



User Characteristics of Vaguebookers versus General Social Media Users

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Abstract. Using the Unified Theory of User Acceptance and Use of Technology (UTAUT), we examined how user traits predict both general acceptance of social media as well as vaguebooking, an understudied subtype of problematic social media use. Past research has suggested that general acceptance of social media platforms and problematic social media use may be linked to different user traits. Based on a sample of young adults ($N = 467$), general acceptance and use of social media platforms were associated with a need to belong, while vaguebooking was associated with loneliness and histrionic symptoms. Histrionic users also had a higher acceptance of social media platforms.

Keywords: Social media · Loneliness · Histrionic · User acceptance · Vaguebooking · Problematic internet use · Need to belong

1 Introduction

As social media's popularity has grown, there has been increasing concern over the possible negative effects of these emerging technologies on users. 79% of adults with internet access have a Facebook profile, and 70% of those users use the platform everyday [1]. Both popular press outlets [2] and research communities [3] have suggested that social media may be linked to problematic internet use [4], leading to higher rates of depression [5], increased social isolation [6], and narcissistic behavior [7]. On the other hand, other researchers have suggested that negative emotional experiences or poor mental health may actually motivate certain individuals to use and accept these technologies or use these technologies to engage in maladaptive behaviors at a great rate than their healthier counterparts [8]. Using the Unified Theory of Acceptance and Use of Technology (UTAUT), the present study examines how various healthy,

unhealthy, and demographic user characteristics may contribute to user acceptance and use of social media. Since certain user characteristics, such as narcissism [7] and other personality traits [9], have already been examined as predictors of social media use, we focus our examination on user traits that have been less examined in the literature: histrionic personality disorder, loneliness, and the need to belong. To distinguish from general acceptance of social media, we also examine how these traits are related to vaguebooking, a type of problematic social media use that has been under-examined in the literature.

2 Related Literature

One of the greatest concerns surrounding social media is its possible link to problematic internet use [10]. Problematic internet use is a broad term that can refer to any sort of pathological internet use, and often includes maladaptive or psychologically unhealthy behaviors, such as internet dependency [11] and internet addiction [12]. Some of these behaviors are equivalent to unhealthy or maladaptive offline behaviors, such as using the internet to engage in procrastination [13] and practicing poor impulse control [14]. Many of these behaviors may be motivated or exacerbated by mental health issues such as anxiety, depression [15] and social isolation [6]. Internet use is also especially problematic when users perceive themselves as having few connections that are not virtual or feel uncomfortable interacting with others offline [16]. It has also been suggested that problematic internet use may include attention-seeking behaviors and may be used by individuals who have mental illnesses that encourage attention-seeking [17].

3 Research Framework

3.1 Social Media and Problematic Internet Use

Many popular press outlets suggest that problematic social media use in general can lead to negative mental health outcomes. However, the directional relationship between mental health and social media use remains unclear. Some research suggests that more time spent on social media may lead to depression and other negative emotions [18]. On the other hand, individuals who spend more time online may also use social media more because they have mental health issues [19], and that maladaptive online behaviors, not overall use is more related to mental health [20]. This research suggests that poor mental health may actually lead certain users to engage in problematic social media use as a means of coping with mental health issues in a maladaptive way. For example, individuals who are lonely may use online communication to reduce loneliness in a way that decreases more healthy in-person contact [6]. Thus, while users may use social media to engage in unhealthy coping behaviors, social media use is not necessarily used to engage in maladaptive behaviors.

Social media use and acceptance may also be motivated by nonpathological needs, such as a desire to expand one's social network [21] or to strengthen bonds formed

offline [22]. Indeed, social media can be used to strengthen communications by opening up new forms of communication with family and friends [23] and help individuals from marginalized groups find support groups they cannot find in offline contexts [24]. Therefore, when examining predictors of problematic internet use, many researchers separate problematic internet use from more neutral or positive use and acceptance of online platforms [25], often focusing on specific categories of problematic internet use [16], such as online gambling [26], cyberloafing [27], and social media addiction [28]. In our case, the present study focuses specifically on vaguebooking, an understudied but prevalent type of problematic social media use [29]. However, we also examine a users' need to belong as a potential nonpathological need for using social media.

3.2 Vaguebooking on Social Media

Like offline communities, online communities such as social media websites also have their own norms that must be followed by users. These social media norms dictate what content or information is appropriate to share on social media platforms [30]. These norms are usually implicit [31] and are an extension of norms usually observed in offline contexts [32]. Some of these norms mirror offline norms, with some social media specific context. For example, users are expected to tailor information shared on social media to whichever users may see this information [33]. Social media norms also dictate whether information that is overly emotional or personal should be shared in private communication channels (e.g., messaging) versus public communication channels (e.g., Facebook timeline posts, public tweets) [34].

