

2013

Going offline: Personality and its effects on the transition of online relationships to the offline world

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Johnson, Morgan, "Going offline: Personality and its effects on the transition of online relationships to the offline world" (2013). *Honors Program Theses*. 34.

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Running head: GOING OFFLINE

GOING OFFLINE: PERSONALITY AND ITS EFFECTS ON THE TRANSITION OF
ONLINE RELATIONSHIPS TO THE OFFLINE WORLD

A Thesis Submitted
in Partial Fulfillment
of the Requirements for the Designation
University Honors with Distinction

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May 2013

GOING OFFLINE

This Study by: Morgan Johnson

Entitled: Going Offline: Personality and its Effects on the Transition of Online Relationships to the Offline World

has been approved as meeting the thesis or project requirement for the Designation University Honors with Distinction.

Date

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GOING OFFLINE

Abstract

Because the internet is a relatively new technology, few studies have researched the correlations between online behavior and personality. As such, this study set out to determine if online friendships and personality are related. In this study differences in personality were examined between individuals who have met their online friends face-to-face and those who have not. A survey was distributed online using the Five Factor Model to measure personality. Participants in this study were recruited from an online community called Nerdfighteria. The results found that the facets of the Five Factor Model of personality were largely found not to be predictors of whether or not individuals will meet their online friends in an offline setting. Of the five personality factors measured, extraversion was the only one that had statistically significant differences in mean scores between individuals who chose to meet their online friends offline and those chose not to. Individuals with higher scores of extraversion are more likely to meet their online friends face-to-face than those with lower scores of extraversion. Because the difference in mean scores of these two groups was so small, it is possible extraversion does not truly have an effect. As such, it is difficult to determine if personality truly has a relationship to this online behavior.

Going Offline: Personality and its Effects on the Transition of Online Relationships to the Offline World

Ever since the advent of the internet, people have been using the technology to communicate with people all around the world. Interacting with other users online is increasing in popularity, along with the number of online communities (Wang & Chen, 2012). With increasingly more Web 2.0 websites (such as YouTube, Facebook, and Wikipedia) that have moved beyond websites with strictly static content, the dynamic processes of online interaction, creation, and collaboration are at an all-time high (Ganley & Lampe, 2009; Wang & Chen, 2012; Zhao & Bishop, 2011). But why do individuals interact with other people online, especially people they have never met in person? Similarly, why do people choose to meet these online friends in a face-to-face setting?

While there are most likely many different factors that may be connected to why a person chooses to form online relationships and then move those relationships to the offline world, there is one factor that has been found to have a relationship a wide variety of behaviors: personality. Unfortunately, while studies have been conducted to examine how personality and internet use relate (e.g., Hughes, Rowe, Batey, & Lee, 2011; Muscanell & Guadagno, 2012; Wang, Jackson, Zhang, & Su, 2012), these studies only took a look at how personality relates to the way a person uses social networking sites (such as how many photos a person uploads or how many friends they have) and not the relationships people form on these sites.

To help fill in some of these gaps in research that has looked at internet use and personality, this study was conducted to find correlations between personality and online relationships. In order to measure personality for this study, the Five Factor model was used. (e.g., Costa & McCrae, 1995a; Costa & McCrae, 1995b; Goldberg, 1990; McCrae & John,

1991). The Five Factor Model personality inventory determines an individual's levels of neuroticism, extraversion, openness to experience, agreeableness, and conscientiousness. The purpose of this study is to see if individuals who choose to meet their online friends in a face-to-face setting have any specific personality traits that are different from individuals who do not choose to meet their online friends in person.

Development of friendships within online communities

Over the years as needs and wants of internet users have changed, many online communities have been established. According to Wang and Chen (2012), online communities serve as important resources for people with a variety of needs, goals, and interests. Friendships are likely to form within these communities because people are able to relate to one another through these various needs and goals, most importantly through similar interests (Tang, 2009). Tang also argues that because computer-mediated communication (CMC) allows people to find others with similar interests, CMC actually facilitates the formation of online friendships.

Once online relationships are formed, rarely does the communication stay on the website, social network, etc. where the interaction started. Tang (2009) found that many forms of online communication are not supportive of continuous engagement. Because of this, online friends often expand their communication to other websites, social networks, and forms of communication. Tang (2009) also found that as online friendships expand through multiple spaces, both online and offline, the more intimate and rewarding these friendships become. For instance, a pair of online friends that meet on an online message board and expand their means of communication to Facebook, Twitter, and Skype will have a more intimate and rewarding relationship than a pair of online friends who simply keep their relationship on the message board. It has also been found that by meeting in person, online friends seemed to strengthen the

relationship that was built online. The transfer from online to offline also increased the strength and intimacy of the relationships in the study (Broughton, 2011; Tang, 2009).

A few studies have documented the experiences of those who have chosen to take their online relationships offline. Not all internet users with strictly online friends choose to meet those friends in an offline setting, but an increasing number of people are choosing to take that next step in their relationships. In fact, Carter (2005) argued that most relationships that begin online drift into the offline world. While logistic factors like money and distance play an important role in whether or not online friends are able to meet offline (Tang, 2009), there also may be unique personality factors involved in this decision.

