sub> = .21, Wald (1, df) = 2.55, p = .11. The other Big Five subscales did not predict blogging. See Table 2 for test statistics for all subscales of the Big Five. Gender and age did not interact with the subscales of the Big Five nor did they significantly predict blogging, or blog content.

## 2.1.3. Discussion

Overall, the results of Study 1 indicated that the current sample of bloggers were comparable to what has been previously reported in the literature, in terms of the number of blogs maintained and blog content. Additionally, there was a substantial portion of the sample of bloggers who reported providing identifiable information in their blogs. In terms of the personality findings, we found that openness to new experience predicts maintaining a blog and that most people who do so write about the details of their personal lives. Additionally, we also found a non-significant trend indicating that neuroticism predicts blogging. These results are not surprising. Given that blogging is a new form of online expression – we would expect that those willing to try new things would be the most likely to report being a blogger. We next decided to collect data with a different sample to determine if these results generalized and to examine the effects of a larger sample on our findings. Specifically, we sought to examine whether the relationship between neuroticism and blogging achieved statistical significance with a larger sample.

Table 2								
Logistic regression	coefficients	for the	subscales	of the	Big Five	predicting	blogging in	Study 1
	β		S.E.		Wald		df	p value

	β	S.E.	Wald	df	p value	$Exp(\beta)$
Extraversion	.15	.18	0.69	1	.41	1.16
Agreeableness	07	.19	0.12	1	.73	0.94
Conscientiousness	07	.26	0.08	1	.78	0.93
Neuroticism	.34	.21	2.55	1	.11	1.40
Openness	.53	.26	4.25	1	.04	1.70

#### 2.2. Study 2

The purpose of Study 2 was to replicate and expand upon Study 1 by examining whether we find the same results with a larger sample. We were particularly interested in examining whether neuroticism would significantly predict blogging if the sample size were increased.

# 2.2.1. Method

2.2.1.1. Participants. Two hundred, seventy-eight (104 males and 174 females) participants from a large Southeastern University were used in this sample. Ethnicity was self-reported: 219 participants identified themselves as Caucasian, 31 as African–American, and 28 as other. The age of the participants ranged from 17 to 36 with a mean age of 19.1 (SD = 1.83). Of the 278 participants, 44 (16%) reported writing blogs and 121 (44%) reported reading blogs.

2.2.1.2. Design and variables. The survey for Study 2 included the questions from Study 1 and also included a series of questions to assess the extent to which participants use other forms of media. Participants answered questions about the use of instant messenger, chat rooms, and online discussion groups. Participants were also asked to estimate time spent using the Internet for recreation purposes, time spent using instant messenger, and number of e-mails written per day.

2.2.1.3. Procedure. Participants completed an online survey that asked them about their experiences of writing and reading blogs. Those who reported writing a blog also reported the following: hours spent maintaining the blog, number of blogs maintained, frequency of updating, use of real name or screen name, and content of their blog. Those who reported reading a blog reported the following: hours spent reading blogs, number of blogs read, and content of blogs read. Participants also completed the Big Five Inventory-Short Form (Benet-Martinez & John, 1998).

# 2.2.2. Results

As in Study 1, the Big Five Personality Inventory produced reliable composites of the following five traits: neuroticism ( $\alpha = .83$ ), extraversion ( $\alpha = .86$ ), agreeableness ( $\alpha = .81$ ), openness to experience ( $\alpha = .80$ ), and conscientiousness ( $\alpha = .82$ ).

2.2.2.1. Blog content. As in Study 1, most bloggers reported keeping only one blog (75%, N = 36) and the majority of participants in this sample who blog reported blogging mostly about personal experiences (themselves, relationships, friends, daily experiences) (See Table 3). When asked how they identify themselves on their blog, half of the bloggers in the current sample reported using their real name (50%, N = 24); the remaining half reported using a screen name (50%, N = 24). Most bloggers reported updating their blog daily (27%, N = 13), weekly (35%, N = 17), or monthly (31%, N = 15); very few reported updating their blog yearly (6%, N = 3).