One type of potentially maladaptive online behavior, which violates social media norms is vaguebooking. Vaguebooking refers to posts on Facebook or other social media sites that are intentionally vague and ambiguous [35]. These ambiguous posts are seen as norm violations in part because they appear to be private messages that are shared with public audiences [33]. They are also considered norm violations because they may contain overly emotional or dramatic wording [34]. Users who engage in vaguebooking may do so in an effort to protect their privacy from people who may have access to their social media profile, but are not the intended target of the message [29]. However, research that examines specific motivating factors for these posts suggest that most users engage in vaguebooking as a means of eliciting emotional support or gaining attention from other users [35]. Users may vaguebook as a means of gaining comfort from other users without making a direct request for help [35]. These vaguebooking posts, while seemingly innocuous, can often be passive aggressive, as they allow the vaguebooking user to avoid speaking to someone who has caused them emotional distress directly [36]. Since they violate social media norms, they may also strain and damage relationships with people who view these messages [37], as well as create stress for receivers who are confused or frustrated by the ambiguity of these posts [38]. For these reasons, vaguebooking is generally seen as an unhealthy or maladaptive behavior [39] that is associated with attention seeking [39]. Though vaguebooking has already been studied in past research [33–35], there is no research to date on the antecedents of vaguebooking. In the following sections, we describe our research framework for examining vaguebooking behaviors and social media use.

3.3 Histrionic Personality Symptoms

Histrionic personality disorder is a clinical disorder recognized by the Diagnostic and Statistical Manual of Mental Disorders [40]. This disorder is characterized by a need to be the center of attention. Individuals with histrionic personality disorder often fulfill this need for attention through overdramatic expressions of emotion [41]. Histrionic individuals may feel frustrated when people do not notice them [42]. Histrionic individuals also have trouble gauging how intimate relationships are, and may seek out emotional support from people they are not close to [43]. Though histrionic personality disorder is relatively prevalent, with 2–3% of the population experiencing clinically diagnosable symptoms [44], it is underresearched in comparison to similar personality disorders [42].

As vaguebooking is usually an attention-seeking and overdramatic behavior [39] and often used to indirectly bid for emotional support or interaction from other users [29], users who engage in vaguebooking may have traits that are associated with these behaviors. Since vaguebooking is characterized by emotional and melodramatic bids for attention [40], individuals who exhibit histrionic personality symptoms may be more likely to vaguebook. However, while narcissistic personality symptoms and problematic social media use have been thoroughly examined in the literature [7], histrionic personality symptoms has not been examined in relation to problematic internet use. Therefore, the current study examines the relationship between vaguebooking and histrionic personality symptoms.

H1: *Users who exhibit histrionic personality symptoms will be more likely to vaguebook.*

4 Loneliness

Like histrionic personality symptoms, loneliness also may prompt individuals to seek out emotional support [45]. Loneliness may arise from a perceived lack of social support or a perceived discrepancy between one's desired and actual social support [46]. Loneliness can be acute (e.g., feeling lonely during a solitary holiday) or chronic (e.g., feeling lonely for several months) [47]. While loneliness is a negative experience [48], it is not considered pathological. Instead, loneliness is considered a negative emotional experience that occurs when someone has an unmet need for social connections [49].

Social media acceptance and use may be motivated by a desire to connect with others [50]. It is possible that individuals may be more likely to engage with and use social media in part because it allows them to create new connection with other users or maintain relationship with offline friends and family [51]. Lonely individuals may be particularly drawn to online communication forms where they feel they can gain the connections they lack [52]. Previous content analyses of vaguebooking posts suggest that this behavior is based on a need for emotional support or social interaction [35]. Problematic internet use that is meant to elicit emotional and social support is common

[53] and is often motivated by users' loneliness [54]. Therefore, it is also probable that loneliness is also related to vaguebooking behaviors.

H2: *Loneliness will be directly related to vaguebooking behaviors.*

4.1 Need to Belong

Another trait that is related to a desire to connect to other is the need to belong (NTB). NTB is defined by the need to form attachments and feel a sense of intimacy with others [55]. Individuals who have a greater sense of belonging tend to have a higher sense of self-competence and worth [56]. Individuals who have a greater need to belong tend to seek out and strengthen interpersonal attachments [57]. For this reason, individuals who have a greater need to belong are more likely to engage in activities that allow them to forge new friendships. They are also able to maintain stronger friendships [58], in part because they are better able to follow group norms [57].