Five factor model of personality

Many personality models and inventories exist, but the measure that will be used for this study is the Five Factor Model (e.g., Costa & McCrae, 1995a; Costa & McCrae, 1995b; Goldberg, 1990; McCrae & John, 1991). The Five Factor Model is made up of five basic dimensions of personality: Neuroticism, Extraversion, Openness to Experience, Agreeableness, and Conscientiousness.

McCrae and John (1991) defined each of the five factors in this model. Individuals scoring high in neuroticism often are negative and frequently feel depressed, guilty, frustrated, and self-conscious. Conversely, individuals with low in neuroticism scores are more calm and relaxed with even tempers (McCrae & John, 1991). People scoring high in extraversion have positive emotions like cheerfulness, optimism, and enthusiasm, in addition to being ambitious and energetic. Lower levels of extraversion are associated with withdrawal, shyness, and quietness (McCrae & John, 1991). While openness to experience is not a measure of intellect, high scores on this dimension are tied to individuals with creative and intellectual interests, as

well as higher levels of originality, curiosity, and imagination. Individuals who have higher scores of agreeableness have humane inclinations like altruism, caring, and the need to give emotional support. Hostility, narcissism, spitefulness, and indifference and jealousy of others are all characteristics of individuals who score lower in agreeableness (McCrae & John, 1991).

Lastly, individuals with higher scores of conscientiousness have characteristics like thoroughness, neatness, diligence, and organizational skills. Lower conscientiousness scores are related to messiness, lack of interest in achievement, and leaving tasks incomplete (McCrae & John, 1991).

While the Five Factor Model cannot explain everything about personality or account for the richness of the human individual, the model has been shown to be a comprehensive measure of personality that is applicable across cultures. Additionally, there is evidence for the stability of all five traits over time, meaning these five factors do not change within a person as they get older (Costa & McCrae, 1995, McCrae & John, 1991).

Personality influences within online communities

Researchers often use specific online communities as samples for their research focusing on development and expansion of online friendships. For instance, members of communities like Wikipedia (Zhao & Bishop, 2011), Usenet (Lee, 2011), Slashdot (Ganley & Lampe, 2009), and Cybercity (Carter, 2005), have all been the subjects of surveys and ethnographic studies in order to examine various aspects of online communities. The growing number and size of online communities allows them to be easy populations to target for online research.

Some studies have focused on the relationship between personality and internet use (e.g., Hughes, Rowe, Batey, & Lee, 2011; Muscanell & Guadagno, 2012; Wang, Jackson, Zhang, & Su, 2012). However, these studies concentrated on the way in which personality relates to the

structural way that individuals use aspects of social networking sites (like commenting on threads, photo uploading, quantity of friends, etc.), rather than the *relationships* formed on the sites. While it is important to know the ways in which personality influences how a person uses a website, it is just as important to find out how personality may affect the way individuals interact with others they may meet on the internet.

Correa, Hinsely, and de Zuñiga (2010) examined how personality is related to frequency of social media use. They found that extraversion and openness to experiences are positively correlated with social media usage, and that emotional stability (or neuroticism) was negatively correlated to usage. While their study may show the personality traits of individuals who are more likely to use social networking sites and the internet in general, the same personality traits are not necessarily additional predictors of whether or not individuals will choose to meet their online friends in an offline setting.

Only a few studies have found relationships between certain online behaviors (like frequency of posts and number of friends) and personality traits from the Five Factor Model (e.g., Correa, Hinsely, & de Zuñiga, 2010; Hughes, Rowe, Batey, & Lee, 2011; Muscanell & Guadagno, 2012; Wang, Jackson, Zhang, & Su, 2012), but none of the studies have examined relationships between online relationships and personality. Because of this, the purpose of this study is to see if individuals who choose to take their online friendships offline have a specific set of personality characteristics taken from the Five Factor Model (e.g., Costa & McCrae, 1995a; Costa & McCrae, 1995b; Goldberg, 1990; McCrae & John, 1991) that are different from those who do not make this choice. For the purpose of this study, online friends are defined as friends that the participant did not know face-to-face prior to meeting the friend(s) online.

Additionally, an offline setting is considered to be anywhere individuals are able to interact in a physical, non-digital, face-to-face context.

It is expected that certain personality factors as defined by the Five Factor Model (e.g., Costa & McCrae, 1995a; Costa & McCrae, 1995b; Goldberg, 1990; McCrae & John, 1991) will predict whether a person will choose to meet their online friends in an offline setting.

Specifically, individuals who have met their online friends in an offline setting are expected to have higher levels of extraversion, openness to experience, and agreeableness, when compared to those who have not met their online friends offline. Conversely, individuals who have chosen not to meet their online friends offline will likely report higher levels of neuroticism, compared to those that have. The groups are not expected to differ in preexisting levels of conscientiousness.

Method

Participants

The participants in this study were recruited from an online community called Nerdfighteria. This community was established in 2007 shortly after two brothers, John and Hank Green, started making conversational video blogs back and forth to each other on their collaborative YouTube channel called vlogbrothers (<http://www.youtube.com/vlogbrothers>). John Green is a New York Times bestselling young adult author and Hank Green is a musician and blogger. Community members of the Green brothers' Nerdfighteria are called nerdfighters (see Footnote 1). As of February 2013, the vlogbrothers YouTube channel has amassed over 1,000,000 subscribers and is in the top 250 most subscribed channels on YouTube (VidStatsX, 2013).