A logistic regression examined what personality traits predicted blogging. The model included scores on each of the Big Five subscales as criterion variables and whether or not participants reported keeping a blog as the dependent variable. Because of the low to moderate inter-correlations among the predictors, all variables were entered simulta-

# ARTICLE IN PRESS

#### R.E. Guadagno et al. / Computers in Human Behavior xxx (2007) xxx-xxx

Percentage of bloggers in study 2 who reported discussing each topic in their blog					
Yes	No				
4.2% (1/24)	95.8% (23/24)				
100% (24/24)	0% (0/24)				
33.3% (8/24)	66.7% (16/24)				
66.7% (16/24)	33.3% (8/24)				
87.5% (21/24)	12.5% (3/24)				
20.8% (5/24)	79.2% (19/24)				
20.8% (5/24)	79.2% (19/24)				
46% (11/24)	54% (13/24)				
75% (18/24)	25% (6/24)				
	Yes 4.2% (1/24) 100% (24/24) 33.3% (8/24) 66.7% (16/24) 87.5% (21/24) 20.8% (5/24) 20.8% (5/24) 46% (11/24)				

Table 3

8

Percentage of blog	gers in Stud	v 2 who r	eported disci	issing each	topic in	their blog <sup>a</sup>

*Note*: Percentages represent percentage of bloggers who reported blogging about each topic. Numbers in parenthesis represent number of bloggers who reported blogging about each topic.

<sup>a</sup> Due to a technical malfunction, data for some of our bloggers were lost so the percentages reported here represent the data for 24 of the 44 bloggers. Despite the loss in data, the results generally replicate our findings from Study 1.

neously. Results of the logistic regression indicated that the significant predictors of blogging were openness to experience, b = .75,  $se_b = .19$ , Wald (1, df) = 15.66, p < .001, and neuroticism, b = .39,  $se_b = .13$ , Wald (1, df) = 9.21, p < .01. No other Big Five subscale significantly predicted blogging (See Table 4 for the test statistics for each Big Five subscale). Gender and age did not interact with any subscale of the Big Five or significantly predict blogging or blog content.

2.2.2.2. Media use & blogging. A chi-square analysis showed a significant relationship between keeping a blog and participating in online discussion groups,  $\chi^2(1, N = 265) = 6.39$ , p = .01. Specifically, of those who blog, 30% reported also using online discussion groups. There was not a significant relationship between keeping a blog and either instant messenger or chat room use, p's > .05.

2.2.2.3. The relationship between gender, neuroticism, and blogging collapsed across studies. Because prior work in personality and Internet use (Amichai-Hamburger & Ben-Artzi, 2003) demonstrated that women, particularly neurotic women, use social services online to assuage their loneliness, we collapsed the Big Five scores, gender of participant, and blogging self-reports across the two studies to examine whether we found that this pattern generalizes to bloggers. After performing a median split for neuroticism, a chi-square analysis was conducted to determine if there were gender differences in blogging for individuals high and low in neuroticism. Overall, there was a significant difference in

Table 4 Logistic regression	coefficients fo	or the subscales	of the Big Five	predicting blo	ogging in Study 2	
	ß	SE	Wald	df	n value	

	β	S.E.	Wald	df	p value	$Exp(\beta)$
Extraversion	0.17	0.14	1.44	1	0.23	1.19
Agreeableness	0.03	0.18	0.02	1	0.88	1.03
Conscientiousness	0.08	0.15	0.28	1	0.59	1.09
Neuroticism	0.39	0.13	9.21	1	<.01	1.48
Openness	0.75	0.19	15.66	1	<.001	2.11

blogging for women high and low in neuroticism,  $\chi^2(1, N = 347) = 3.95$ , p < .05. Specifically, women high in neuroticism (23.8%) reported blogging more than women low in neuroticism (13%). There were no significant differences found for men (high: 15.2% vs. low: 14.3%), p > .05.