Though NTB has not been studied in the context of problematic social media use, it is generally related to more positive social behaviors offline [59]. Moreover, previous research suggests that NTB does motivate online behaviors that are related more to non-problematic internet use meant to strengthen, maintain, or form new social bonds [60]. Moreover, individuals with a greater NTB tend to observe social cues and norms at a higher rate in online contexts [61]. As vaguebooking is considered a violation of social media norms [29], individuals with a greater need to belong may engage in vaguebooking less.

H3: *Users with a greater NTB will be (a) more likely to use and accept social media and (b) be less likely to engage in vaguebooking.*

4.2 Demographics and User Acceptance

Demographic variables are one of the more widely studied predictors of user acceptance. The unified theory of acceptance and use of technology (UTAUT) [62] suggests that demographics are one of the key predictors of adoptions of new technology. Gender in particular determines which types of technology users tend to accept. Males may use the internet more heavily for entertainment purposes, such as gaming [63]. Females tend to use the internet for communication or social reasons [64], and are therefore more likely to integrate social media into their lives [65].

H4: Females will have a higher rate of social media use and acceptance when compared to males.

Another demographic variable included in the UTAUT is age. Age has been shown to be a strong predictor of technology acceptance and adoption [66]. Past national surveys indicate that younger people tend to be heavy users of social media sites [1], in part because younger individuals have spent a larger portion of their lives with the internet [67].

H5: *Younger user will accept and use social media at a higher rate.*

5 Materials and Methods

Analyses were based on archival data from a previous study that examined different research questions [68]. Undergraduate students from a university in the America southeast were invited to complete an online survey for extra credit. 471 undergraduate students elected to take part in the study. Of these participants, 467 completed enough of the survey to be included in the analyses. The majority of the remaining participants identified as female (71.7%), were young adults ($M = 19.66$, $SD = 3.92$), and identified as White or Caucasian (60.2%; 16.5% Hispanic or Latinx; 10.1% African American or Black; 6.6% Asian American; 6.2% Other).

5.1 Measures

Social Media Acceptance and Use. Since the present study examines social media acceptance and use, we utilized a measure that captured the extent to which users integrate and embed social media into their daily lives. The Social Media Use Integration Scale (SMUIS) [69] is a ten item scale that measures emotional investment in social media as well as preference for social media over other communication technologies. Example items include, “Using social media is part of my everyday routine” and “Social media plays an important role in my social relationships.” Respondents rate their level of agreement for each statement on a scale of 1 (strongly disagree) to 6 (strongly agree) point scale. Scores on the SMUIS were relatively high for this sample ($M = 3.05$, $SD = 0.80$) and had acceptable reliability (Cronbach $\alpha = .90$).

Vaguebooking. Vaguebooking was measured using three items included in the survey: “I post vague updates that allude to something else on my social networking account,” “I post social networking updates that prompt friends to ask me what is going on,” and “I speak my mind on my social networking account without talking about what I am referencing directly.” These items were based on formal and informal definitions found in past literature on vaguebooking [29, 35]. All items were answered using a 1 (never) to 4 (frequently) point frequency scale. The scale had acceptable reliability in this sample (Cronbach $\alpha = .79$) and a low mean ($M = 1.83$, $SD = 0.75$).

Loneliness. Participants completed the UCLA Loneliness Scale Version 3.0 (UCLA Lon-3) [70] to measure loneliness. Participants completed the scale by rating the extent to which they agreed with twenty statements on a scale of 1 (never true) to 4 (always true) point scale. The mean for this sample was relatively low ($M = 2.18$, $SD = 0.51$) and had acceptable reliability (Cronbach $\alpha = .93$).

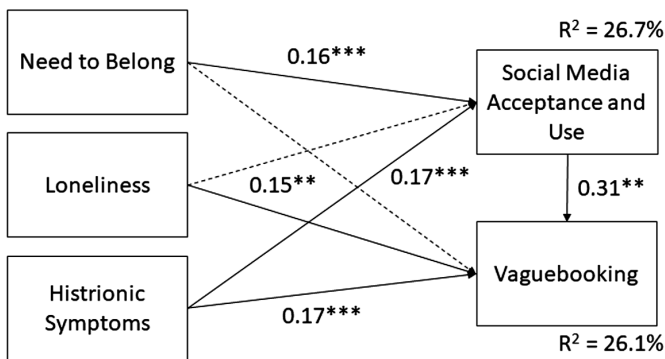
Histrionic Personality Symptoms. Histrionic personality symptoms were measured using an eleven item self-report scale of histrionic personality disorder (the Brief Histrionic Personality Scale or BHPS). [42] Participants rated the extent to which they agreed with each statement on a scale of 1 (never true) to 4 (always true) point scale. Example items include, “I like to be the center of attention” and “I get frustrated when people don’t notice me.” The mean score on the BHPS was 2.14 ($SD = 0.49$). The scale demonstrated acceptable reliability in this sample (Cronbach $\alpha = .81$).