A sample of 1300 participants was gathered. Out of these 1300 participants, 13.7% did not consent to take the survey or were not yet 18 years old ($n = 178$), and 2.6% consented but were under the age of 18 ($n = 34$). Additionally, 3.6% of the participants reported they were not a member of Nerdfighteria ($n = 46$), and as such were not a part of the sample population. Lastly, 27.5% of the participants stated they did not have any online friends ($n = 357$). After excluding all of the aforementioned groups from the original sample of 1300 participants, 684 valid participants remained in the sample.

Out of the remaining participants ($n = 684$), the mean age was 21.1 years old ($SD = 3.732$). The ages of participants ranged from 18 to 44 years of age. Of these participants 12.9% were male ($n = 88$), 82.6% were female ($n = 568$), 2.8% identified their gender as “other” ($n = 19$), and 1.8% did not indicate any gender ($n = 12$). Geographically speaking, participants in this study are primarily from the United States of America (63.5%, $n = 434$). In addition, 12.6% of the participants are from the United Kingdom ($n = 86$), and 7.3% are from Canada ($n = 50$). The remaining 16.7% of the participants are from various other countries across the world ($n = 114$, see Table 1). Finally, 61.7% had met their online friends face-to-face ($n = 422$), and 34.9% had not met their friends face-to-face ($n = 239$).

Measures

Demographics. Participants were asked to provide their gender, age, and geographic location for their demographic information (see Appendix B).

Online Behavior. Questions related to the participant’s behavior and relationships online were also asked. The first question was an inquiry to see if the participants identify as a nerdfighters and if they watch vlogbrothers videos. This was in order to ensure the participants self-identify as members of the sample community. The following three questions asked if the

participant has online friends, if they have met any of their online friends face-to-face, and if they would like to meet any of their online friends face-to-face in the event they have not done so (see Appendix B).

Personality. To measure personality, this study used the International Personality Item Pool Representation of the NEO PI-R (IPIP-NEO) (<http://www.ipip.ori.org>). The IPIP-NEO measures the Big Five factors of personality (Neuroticism, Extraversion, Openness to Experience, Agreeableness, and Conscientiousness) with a 100-item self-report questionnaire. The directions for the questionnaire state: How accurately does each statement describe you? A 5-pt Likert scale is used for the IPIP and ranges from very inaccurate (0) to very accurate (5). The online survey software randomized the 100 items of the IPIP in order to ensure that items for each of the five factors were intermixed with one another. See Appendix B for the questionnaire and Table 2 for internal consistency estimates and correlations among the five personality subscales.

Procedure

Prior to the survey being administered, the Institutional Review Board (IRB) needed to All of the materials for the study needed to be submitted, including items such as the recruitment message and method, purpose, and questionnaire. The documentation for this study was successfully reviewed and approved by the IRB, meaning that the study was determined to be ethically sound for use with human participants.

The survey for this study was hosted on an online survey service and was distributed in a text post on the Tumblr blog 'Eff Yeah Nerdfighters' (www.effyeahnerdfighters.com), a community run blog (see Footnotes 2 and 3). Because YouTube is not conducive to online communication, many nerdfighters interact on other social media websites such as Tumblr. The

vlogbrothers are fans of the blog and frequently promote the link in their video blogs and descriptions (e.g., Vlogbrothers, 2010; Vlogbrothers, 2012). At the time of survey distribution the blog had approximately 62,000 followers. While the number of blog followers is only a small fraction of the 1,000,000 vlogbrothers subscribers, it is one of the social media sites with the highest concentration of nerdfighters outside of YouTube.

The Tumblr blog post encouraged nerdfighters who follow the blog to take an anonymous survey about personality and online behavior within the nerdfighting community. Blog followers and participants were also encouraged to repost the survey to their own blog in an effort to increase the visibility of the survey. A direct link to the survey was included as the title and at the end of the blog post. Access to the online survey was available for one week. Participation in the study was anonymous and voluntary with no compensation provided for the participants.

Results

In this study, internal consistency estimates for IPIP subscales measuring neuroticism, extraversion, and conscientiousness were exceptionally high, $\alpha > .90$. The other two IPIP subscales, openness to experience and agreeableness, produced lower, but acceptable, alpha coefficients. Age was found to be significantly correlated with Neuroticism and conscientiousness. See Table 2 for the IPIP internal consistency estimates and correlations among subscales, as well as age. It is important to note that the original internal consistency estimate for the openness to experience subscale was low ($\alpha = .758$). Because of this the item “I tend to vote for conservative political candidates” was removed, and as such the reliability for openness to experience was improved ($\alpha = .764$).

In order to test the hypothesis that certain personality factors (measured by the IPIP in this study) will predict whether a person will choose to meet their online friends in an offline setting, independent samples t-tests were run to evaluate potential mean differences for those that have met their online friends offline and those that had not. Extraversion was the only personality subscale of the five measured personality traits to show a significant mean difference in scores between participants who have met their online friends offline and those who have not. Descriptive statistics and analyses for the five subscales can be found in Table 3.