#### 2.2.3. Discussion

Overall the results of Study 2 replicated the results of Study 1 and demonstrated that, as expected, in a larger sample, neuroticism does predict blogging. However, the examination of gender and neuroticism collapsed across the two studies suggests that this result is largely driven by women and suggests that previously reported gender and personality differences in Internet usage (Amichai-Hamburger & Ben-Artzi, 2003) generalize to blogging. Finally, it appears that individuals who keep blogs are also likely to be members of other online communities and as in Study 1, are likely to report information in their blog that would allow their readers to identify them.

## 3. General discussion

Taken together the results of these two studies indicate that openness to new experience and neuroticism predict blogging. That is, people who were high on these Big Five subscales were more likely to report maintaining a blog in this sample. These findings were also moderated by gender. Collapsed across the two studies, women who were high in neuroticism were more likely to maintain a blog than were women low in neuroticism but there was no difference in blogging for men based on their level of neuroticism. Additionally, we found that similar to prior research, individuals who maintain blogs mostly discuss details of their personal lives and are likely to use other forums for online social interaction. The results of this research also replicated prior findings in that bloggers disclose personal information about themselves in their blogs (Herring et al., 2005b; Huffaker, 2005; Viegas, 2005).

Given that the characteristics of individuals high in openness include imagination, curiosity, artistic talent, intelligence, and diversity in interests (John & Srivastava, 1999; McCrae & Costa, 1986), it is not surprising that this is a characteristic of bloggers. Blogging is both a form of self-expression as well as a form of online behavior so it stands to reason that creative individuals who are willing to try new things are likely to blog. Indeed, it may be that individuals who are high in openness to new experience are likely to be the individuals who are the first to adopt new technology. Since blogging is a relatively new form of online self-expression, this relationship may change over time as more people start to keep a blog. Future research should examine whether there is any such relationship between technology adoption and openness to new experience and whether the relationship between blogging and openness persists as blogging becomes more widely adopted.

The finding that women high in neuroticism were more likely to maintain a blog is consistent with both prior research on gender differences in personality in general and specifically with regard to Internet use. Prior research on gender differences in personality indicates that women, as compared to men, tend to be higher in neuroticism and agreeableness, but there are no other gender differences in the other Big Five factors including openness to new experience (Costa, Terracciano, & McCrae, 2001). These results suggest that individuals who are high in neuroticism, characterized by anxiety, worry, emotional reactivity, and nervousness (John & Srivastava, 1999; McCrae & Costa, 1986) may blog to

#### R.E. Guadagno et al. / Computers in Human Behavior xxx (2007) xxx-xxx

assuage loneliness or in an attempt to reach out and form social connections with others. Thus, the finding that individuals, in particular women, who are high in neuroticism are more likely to maintain a blog is not surprising given that it is consistent with prior research in Internet usage, which reported that women high in neuroticism were more likely to use the Internet to socialize with others (Amichai-Hamburger & Ben-Artzi, 2003; Hamburger & Ben-Artzi, 2000). Future research should continue to investigate the relationship between gender, personality, and Internet use as both the present investigation and the prior research suggests that the Internet may be provide different benefits to different people.

One potentially alarming aspect of these findings (and is exemplified by the media attention to bloggers reported in the introduction above) is that a high proportion of the individuals who blog report that they are writing about their personal lives and provide some amount of identifying information and they do so while using a communication mode that is prone to perceived anonymity and increased self-awareness. Thus, one implication of these findings is that many individuals treat blogs as a private journal yet they are doing so while providing identifiable information. Future research should examine the psychological consequences of engaging in such behavior and seek to demonstrate a direct link between blogging and increased private self-awareness.