Need to Belong. The Need to Belong scale or NTB [71] was used to assess participants' need to belong. Respondents fill out the NTB by indicating the extent to which they agree with ten statements on a 1 (strongly disagree) to 5 (strongly agree) point scale. The mean for the sample was 3.36 ($SD = 0.70$). The scale had acceptable reliability for this sample (Cronbach $\alpha = .80$).

Other Variables. Two non-hypothesized variables were also included in our analyses. The first was social media use frequency, measured as the average number of hours a day spent using social media to communicate with others online. This was meant to distinguish social media use frequency (i.e., how often an individual is on a social media site) and overall acceptance and use of social media (i.e., the extent to which social media use is accepted as an integral part of the user's life). This variable was also included to account for the fact that participants who use social media for a longer period of time may be more likely to engage in vaguebooking because they spend more actual time on social media sites. We also included a socially desirable responding scale in the survey. Since vaguebooking is considered a negative behavior [35], it is possible that respondents who engage in socially desirable responding may be less likely to report engaging in vaguebooking. Using the Marlowe-Crowne Social Desirability Scale-Short Form [72], we assessed the extent to which participants respond to items in a way that portrayed them in a favorable light. All questions were answered in a true-false format. The mean of the sample was 0.51 ($SD = 0.22$) with acceptable internal reliability (Cronbach's $\alpha = .69$).

6 Results

To examine the hypothesized relationships between variables, a path analysis was performed using SmartPLS, as shown in Fig. 1.



Control Variables: Gender, Age, Frequency of Use, and Social Desirability Response

Fig. 1. Path analysis of user characteristics, vaguebooking, and social media acceptance. SM = social media. SD = socially desirable. * $p < .05$. ** $p < .01$. *** $p < .001$.

6.1 Vaguebooking

As hypothesized, both loneliness ($\beta = 0.151$, $p < .05$) and histrionic symptoms ($\beta = 0.171$, $p < .001$) predicted vaguebooking, while NTB ($\beta = -0.082$, $p > .05$) did not [73]. For demographic variables, females tended to vaguebook more ($\beta = 0.099$, $p < .05$), while age was unrelated to vaguebooking ($\beta = -0.042$, $p > .05$). For control variables, socially desirable responders were not less likely to report vaguebooking ($\beta = -0.086$, $p > .05$), but people who spent more time online ($\beta = 0.083$, $p < .05$) and had a greater use and acceptance of social media ($\beta = 0.313$, $p < .001$) did report more vaguebooking.

6.2 Social Media Acceptance and Use

Consistent with H3, NTB ($\beta = 0.159$, $p < .001$) was related to social media acceptance and use. However, an unhypothesized relationship between histrionic symptoms ($\beta = 0.151$, $p < .001$) was also significant. In addition, it appears that people who accept social media are more likely to vaguebook ($\beta = 0.313$, $p < .001$), though this may merely be a reflection of the fact that people who have a higher acceptance of social media also spend more time on social media ($\beta = 0.288$, $p < .05$). Unlike vaguebooking, no demographics variables were related to social media acceptance and use. Socially desirable responders were also less likely to report social media acceptance ($\beta = -0.166$, $p < .001$), suggesting there may be a self-presentation bias to answers on this scale.

7 Discussion

Overall, most of our hypotheses were supported. NTB, a healthy motivation, was related to general social media acceptance, but unrelated to a type of problematic social media use (i.e., vaguebooking). In addition, two indicators of negative emotional experiences (i.e., histrionic personality disorder and loneliness) were related to problematic social media use. This suggests that vaguebooking can be influenced by non-pathological user traits, such as loneliness, as well as pathological traits, such as histrionic personality symptoms. This is consistent with past research that suggests that problematic internet use is related to negative emotions and emotional experiences, while positive internet use is related to more emotionally healthy motivators [74]. The relationship to loneliness may also indicate that vaguebooking may be an attempt to connect to others or gain social support, as many vaguebooking posts are an attempt to seek support from others [35].