Discussion

Conclusions and Implications

In this study, it was expected that particular personality traits defined by the Five Factor Model would predict whether a person would choose to meet their online friends in an offline setting. It was expected that participants with higher scores in extraversion, openness to experience, and agreeableness would be more likely to meet their online friends in an offline setting. Additionally, it was predicted that participants with high neuroticism scores would be less likely to meet their online friends in person. Conscientiousness was the only one of the five personality subscales that was hypothesized to not have an effect on whether or not a person chooses to meet their online friends in person.

Of the five personality subscales, extraversion was the only one to have a statistically significant difference in mean scores for participants who have and have not met their online friends face-to-face. Because the mean scores were higher for participants who had met their online friends in an offline setting were higher than the participants who had not, this hypothesis was supported.

As expected, conscientiousness was not a predictor of whether or not people would meet their online friends in person. However, other traits, including neuroticism, openness to experience, and agreeableness were also not predictors for face-to-face interaction of online friends. Because of this, hypotheses predicting group differences in openness, agreeableness, and neuroticism were not supported in this study.

Extraverts are typically sociable, talkative, energetic, and enjoy being in the presence of others; as such, this could be why individuals with higher scores in extraversion chose to meet their online friends in an offline setting. This study is not the only one to have found a positive relationship with online behavior and extraversion. Past studies have shown that individuals who have higher scores in extraversion also post more text and photos on social media (Muscanell & Guadagno, 2011) and use social media more often (Correa, Hinsley, & de Zuñiga, 2009). While these are not the same types of online behavior, these studies demonstrate that individuals with higher scores in extraversion have a tendency to have more frequent and extensive interactions with people online, which could easily transfer to an increased desire to have face-to-face interactions with online friends.

Even though there was a statistically significant difference in mean scores for extraversion, the mean difference was small between those who have met their online friends ($M = 3.04$, $SD = .81$) and those who have not ($M = 2.83$, $SD = .80$). Research conducted by Hughes, Rowe, Batey, and Lee (2011) found that extraversion did not influence Facebook or Twitter use; it is possible that extraversion may not influence the type of online behavior examined in this study either. If it is the case that extraversion does undoubtedly have a difference between individuals who have and haven't met their online friends, none of the five factors of the Five Factor Model of Personality can confidently be called predictors of face-to-face interactions of

online friends in regards to the results of this study. Because the results of this study indicate that Big Five personality traits did not differentiate between those who have and have not met their online friends in an offline setting, it is possible that other traits not delineated by this model may provide traits that better distinguish these groups.

Overall, this sample of participants has high scores in openness to experience (see Table 3). It is interesting that the item “I tend to vote for conservative political candidates” was removed from the openness subscale in order to improve its internal consistency estimate. There is a possibility that this sample of participants is more liberal as a whole than the average person. Additionally, it is possible that the construct definitions of “liberal” and “conservative” as established by the creators of the Five Factor Model and the IPIP have changed since the personality inventory was created.

When examining age differences for each of the five factors, age was found to have a significant correlation with neuroticism and conscientiousness (see Table 2). Conscientiousness was found to increase with age, and neuroticism was found to decrease. This is consistent with previous research conducted about the Five Factor Model and age differences (McCrae et al., 2000; Soto, John, Gosling, & Potter, 2011).

It is interesting that out of the 684 participants who stated that they have online friends that almost two-thirds had met their online friends in person. This could possibly be attributed to the culture of this online community. Numerous meetups and gatherings specifically for community members take place around the world every year, in addition to a handful of annual conferences that members of this community flock to. The culture this community has is most likely not the same for other online communities. However, some groups like the spaghetti western fans in the study conducted by Broughton (2011) also rely on arranged face-to-face

gatherings. It is possible that cultures that emphasize face-to-face interaction may affect the personality types it attracts.

Limitations

One limitation of this study is that information collected within this study was reliant on self-report. While any self-reporting measure is an efficient way to obtain information, there is always a chance that a participant may distort their responses, which in turn weakens the validity of the study. The IPIP has been proven to be both reliable and valid, so distortion due to self-reporting is not a concern for this measure. However, the validity and reliability for the four questions composed by the researcher is unknown. The researcher found it challenging to form questions that would properly gather the information she was looking for, particularly because it is difficult to define “friends” and “online friends”. Additionally, changes in the phrasing of the questions were implemented after the IRB gave suggestions. Because it is unknown how the participants interpreted and understood these four questions, it is also unknown whether or not they answered the questions the way the researcher intended.

Another limitation is the small percentage of male participants in this study. However, it was expected that a larger proportion of females would complete the survey as is consistent with the population distribution. Duggan and Brenner (2013) published a study that found that for Americans over 18 an estimated 80% of males and 82% of females use the internet. Because in reality there are practically equal numbers of male and female internet users (even though it is unknown how many of them have online friends), the findings in this study cannot be generalized across all genders.