Other future directions could be to examine the content of blogs. Specifically, it would be interesting to examine whether the content of blogs, much like websites, reflect back aspects of an individual's personality (Vazire & Gosling, 2004) and whether the language an individual uses in their blogs predicts their ability to cope with traumatic events (Cohn, Mehl, & Pennebaker, 2004). It may be the case that those individuals who use blogs as a coping mechanism may gain some cathartic benefit from the process of blogging.

Additionally, it would be interesting to examine more about why people blog. This study revealed information about who blogs and what they blog about, but is there a reason why people blog (coping, reaching out for social support, etc.)? For instance, Stokes (1985) reported that the relationship between neuroticism and loneliness is moderated by the size of an individuals' social network. It would be interesting to examine whether this finding extends to those individuals who maintain blogs.

Although the present investigation only examined the relationship between the Big Five and blogging, there are other individual difference factors that may predict different patterns of blogging. Future work should also consider examining the relationship between other individual difference characteristics and blogging. For instance, Amichai-Hamburger (2002) suggested that a wide variety of personality measures such as Need for Closure (Kruglanski & Freund, 1983), Locus of Control (Rotter, 1966; Rotter, 1982), Attachment style (Hazan & Shaver, 1987), and Risk taking (Levenson, 1990) may impact Internet usage. If this is the case, then future research may find that these measures may also predict blogging.

Finally, there are two notable limitations to this research. These data were collected using a college student population and may not generalize to older samples, particularly those who use their blogs as a marketing vehicle or for professional purposes. Second, these samples were all United States citizens and while the existing research on blogging indicates that the blogosphere is currently dominated by Americans (Herring et al., 2005b), this research may not extend to bloggers in other countries. Future research should examine whether these personality predictors of blogging extend to an older sample

whose reasons for maintaining and reading blogs may be fundamentally different from

those of a younger generation and whether these results extend to non-US populations. In conclusion, the present investigation demonstrates that, while there are some general trends about Internet use that extend to blogging, there are also a large number of research questions yet to be addressed. One thing that remains clear is that blogs are a form of online expression that is gaining in popularity and that they represent one of the newer forms of online social interaction. As such, it is important for social scientists to continue to examine this phenomenon to fully understand its affects on psychological processes that differentiate it from other similar forms of self-expression.