However, in contrast to our hypothesis, histrionic symptoms were positively related to social media acceptance and use. This suggests that, though many users may be motivated to accept social media in order to fulfill healthy emotional needs such as forming stronger relationships and creating a sense of belonging, other users may also be drawn to social media because it helps them fulfill unhealthy needs. For example, social media can be used as a form of communication. However, social media can also be used feed an unhealthy need to be noticed and validated by other people [19].

Moreover, social media may also be used as a method to flirt with others, or to seek out romantic partners [75], in part because users have more control over the online image they present to potential partners [76]. These behaviors are typical of people with histrionic personality disorder. Therefore, our results may indicate that individuals with histrionic symptoms may accept and use social media in order to gain attention or to engage in flirting. Future research could examine these relationships more explicitly.

Our results for demographic variables were also not expected. Women were more likely to engage in vaguebooking, though gender was unrelated to social media acceptance and use. This may be a reflection of gender roles in our American sample. Vaguebooking posts are often a bid for emotional support from other users [35]. Traditional American gender roles discourage men from expressing emotional vulnerability [77] and seeking out emotional support [78]. Female vaguebooking may then be another form of this behavior, a possibility that could be explored by studying gender roles in relation to vaguebooking in future research. The relationship between age and social media use and acceptance was also inconsistent with past research [65]. However, this may be due to restriction of range, as the majority of our sample were young adults. It may also be due to self-selection bias; people who use social media more were probably more likely to elect to participate in a study about social media.

Socially desirable responders tended to report lower levels of social media acceptance and use. This may indicate that there is a stigma towards social media [2]. Also contrary to research, socially desirable responders were not less likely to self-report vaguebooking. This suggests that, though vaguebooking is considered a negative behavior that violates social norms [35], it is not considered socially unacceptable among the young adults who participated in the study.

7.1 Conclusion

Users who have a higher acceptance of social media tend to vaguebook more. However, it appears that there are several differences between a user who vaguebooks versus a user who has a higher acceptance of social media use. Typical social media acceptance and use may be motivated by a need to belong, whereas vaguebooking is linked to negative emotional experiences such as loneliness and histrionic symptoms.

References

1. Lenhart, A., Purcell, K., Smith, A., Zickuhr, K.: Social Media and Mobile Internet Use Among Teens and Young Adults. Millennials. <http://files.eric.ed.gov/fulltext/ED525056.pdf>
2. Stephens-Davidowitz, S.: Don't Let Facebook Make you Miserable (2017). <https://www.nytimes.com/2017/05/06/opinion/sunday/dont-let-facebook-make-you-miserable.html>
3. Barry, C.T., Sidoti, C.L., Briggs, S.M., Reiter, S.R., Lindsey, R.A.: Adolescent social media use and mental health from adolescent and parent perspectives. *J. Adolesc.* **61**, 1–11 (2017)
4. Kittinger, R., Correia, C.J., Irons, J.G.: Relationship between Facebook use and problematic internet use among college students. *Cyberpsychol. Behav. Soc. Netw.* **15**, 324–327 (2012)
5. Çerkez, Y., Kara, D.: Investigating the relationship between university students' use of social media, loneliness and depression. *Eur. J. Educ. Stud.* (2017)