Also, there is an overrepresentation of young people within the sample of this study. This is most likely because the typical age of adult Tumblr users is between 18 and 29 (Duggan

& Brenner, 2013) and the fact that one of the community founders has built much of his audience from the fans of his young adult literature. Because of the large number of young people in this study's sample, generalizing the results of this study to older populations of online users is somewhat questionable. Duggan and Brenner (2013) estimate that 81% of all American adults 18 and older occasionally use the internet in some capacity. While there are not any reliable numbers that indicate how many of these internet users have online friends, due to the wide age range of internet users as a whole, it is problematic to generalize the findings of this study to all age groups of internet users.

Additionally, only a small fraction of internet users use Tumblr. Duggan and Brenner (2013) found that only 6% of the American adult internet users in their study use Tumblr. Because the survey for this study was disseminated through Tumblr, it is highly unlikely that the participants are a representative sample of all internet users. This creates another issue that makes it difficult to generalize the results of this study to the entire population of internet users with online friends.

Lastly, this study uses one specific online community as its sample, and as such the selected community may have some unknown characteristics that make it different than other communities, other than the aforementioned attributes of age and gender. Since there is only one community represented in this study, it may not be possible to assume the results of this study are true for all online communities or for all people who have online friends.

Overall, the results of this study may be useful to apply to this specific online community and possibly to other communities with similar demographics. However, due to the incredible variation of online users and the communities they partake in, as well as all of the

aforementioned issues, it is difficult to generalize the data from this study to internet users as a whole, or to any other online community.

Future Research

Because little research has been conducted in the area of online friendships, especially in regards to personality, there are many directions future researchers could go. One option for future studies would be to examine gender and personality differences in regards to online relationships. While genders of the participants were recorded in this study, they were only used for demographic information and not for any of the statistical analyses because of the disproportionate sample sizes of males and females. Future studies could be done to see if there are any gender differences in regards to online friendships and behaviors.

Additionally, because there were few to no differences in the personality subscale mean scores between those who have met their online friends face-to-face and those who have not, perhaps a different personality inventory could be use for future research. Researchers could examine these potential group differences using a questionnaire that measures constructs such as sociability (as done in the 2011 study by Hughes, Rowe, Batey, and Lee), self-esteem, and trust. By continuing similar research using different tests of personality it would be established whether or not personality is actually an adequate predictor for certain types of online behavior and relationships.

In summary, this study demonstrates that largely the facets of the Five Factor Model of personality do not serve as predictors for whether or not individuals with online friends will meet these friends face-to-face. Extraversion was the only one of the five personality factors that had a statistical significance in mean scores between individuals who have met their online friends offline and those who have not. Individuals with higher scores of extraversion are more likely to

meet their online friends face-to-face than those with lower scores of extraversion. However, because the difference between the mean scores of these two groups was so small, it is possible extraversion does not really have an effect. As such, it is questionable as to whether or not personality truly has an effect on this type of online behavior. While the findings of this specific study may not have found significance regarding these personality traits, further research may need to be conducted using different personality inventories and traits to determine whether or not personality has an influence. Further research should also be conducted in order to generalize the findings to the whole population of internet users with online friends, rather than just the specific population used in this study.

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Footnotes

¹This name for followers of the vlogbrothers was established shortly after John Green uploaded a video to the vlogbrothers channel on February 1, 2007 (Vlogbrothers, 2007). He misread an arcade video game entitled “Aerofighters” as “Nerdfighters”. His mistake stuck and the vlogbrothers viewers adopted it as their community name. The Green brothers frequently state that nerdfighters are not people who fight nerds, but instead are people who are nerds and proponents of their fellow nerds (Vlogbrothers, 2009).

²A common blog naming convention for fan blogs on Tumblr is “Fuck Yeah X”, as well as the less profane varieties such as “Eff Yeah”, “F Yeah”, and “FY”. Tumblr released statistics in an infographic in May 2012 stating that at that time over 103,000 “Fuck Yeah” blogs had been created and that over 100 were made each day (Tumblr, 2012).

³The researcher is one of 15 contributors to this community member-run Tumblr blog.

Table 1: Geographic Location of Participants

| Country | # of Participants | % of Total Participants |
|--------------------------|--------------------------|--------------------------------|
| United States of America | 434 | 63.5 |
| United Kingdom | 86 | 12.6 |
| Canada | 50 | 7.3 |
| Australia | 19 | 2.8 |
| Germany | 11 | 1.6 |
| Netherlands | 9 | 1.3 |
| Ireland | 6 | .9 |
| Brazil | 5 | .7 |
| Norway | 5 | .7 |
| Belgium | 4 | .6 |
| France | 4 | .6 |
| New Zealand | 4 | .6 |
| Sweden | 4 | .6 |
| Bulgaria | 2 | .3 |
| Croatia | 2 | .3 |
| Finland | 2 | .3 |
| Mexico | 2 | .3 |
| Philippines | 2 | .3 |
| Portugal | 2 | .3 |
| Slovenia | 2 | .3 |
| Afghanistan | 1 | .1 |
| Argentina | 1 | .1 |
| Austria | 1 | .1 |
| Azerbaijan | 1 | .1 |
| Bolivia | 1 | .1 |
| Chile | 1 | .1 |
| Denmark | 1 | .1 |
| Israel | 1 | .1 |
| Lithuania | 1 | .1 |
| Panama | 1 | .1 |
| Poland | 1 | .1 |
| Russian Federation | 1 | .1 |
| Singapore | 1 | .1 |
| Trinidad and Tobago | 1 | .1 |
| No Response | 15 | 2.2 |