## References

- Amichai-Hamburger, Y. (2002). Internet and personality. Computers in Human Behavior, 18, 1-10.
- Amichai-Hamburger, Y., & Ben-Artzi, E. (2003). Loneliness and Internet use. Computers in Human Behavior, 19, 71–80.
- Amichai-Hamburger, Y., Wainapel, G., & Fox, S. (2002). "On the Internet no one knows I'm an introvert": Extroversion, neuroticism, and Internet interaction. *CyberPsychology and Behavior*, 5, 125–128.
- Bailey, H. (2004, June 7). A beltway blogger's sex scandal. Newsweek. <a href="http://findarticles.com/p/articles/mi\_kmnew/is\_200406/ai\_kepm480053">http://findarticles.com/p/articles/mi\_kmnew/is\_200406/ai\_kepm480053</a>> Retrieved April 19, 2007.
- Bargh, J., & McKenna, K. (2004). The Internet and Social Life. Annual Review of Psychology, 55, 573-590.
- Benet-Martinez, V., & John, O. P. (1998). Los Cinco Grandes across cultures and ethnic groups: Multitrait multimethod analyses of the Big Five in Spanish and English. *Journal of Personality and Social Psychology*, 75, 729–750.
- Botwin, M. D., & Buss, D. M. (1989). Structure of act-report data: Is the five-factor model of personality recaptured? *Journal of Personality and Social Psychology*, 56, 988–1001.
- Cohn, M. A., Mehl, M. R., & Pennebaker, J. W. (2004). Linguistic markers of psychological change surrounding September 11, 2001. Psychological Science, 15, 687–693.
- Costa, P. T., & McCrae, R. R. (1988). Personality in adulthood: A six-year longitudinal study of self-reports and spouse ratings on the NEO Personality Inventory. *Journal of Personality and Social Psychology*, 54, 853–863.
- Costa, P. T., Jr., & McCrae, R. R. (1992). Normal personality assessment in clinical practice: The NEO Personality Inventory. *Psychological Assessment*, 4, 5–13.
- Costa, P. T., Jr., Terracciano, A., & McCrae, R. R. (2001). Gender differences in personality traits across cultures: Robust and surprising findings. *Journal of Personality and Social Psychology*, 81, 322–331.
- Digman, J. M. (1989). Five robust trait dimensions: Development, stability, and utility. *Journal of Personality*, 57, 195–214.
- Digman, J. M. (1990). Personality structure: Emergence of the five-factor model. *Annual Review of Psychology*, 41, 417–440.
- Digman, J. M., & Inouye, J. (1986). Further specification of the five robust factors of personality. Journal of Personality and Social Psychology, 50, 116–123.
- Franzoi, S. L., & Davis, M. H. (1985). Adolescent self-disclosure and loneliness: Private self-consciousness and parental influences. *Journal of Personality and Social Psychology*, 48, 768–780.
- Goldberg, L. R. (1990). An alternative "description of personality": The big-five factor structure. *Journal of Personality and Social Psychology*, 59, 1216–1229.
- Hamburger, Y. A., & Ben-Artzi, E. (2000). Relationship between extraversion and neuroticism and the different uses of the Internet. *Computers in Human Behavior*, 16, 441–449.
- Hazan, C., & Shaver, P. (1987). Romantic love conceptualized as an attachment process. Journal of Personality and Social Psychology, 52, 511–524.
- Healy, R. (2007, March 9). Murder, they blogged. *Time Magazine*. <a href="http://www.time.com/time/nation/article/0,8599,1597801,00.html?cnn=yes">http://www.time.com/time/nation/article/0,8599,1597801,00.html?cnn=yes</a>> Retrieved April 19, 2007.
- Herring, S. C., Kouper, I., Paolillo, J. C., Scheidt, L. A., Tyworth, M., Welsch, P., Wrights, E., & Yu, N. (2005a). Conversations in the blogosphere: An analysis "from the bottom up". In *Proceedings of the 38th Hawaii international conference on systems sciences.*
- Herring, S. C., Scheidt, L. A., Wright, E., & Bonus, S. (2005b). Weblogs as bridging genre. Information Technology & People, 18(2), 142–171.