6. Lee, E.-J., Cho, E.: When using Facebook to avoid isolation reduces perceived social support. *Cyberpsychol. Behav. Soc. Netw.* **21**, 32–39 (2017)
7. Andreassen, C.S., Pallesen, S., Griffiths, M.D.: The relationship between addictive use of social media, narcissism, and self-esteem: findings from a large national survey. *Addict. Behav.* **64**, 287–293 (2017)
8. Caplan, S.E.: Relations among loneliness, social anxiety, and problematic internet use. *Cyberpsychol. Behav.* **10**, 234–242 (2007)
9. Correa, T., Hinsley, A.W., De Zuniga, H.G.: Who interacts on the web?: the intersection of users' personality and social media use. *Comput. Hum. Behav.* **26**, 247–253 (2010)
10. DeJong, S.M.: Problematic internet use: a case of social media addiction. *Adolesc. Psychiatry* **4**, 112–115 (2014)
11. Odacı, H., Çelik, Ç.B.: Group counselling on college students' internet dependency and life satisfaction. *J. Psychol. Couns. Sch.* **27**, 239–250 (2017)
12. LaRose, R., Lin, C.A., Eastin, M.S.: Unregulated internet usage: addiction, habit, or deficient self-regulation? *Media Psychol.* **5**, 225–253 (2003)
13. Thatcher, A., Wretschko, G., Fridjhon, P.: Online flow experiences, problematic internet use and internet procrastination. *Comput. Hum. Behav.* **24**, 2236–2254 (2008)
14. Mazhari, S.: Association between problematic internet use and impulse control disorders among iranian university students. *Cyberpsychol. Behav. Soc. Netw.* **15**, 270–273 (2012)
15. Dalbudak, E., Evren, C., Aldemir, S., Coskun, K.S., Ugurlu, H., Yildirim, F.G.: Relationship of internet addiction severity with depression, anxiety, and alexithymia, temperament and character in university students. *Cyberpsychol. Behav. Soc. Netw.* **16**, 272–278 (2013)
16. Davis, R.A., Flett, G.L., Besser, A.: Validation of a new scale for measuring problematic internet use: implications for pre-employment screening. *Cyberpsychol. Behav.* **5**, 331–345 (2002)
17. Wu, J.Y.-W., Ko, H.-C., Lane, H.-Y.: Personality disorders in female and male college students with internet addiction. *J. Nerv. Ment. Dis.* **204**, 221 (2016)
18. Shensa, A., Escobar-Viera, C.G., Sidani, J.E., Bowman, N.D., Marshal, M.P., Primack, B.A.: Problematic social media use and depressive symptoms among U.S. young adults: a nationally-representative study. *Soc. Sci. Med.* **182**, 150–157 (2017)
19. Davenport, S.W., Bergman, S.M., Bergman, J.Z., Fearington, M.E.: Twitter versus Facebook: exploring the role of narcissism in the motives and usage of different social media platforms. *Comput. Hum. Behav.* **32**, 212–220 (2014)
20. Harman, J.P., Hansen, C.E., Cochran, M.E., Lindsey, C.R.: Liar, liar: internet faking but not frequency of use affects social skills, self-esteem, social anxiety, and aggression. *Cyberpsychol. Behav.* **8**, 1–6 (2005)
21. Kraut, R., Patterson, M., Lundmark, V., Kiesler, S., Mukophadhyay, T., Scherlis, W.: Internet paradox: a social technology that reduces social involvement and psychological well-being? *Am. Psychol.* **53**, 1017–1031 (1998)
22. Moore, K., McElroy, J.C.: The influence of personality on Facebook usage, wall postings, and regret. *Comput. Hum. Behav.* **28**, 267–274 (2012)
23. Valkenburg, P.M., Peter, J.: Online communication among adolescents: an integrated model of its attraction, opportunities, and risks. *J. Adolesc. Health* **48**, 121–127 (2011)
24. Ybarra, M.L., Mitchell, K.J., Palmer, N.A., Reisner, S.L.: Online social support as a buffer against online and offline peer and sexual victimization among US LGBT and non-LGBT youth. *Child Abuse Negl.* **39**, 123–136 (2015)
25. Cooper, S.: Internet, social media, and television use: what effect does problematic use of technology have on one's psychological well-being, appreciation, and life satisfaction? (2017). <https://login.ezproxy.net.ucf.edu/login?auth=shibb&url=http://search.ebscohost.com/login.aspx?direct=true&db=psych&AN=2017-10860-186&site=ehost-live&scope=site>