Table 2: Internal Consistency Estimates and Correlations Among Subscales

| | 1 | 2 | 3 | 4 | 5 |
|----------------------|----------------|----------------|----------------|----------------|----------------|
| 1. Neuroticism | $\alpha = .96$ | | | | |
| 2. Extraversion | -.39* | $\alpha = .95$ | | | |
| 3. Openness | -.07 | .30* | $\alpha = .76$ | | |
| 4. Agreeableness | -.23* | .21* | .27* | $\alpha = .86$ | |
| 5. Conscientiousness | -.34* | .23* | .18* | .23* | $\alpha = .94$ |
| 6. Age | -.18* | .06 | .05 | .02 | -.16* |

* = correlation is significant at the 0.01 level (2-tailed)

Table 3: t-Test for Equality of Means

| Big 5 | Met FTF | <i>M (SD)</i> | <i>t</i> | <i>p</i> |
|--------------|----------------|----------------------|-----------------|-----------------|
| N | Yes | 3.23 (.82) | -1.49 | .14 |
| | No | 3.32 (.71) | | |
| E | Yes | 3.04 (.81) | 3.11* | .00 |
| | No | 2.83 (.80) | | |
| O | Yes | 4.31 (.46) | -.31 | .76 |
| | No | 4.32 (.38) | | |
| A | Yes | 3.81 (.57) | .01 | .99 |
| | No | 3.81 (.55) | | |
| C | Yes | 3.39 (.67) | 1.58 | .11 |
| | No | 3.30 (.38) | | |

Note: FTF = face-to-face. $N_{\text{met FTF}} = 422$, $N_{\text{not met FTF}} = 239$. * indicates significance at $p < .05$, df for all t-tests = 659.

Appendix A: Informed Consent Form

Going Offline: Personality and its Effects on the Transition of Online Relationships to the Offline World

You are invited to participate in a research project conducted through the University of Northern Iowa. The University requires that you give your signed agreement to participate in this project. The following information is provided to help you made an informed decision about whether or not to participate.

The purpose of this study is to gain information about an individual's personality traits and how they relate to the individual's behavior within online relationships.

This study will consist of a 107 question survey and will take 10-20 minutes to complete. The survey is the only element of this study. At the end of the study the data will be interpreted and incorporated into an undergraduate honors thesis paper and presentation.

Risks for participation in this study are minimal and are similar to those experienced in day-to-day life. There is no direct benefit or compensation as a result of participating in this study.

Information obtained during this study which could identify you will be kept confidential. The summarized findings with no identifying information will be published in an undergraduate honors thesis paper and given in a presentation about the findings.

Your participation is completely voluntary. You are free to withdraw from participation at any time or to choose not to participate at all, and by doing so, you will not be penalized.

If you have questions about the study you may contact or desire information in the future regarding your participation or the study generally, you can contact Morgan Johnson at 319-XXX-XXXX or mojohn@uni.edu, or the faculty advisor Sundé Nesbit at the Department of Psychology, University of Northern Iowa, at sunde.nesbit@uni.edu. You can also contact the office of the IRB Administrator, University of Northern Iowa, at 319-273-6148, for answers to questions about rights of research participants and the participant review process.

Agreement:

I am fully aware of the nature and extent of my participation in this project as stated above and the possible risks arising from it. I hereby agree to participate in this project. I acknowledge that I have received a copy of this consent statement. I am 18 years of age or older.

I agree and I am 18 years old.

I do not agree and/or I am not yet 18 years old.

Appendix B: Questionnaire

Demographics

Gender

Male Female Other

Age

(a text box was available for participants to type in their age)

Location

(a drop-down list of countries was available for participants to choose from)

Online Behavior

Do you watch the online video blogs produced by John and Hank Green (the vlogbrothers) and consider yourself a member of the online community known as Nerdfighteria?

Yes *No*

Do you have one or more friends or acquaintances whom you initially met online? In other words, do you have any friends currently that you did not know face-to-face prior to meeting them online?

Yes *No*

Out of all of your friends that you initially met online, did you later connect with any of them face-to-face?

Yes *No*

If you answered no to the previous question, would you like to meet any of them in person?

Yes, I would like to meet my online friend(s) face-to-face

No, I am fine with keeping my relationship(s) solely online

IPIP-NEO

On the following pages, there are phrases describing people's behaviors. Please use the rating scale below to describe how accurately each statement describes **you**. Describe yourself as you generally are now, not as you wish to be in the future. Describe yourself as you honestly see yourself, in relation to other people you know of the same sex as you are, and roughly your same age. So that you can describe yourself in an honest manner, your responses will be kept in absolute confidence. Please read each statement carefully, and then fill in the bubble that corresponds to the number on the scale.