12

- R.E. Guadagno et al. / Computers in Human Behavior xxx (2007) xxx-xxx
- Huffaker, D. A., & Calvert, S. L. (2005). Gender, identity, and language use in teenage blogs. Journal of Computer-Mediated Communication, 10(2), article 1. http://jcmc.indianca.edu/vol10/issue2/huffaker.html.
- John, O. P., & Srivastava, S. (1999). The Big Five trait taxonomy: History, measurement, and theoretical perspectives. In L. A. Pervin & O. P. John (Eds.), *Handbook of personality: Theory and research* (2nd ed., pp. 102–138). New York: Springer.
- Joinson, A. N. (2001). Self-disclosure in computer mediated communication: The role of self-awareness and visual anonymity. *European Journal of Social Psychology*, 31, 177–192.
- Joinson, A. N. (2003). Understanding the psychology of Internet behaviour: Virtual worlds, real lives. New York: Macmillan.
- Kruglanski, A. W., & Freund, T. (1983). The freezing and unfreezing of lay-inferences: Effects on impressional primacy, ethnic stereotyping, and numerical anchoring. *Journal of Experimental Social Psychology*, 19, 448–468.
- Lenhart, A. & Fox, S. (2006). Bloggers: A portrait of the internet's new storytellers. <a href="http://www.pewinter-net.org/pdfs/PIP%20Bloggers%20Report%20July%2019%202006.pdf">http://www.pewinter-net.org/pdfs/PIP%20Bloggers%20Report%20July%2019%202006.pdf</a>> Retrieved December 9, 2006.
- Levenson, M. R. (1990). Risk taking and personality. Journal of Personality and Social Psychology, 58, 1073–1080.
- Lewis, D. E. (2006, March 30). Job applicants online musings get a hard look. *Boston Globe*. <a href="http://www.boston.com/business/globe/articles/2006/03/30/job\_applicants\_online\_musings\_get\_hard\_look/">http://www.boston.com/business/globe/articles/2006/03/30/job\_applicants\_online\_musings\_get\_hard\_look/</a> Retrieved April 19, 2007.
- Matheson, K., & Zanna, M. P. (1988). The impact of computer-mediated communication on self-awareness. Computers and Human Behavior, 4, 221–233.
- McCrae, R. R., & Costa, P. T. Jr., (1986). Clinical assessment can benefit from recent advances in personality psychology. *American Psychologist*, 41, 1001–1003.
- McCrae, R. R., & Costa, P. T. (1997). Personality trait structure as a human universal. American Psychologist, 52, 509–516.
- McKenna, K. Y. A., & Bargh, J. A. (2000). Plan 9 from cyberspace: The implications of the Internet for personality and social psychology. *Personality and Social Psychology Review*, 4, 57–75.
- Perez, J. C. (2005, February 16). Three minutes: Fired google blogger. PC World. <a href="http://www.pcworld.com/printable/article/id,119715/printable.html">http://www.pcworld.com/printable/article/id,119715/printable.html</a>> Retrieved April 19, 2007.
- Postmes, T., Spears, R., & Lea, M. (2002). Intergroup differentiation in computer mediated communication: Effects of depersonalization. *Group Dynamics*, *6*, 3–15.
- Poulsen, K. (2005, July 6). Blog bares sex offender's dreams. Wired Magazine. <a href="http://www.wired.com/techbiz/media/news/2005/07/68094">http://www.wired.com/techbiz/media/news/2005/07/68094</a>> Retrieved April 19, 2007.
- Prentice-Dunn, S., & Rogers, R. W. (1982). Effects of public and private self-awareness on deindividuation and aggression. *Journal of Personality and Social Psychology*, 43, 503–513.
- Rotter, J. B. (1966). Generalized expectancies for internal versus external control of reinforcement. *Psychological Monographs*, 80 (Whole No. 609).
- Rotter, J. B. (1982). The development and application of social learning theory. New York: Praeger.
- Stokes, J. P. (1985). The relation of social network and individual difference variables to loneliness. Journal of Personality and Social Psychology, 48, 981–990.
- Trammell, K. D., Tarkowski, A., Hofmokl, J., & Sapp, A. M. (2006). Rzeczpospolita blogów [Republic of blog]: Examining Polish bloggers through content analysis. *Journal of Computer Mediated Communication*, 11, 702–722.
- Twist, J. (2004, October 27). Blogger grounded by her airline. BBC News. <a href="http://news.bbc.co.uk/go/pr/fr/-/1/hi/technology/3955913.stm">http://news.bbc.co.uk/go/pr/fr/-/1/hi/technology/3955913.stm</a>> Retrieved April 17, 2007.
- Valenti, J. (2007, April 14). How the web became a sexist's paradise. The Guardian. <a href="http://www.alternet.org/story/50519/">http://www.alternet.org/story/50519/</a> Retrieved April 19, 2007.
- Vazire, S., & Gosling, S. D. (2004). E-perceptions: Personality impressions based on personal websites. *Journal of Personality and Social Psychology*, 87, 123–132.
- Viegas, F. B. (2005). Bloggers' expectations of privacy and accountability: An initial survey. Journal of Computer-Mediated Communication, 10(3), article 12. http://jcmc.indiana.edu/vol10/issue3/viegas.html.