26. Floros, G.D., Siomos, K., Fisoun, V., Geroukalis, D.: Adolescent online gambling: the impact of parental practices and correlates with online activities. *J. Gambl. Stud.* **29**, 131–150 (2013)
27. Lim, V.K.G., Chen, D.J.Q.: Cyberloafing at the workplace: gain or drain on work? *Behav. Inf. Technol.* **31**, 343–353 (2012)
28. Andreassen, C.S.: Online social network site addiction: a comprehensive review. *Curr. Addict. Rep.* **2**, 175–184 (2015)
29. Child, J.T., Starcher, S.C.: Fuzzy Facebook privacy boundaries: exploring mediated lurking, vague-booking, and Facebook privacy management. *Comput. Hum. Behav.* **54**, 483–490 (2016)
30. Zhao, X., Lampe, C., Ellison, N.B.: The social media ecology: user perceptions, strategies and challenges. Presented at the Proceedings of the 2016 CHI Conference on Human Factors in Computing Systems (2016)
31. Hooper, V., Kalidas, T.: Acceptable and unacceptable behaviour on social networking sites: a study of the behavioural norms of youth on Facebook. *Electron. J. Inf. Syst. Eval.* **15**, 259 (2012)
32. McLaughlin, C., Vitak, J.: Norm evolution and violation on Facebook. *New Media Soc.* **14**, 299–315 (2012)
33. Cotter, C., Wanzer, M.: Facebook norms and expectancy violations. Presented at the National Communication Association Conference, San Diego, CA, November 2008
34. Choi, M., Toma, C.L.: Social sharing through interpersonal media: patterns and effects on emotional well-being. *Comput. Hum. Behav.* **36**, 530–541 (2014)
35. Buehler, E.M.: “You shouldn’t use Facebook for that”: navigating norm violations while seeking emotional support on Facebook. *Soc. Media Soc.* **3** (2017). <https://doi.org/10.1177/2056305117733225>
36. Edwards, A., Harris, C.J.: To tweet or ‘subtweet’?: impacts of social networking post directness and valence on interpersonal impressions. *Comput. Hum. Behav.* **63**, 304–310 (2016)
37. Miller, K., Joseph, L., Apker, J.: Strategic ambiguity in the role development process. *J. Appl. Commun. Res.* **28**, 193–214 (2000)
38. McManus, T.G., Nussbaum, J.: Ambiguous divorce-related communication, relational closeness, relational satisfaction, and communication satisfaction. *West. J. Commun.* **75**, 500–522 (2011)
39. Carpenter, C.J., Tong, S.T.: Relational distancing and termination between online friends: an application of the investment model. In: Proceedings of the 2017 CHI Conference on Human Factors in Computing Systems, pp. 6925–6935. ACM, New York (2017)
40. American Psychiatric Association: Diagnostic and Statistical Manual of Mental Disorders-DSM-5 (2013)
41. AlaviHejazi, M., Fatehizade, M., Bahrami, F., Etemadi, O.: Histrionic women in Iran: a qualitative study of the couple interactive pathology of the women with symptoms of histrionic personality disorder (HPD). *Rev. Eur. Stud.* **9**, 18 (2016)
42. Ferguson, C.J., Negy, C.: Development of a brief screening questionnaire for histrionic personality symptoms. *Personal. Individ. Differ.* **66**, 124–127 (2014)
43. Cale, E.M., Lilienfeld, S.O.: Histrionic personality disorder and antisocial personality disorder: sex-differentiated manifestations of psychopathy? *J. Personal. Disord.* **16**, 52–72 (2002)
44. Kraus, G., Reynolds, D.J.: The “A-B-C’s” of the cluster B’s: identifying, understanding, and treating cluster B personality disorders. *Clin. Psychol. Rev.* **21**, 345–373 (2001)
45. Perlman, D., Peplau, L.A.: Theoretical approaches to loneliness. In: *Loneliness: A Sourcebook of Current Theory, Research and Therapy*, pp. 123–134 (1982)