| | Very Inaccurate | Moderately Inaccurate | Neither Inaccurate or Accurate | Moderately Accurate | Very Accurate |
|--|-----------------|-----------------------|--------------------------------|---------------------|---------------|
| 1. Often feel blue. | 1 | 2 | 3 | 4 | 5 |
| 2. Dislike myself. | 1 | 2 | 3 | 4 | 5 |
| 3. Am often down in the dumps. | 1 | 2 | 3 | 4 | 5 |
| 4. Have frequent mood swings. | 1 | 2 | 3 | 4 | 5 |
| 5. Panic easily. | 1 | 2 | 3 | 4 | 5 |
| 6. Am filled with doubts about things. | 1 | 2 | 3 | 4 | 5 |
| 7. Feels threatened easily. | 1 | 2 | 3 | 4 | 5 |
| 8. Get stressed out easily. | 1 | 2 | 3 | 4 | 5 |
| 9. Fear for the worst. | 1 | 2 | 3 | 4 | 5 |
| 10. Worry about things. | 1 | 2 | 3 | 4 | 5 |
| 11. Seldom feel blue. | 1 | 2 | 3 | 4 | 5 |
| 12. Feel comfortable with myself. | 1 | 2 | 3 | 4 | 5 |
| 13. Rarely get irritated. | 1 | 2 | 3 | 4 | 5 |
| 14. Am not easily bothered by things. | 1 | 2 | 3 | 4 | 5 |
| 15. Am very pleased with myself. | 1 | 2 | 3 | 4 | 5 |
| 16. Am relaxed most of the time. | 1 | 2 | 3 | 4 | 5 |

| | | | | | |
|---|---|---|---|---|---|
| 17. Seldom get mad. | 1 | 2 | 3 | 4 | 5 |
| 18. Am not easily frustrated. | 1 | 2 | 3 | 4 | 5 |
| 19. Remain calm under pressure. | 1 | 2 | 3 | 4 | 5 |
| 20. Rarely lose my composure. | 1 | 2 | 3 | 4 | 5 |
| 21. Have a good word for everyone. | 1 | 2 | 3 | 4 | 5 |
| 22. Believe that others have good intentions. | 1 | 2 | 3 | 4 | 5 |
| 23. Respect others. | 1 | 2 | 3 | 4 | 5 |
| 24. Accept people as they are. | 1 | 2 | 3 | 4 | 5 |
| 25. Makes people feel at ease. | 1 | 2 | 3 | 4 | 5 |
| 26. Am concerned about others. | 1 | 2 | 3 | 4 | 5 |
| 27. Trust what people say. | 1 | 2 | 3 | 4 | 5 |
| 28. Sympathize with others' feelings. | 1 | 2 | 3 | 4 | 5 |
| 29. Am easy to satisfy. | 1 | 2 | 3 | 4 | 5 |
| 30. Treat all people equally. | 1 | 2 | 3 | 4 | 5 |
| 31. Have a sharp tongue. | 1 | 2 | 3 | 4 | 5 |
| 32. Cut others to pieces. | 1 | 2 | 3 | 4 | 5 |
| 33. Suspect hidden motives in others. | 1 | 2 | 3 | 4 | 5 |
| 34. Get back at others. | 1 | 2 | 3 | 4 | 5 |
| 35. Insult people. | 1 | 2 | 3 | 4 | 5 |
| 36. Believe that I am better than others. | 1 | 2 | 3 | 4 | 5 |
| 37. Contradict others. | 1 | 2 | 3 | 4 | 5 |
| 38. Make demands on others. | 1 | 2 | 3 | 4 | 5 |
| 39. Hold a grudge. | 1 | 2 | 3 | 4 | 5 |
| 40. Am out for my own personal gain. | 1 | 2 | 3 | 4 | 5 |
| 41. Feel comfortable around people. | 1 | 2 | 3 | 4 | 5 |
| 42. Make friends easily. | 1 | 2 | 3 | 4 | 5 |
| 43. Am skilled in handling social situations. | 1 | 2 | 3 | 4 | 5 |
| 44. Am the life of the party. | 1 | 2 | 3 | 4 | 5 |
| 45. Know how to captivate people. | 1 | 2 | 3 | 4 | 5 |
| 46. Start conversations. | 1 | 2 | 3 | 4 | 5 |
| 47. Warm up quickly to others. | 1 | 2 | 3 | 4 | 5 |