46. Rubenstein, C., Shaver, P.: The experience of loneliness. In: *Loneliness: A Sourcebook of Current Theory, Research and Therapy*, pp. 206–223 (1982)
47. Johnson, D.P., Mullins, L.C.: Growing old and lonely in different societies: toward a comparative perspective. *J. Cross-Cult. Gerontol.* **2**, 257–275 (1987)
48. Wildschut, T., Sedikides, C., Cordaro, F.: Self-regulatory interplay between negative and positive emotions: the case of loneliness and nostalgia. In: Nyklíček, I., Vingerhoets, A., Zeelenberg, M. (eds.) *Emotion Regulation and Well-Being*, pp. 67–83. Springer, New York (2011). https://doi.org/10.1007/978-1-4419-6953-8_5
49. Cacioppo, J.T., Hawkley, L.C.: Loneliness. In: *Handbook of Individual Differences in Social Behavior*, pp. 227–240. Guilford Press, New York (2009)
50. Chen, G.M.: Tweet this: a uses and gratifications perspective on how active Twitter use gratifies a need to connect with others. *Comput. Hum. Behav.* **27**, 755–762 (2011)
51. Shamugam, L.: Aging society, loneliness and social support: is social media making them less lonely? (2015)
52. Morahan-Martin, J.: The relationship between loneliness and internet use and abuse. *Cyberpsychol. Behav.* **2**, 431–439 (1999)
53. Peng, S., Pandey, S., Pandey, S.K.: Is there a nonprofit advantage? Examining the impact of institutional context on individual-organizational value congruence. *Public Adm. Rev.* **75**, 585–596 (2015)
54. Kim, H., Markus, H.R.: Deviance or uniqueness, harmony or conformity? A cultural analysis. *J. Pers. Soc. Psychol.* **77**, 785–800 (1999)
55. Hornsey, M.J., Jetten, J.: The individual within the group: balancing the need to belong with the need to be different. *Personal. Soc. Psychol. Rev.* **8**, 248–264 (2004)
56. Pittman, L.D., Richmond, A.: University belonging, friendship quality, and psychological adjustment during the transition to college. *J. Exp. Educ.* **76**, 343–362 (2008)
57. Baumeister, R.F., Leary, M.R.: The need to belong: desire for interpersonal attachments as a fundamental human motivation. *Psychol. Bull.* **117**, 497 (1995)
58. Chipuer, H.M.: Dyadic attachments and community connectedness: links with youths' loneliness experiences. *J. Community Psychol.* **29**, 429–446 (2001)
59. Lambert, N.M., Stillman, T.F., Hicks, J.A., Kamble, S., Baumeister, R.F., Fincham, F.D.: To belong is to matter: sense of belonging enhances meaning in life. *Pers. Soc. Psychol. Bull.* **39**, 1418–1427 (2013)
60. Pickett, C.L., Gardner, W.L., Knowles, M.: Getting a cue: the need to belong and enhanced sensitivity to social cues. *Pers. Soc. Psychol. Bull.* **30**, 1095–1107 (2004)
61. Sun, T., Wu, G.: Traits, predictors, and consequences of Facebook self-presentation. *Soc. Sci. Comput. Rev.* **30**, 419–433 (2012)
62. Venkatesh, V., Morris, M.G., Davis, G.B., Davis, F.D.: User acceptance of information technology: toward a unified view. *MIS Q.* **27**, 425–478 (2003)
63. Winn, J., Heeter, C.: Gaming, gender, and time: who makes time to play? *Sex Roles* **61**, 1–13 (2009)
64. Borrero, J.D., Yousafzai, S.Y., Javed, U., Page, K.L.: Expressive participation in Internet social movements: testing the moderating effect of technology readiness and sex on student SNS use. *Comput. Hum. Behav.* **30**, 39–49 (2014)
65. Greenwood, S., Perrin, A., Duggan, M.: Social Media Update. <http://www.pewinternet.org/2016/11/11/social-media-update-2016/>
66. Venkatesh, V., Thong, J.Y., Xu, X.: Consumer acceptance and use of information technology: extending the unified theory of acceptance and use of technology (2012)
67. Kilian, T., Hennigs, N., Langner, S.: Do Millennials read books or blogs? Introducing a media usage typology of the internet generation. *J. Consum. Mark.* **29**, 114–124 (2012)

68. Berryman, C., Ferguson, C.J., Negy, C.: Social media use and mental health among young adults. *Psychiatr. Q.* **89**, 307314 (2017)
69. Jenkins-Guarnieri, M.A., Wright, S.L., Johnson, B.: Development and validation of a social media use integration scale. *Psychol. Pop. Media Cult.* **2**, 38 (2013)
70. Russell, D.W.: UCLA loneliness scale (version 3): reliability, validity, and factor structure. *J. Pers. Assess.* **66**, 20–40 (1996)
71. Leary, M.R., Kelly, K.M., Cottrell, C.A., Schreindorfer, L.S.: Individual differences in the need to belong: mapping the nomological network. Unpublished manuscript, Duke University (2007)
72. Reynolds, W.M.: Development of reliable and valid short forms of the Marlowe-Crowne social desirability scale. *J. Clin. Psychol.* **38**, 119–125 (1982)
73. Kim, J., LaRose, R., Peng, W.: Loneliness as the cause and the effect of problematic internet use: the relationship between internet use and psychological well-being. *Cyberpsychol. Behav.* **12**, 451–455 (2009)
74. Shaw, L.H., Gant, L.M.: In defense of the internet: the relationship between internet communication and depression, loneliness, self-esteem, and perceived social support. *Cyberpsychol. Behav.* **5**, 157–171 (2002)
75. Lenhart, A., Smith, A., Anderson, M.: Chapter 2: How teens meet, flirt with and ask out potential romantic partners (2015). <http://www.pewinternet.org/2015/10/01/how-teens-interact-with-potential-romantic-partners/>
76. Fullwood, C., Attrill-Smith, A.: Up-dating: ratings of perceived dating success are better online than offline. *Cyberpsychol. Behav. Soc. Netw.* **21**, 11–15 (2017)
77. Oransky, M., Marecek, J.: “I’m not going to be a girl”: masculinity and emotions in boys’ friendships and peer groups. *J. Adolesc. Res.* **24**, 218–241 (2009)
78. Ashton, W.A., Fuehrer, A.: Effects of gender and gender role identification of participant and type of social support resource on support seeking. *Sex Roles* **28**, 461–476 (1993)