| | | | | | |
|--|---|---|---|---|---|
| 48. Talk to a lot of different people at parties. | 1 | 2 | 3 | 4 | 5 |
| 49. Don't mind being the center of attention. | 1 | 2 | 3 | 4 | 5 |
| 50. Cheer people up. | 1 | 2 | 3 | 4 | 5 |
| 51. Have little to say. | 1 | 2 | 3 | 4 | 5 |
| 52. Keep in the background. | 1 | 2 | 3 | 4 | 5 |
| 53. Would describe my experiences as somewhat dull. | 1 | 2 | 3 | 4 | 5 |
| 54. Don't like to draw attention to myself. | 1 | 2 | 3 | 4 | 5 |
| 55. Don't talk a lot. | 1 | 2 | 3 | 4 | 5 |
| 56. Avoid contact with others. | 1 | 2 | 3 | 4 | 5 |
| 57. Am hard to get to know. | 1 | 2 | 3 | 4 | 5 |
| 58. Retreat from others. | 1 | 2 | 3 | 4 | 5 |
| 59. Find it difficult to approach others. | 1 | 2 | 3 | 4 | 5 |
| 60. Keep others at a distance. | 1 | 2 | 3 | 4 | 5 |
| 61. Believe in the importance of art. | 1 | 2 | 3 | 4 | 5 |
| 62. Have a vivid imagination. | 1 | 2 | 3 | 4 | 5 |
| 63. Tend to vote for liberal political candidates. | 1 | 2 | 3 | 4 | 5 |
| 64. Carry the conversation to a higher level. | 1 | 2 | 3 | 4 | 5 |
| 65. Enjoy hearing new ideas. | 1 | 2 | 3 | 4 | 5 |
| 66. Enjoy thinking about things. | 1 | 2 | 3 | 4 | 5 |
| 67. Can say things beautifully. | 1 | 2 | 3 | 4 | 5 |
| 68. Get excited by new ideas. | 1 | 2 | 3 | 4 | 5 |
| 69. Enjoy wild flights of fantasy. | 1 | 2 | 3 | 4 | 5 |
| 70. Have a rich vocabulary. | 1 | 2 | 3 | 4 | 5 |
| 71. Am not interested in abstract ideas. | 1 | 2 | 3 | 4 | 5 |
| 72. Do not like art. | 1 | 2 | 3 | 4 | 5 |
| 73. Avoid philosophical discussions. | 1 | 2 | 3 | 4 | 5 |
| 74. Do not enjoy going to art museums. | 1 | 2 | 3 | 4 | 5 |
| 75. Tend to vote for conservative political candidates. | 1 | 2 | 3 | 4 | 5 |
| 76. Do not like poetry. | 1 | 2 | 3 | 4 | 5 |
| 77. Rarely look for a deeper meaning in things. | 1 | 2 | 3 | 4 | 5 |
| 78. Believe that too much tax money goes to support artists. | 1 | 2 | 3 | 4 | 5 |

| | | | | | |
|---|---|---|---|---|---|
| 79. Am not interested in theoretical discussions. | 1 | 2 | 3 | 4 | 5 |
| 80. Have difficulty understanding abstract ideas. | 1 | 2 | 3 | 4 | 5 |
| 81. Am always prepared. | 1 | 2 | 3 | 4 | 5 |
| 82. Pay attention to details. | 1 | 2 | 3 | 4 | 5 |
| 83. Get chores done right away. | 1 | 2 | 3 | 4 | 5 |
| 84. Carry out my plans. | 1 | 2 | 3 | 4 | 5 |
| 85. Make plans and stick to them. | 1 | 2 | 3 | 4 | 5 |
| 86. Complete tasks successfully. | 1 | 2 | 3 | 4 | 5 |
| 87. Do things according to a plan. | 1 | 2 | 3 | 4 | 5 |
| 88. Am exacting in my work. | 1 | 2 | 3 | 4 | 5 |
| 89. Finish what I start. | 1 | 2 | 3 | 4 | 5 |
| 90. Follow through with my plans. | 1 | 2 | 3 | 4 | 5 |
| 91. Waste my time. | 1 | 2 | 3 | 4 | 5 |
| 92. Find it difficult to get down to work. | 1 | 2 | 3 | 4 | 5 |
| 93. Do just enough work to get by. | 1 | 2 | 3 | 4 | 5 |
| 94. Don't see things through. | 1 | 2 | 3 | 4 | 5 |
| 95. Shirk my duties. | 1 | 2 | 3 | 4 | 5 |
| 96. Mess things up. | 1 | 2 | 3 | 4 | 5 |
| 97. Leave things unfinished. | 1 | 2 | 3 | 4 | 5 |
| 98. Don't put my mind on the task at hand. | 1 | 2 | 3 | 4 | 5 |
| 99. Make a mess of things. | 1 | 2 | 3 | 4 | 5 |
| 100. Need a push to get started. | 1 | 2 | 3 | 4 | 5 |

Appendix C: Thank You and Debriefing Letters

Thank You Letter for Individuals Who Chose Not to Participate

Thank you for considering your participation in this research study. If you have questions about the study you can contact Morgan Johnson at 319-XXX-XXXX or mojohn@uni.edu, or the faculty advisor Sundé Nesbit at the Department of Psychology, University of Northern Iowa, at sunde.nesbit@uni.edu.

Thank You and Debriefing Letter for Study Participants

Thank you for taking the time to participate in this research study. If you have questions about the study or desire information in the future regarding your participation, you can contact Morgan Johnson at 319-XXX-XXXX or mojohn@uni.edu, or the faculty advisor Sundé Nesbit at the Department of Psychology, University of Northern Iowa, at sunde.nesbit@uni.edu. You can also contact the office of the IRB Administrator, University of Northern Iowa, at 319-273-6148, for answers to questions about rights of research participants and the participant review process.

The data gathered from this study will be used to gain information about an individual's personality traits and how they relate to the individual's behavior within online relationships. The summarized findings with no identifying information will be published in an undergraduate honors thesis paper and given in a presentation about the findings.

We appreciate your willingness to participate in this research project, as much of the research in psychology is dependent on participation by individuals such as yourself. Thank you.