The Relationship between the "Dark Triad" Personality Traits and Deviant Behavior on Social Networking Sites

Full Paper

Kim L. Withers

Nova Southeastern University

kw954@nova.edu

Steven R. Terrell

Nova Southeastern University

terrell@nova.edu

James L. Parrish

Nova Southeastern University

jlparrish@nova.edu

Timothy J. Ellis

Nova Southeastern University

ellist@nova.edu

Abstract

Many aspects of the Internet have been described as taking a "dark turn", as incidents of spear-phishing, identity theft, and other known cyber threats are becoming more commonplace. Social networking sites (SNSs) such as Twitter, Facebook, Instagram, Snapchat, and other services with user-generated content (UGC), provide a platform to facilitate these types of behavior. While these SNSs encourage respectful or acceptable behavior and adherence to conduct standards, incidences of obscene language, personal attacks, cyberbullying, racial, gender or sexual bias, and hate speech are rampant. Prior research suggests that this type of unacceptable or deviant behavior can be attributed to Dark Triad personality traits (i.e., narcissism, Machiavellianism, and psychopathy). Using the lens of the Dark Triad and an extensive literature review, a Short Dark Triad (SD3) survey study was conducted to investigate the gap in Information Systems (IS) research and the influence of deviant behaviors and its acceptance in SNSs.

Keywords

Dark Triad, Social Networking Site(s), Information Systems, cyber threats, deviant behavior.

Introduction

A Social Networking Site (SNS) is defined as an Internet-based service that allows individuals to construct a profile within a restricted system wherein they are able to establish, list, and navigate connections to other system users (Boyd and Ellison 2008). SNS users tend to form community friendships which are extended to online acquaintances, or possibly people that they do not know socially based on one or more of their interests (Kim et al. 2010). According to a 2015 study conducted by the Pew Research Center (Perrin 2015), 74% of adults use a SNS of some type; this includes 71% of online adults on Facebook, 23% of online adults using Twitter, and 26% on Instagram. The number of SNS users, both adolescents and adults, continues to increase exponentially, especially with social media being accessible via mobile applications.

Social media has been a factor in shaping a set of deviant behaviors, radicalization, and a range of other unacceptable behaviors (Kierkegaard, 2008). Facebook, for example, outlines what content is considered to be disrespectful behavior in its Community Standards. Specifically, Facebook identifies certain levels of nudity, speech that attacks community members based on attributes such as race or national origin, and violent or graphic content shared in order to promote violence or to provide sadistic pleasure to the SNS user who posted it.

Prior and current information systems (IS) research has investigated deviant behaviors within the workplace (Berry et al. 2007) as an insider threat or threats to organizations. Organizational deviance refers to deliberate actions that are intended to harm others, violate rules or norms, or reduce organizational performance (Lau et al. 2003). Additionally, criminological research has identified participation in deviant activities as a risk factor for a variety of types of victimization (Henson et al. 2010; Sampson et al. 1990), including cyber victimization (Bossler and Holt 2009; Choi 2008). Consistent with the aforementioned definitions, a violation of the Community Standards could be considered a deviant behavior. In a review of research, outside of rare studies related to cyberbullying (Vandebosch and Van Cleemput 2008) and cyber-harassment (Melander 2010), limited research has focused specifically on the subject of deviant behavior as it relates to SNSs.

Gove (1985) reviewed six of the most influential theories of deviance: labeling theory, conflict theory, differential association theory, control theory, anomie theory, and functional theory. He concluded, "All of these theoretical perspectives either explicitly or implicitly suggest that deviant behavior is an amplifying process that leads to further and more serious deviance" (p. 118). Exploration of deviant behaviors through examination of what goes on inside the mind of an SNS user has taken a back seat to IS research. SNSs have gained minimal attention from IS researchers and grown steadily as a research between 2004 and 2013, publishing only 136 articles related to SNSs in top IS journals. However, the accumulated research has not shown to examine new and pressing issues in social networks; available knowledge needs to be synthesized and research gaps need to be addressed (Bandara et al., 2011). There is a gap in the understanding of deviant behavior within SNSs. One lens that can be used to examine these behaviors focuses on the "Dark Triad" personality traits (Jones and Paulhus 2014).

The "Dark Triad," refers to three interrelated higher-order personality constructs: narcissism (i.e., excessive self-love), Machiavellianism (i.e., a manipulative attitude) and psychopathy (i.e., lack of empathy) (Jones and Paulhus 2014). This paper investigates a conceptual model used to answer the overarching question, "How does a user's Dark Triad profile relate to a users' acceptance of deviant behavior in a SNS?"

Background

The "Dark Triad"

Over time, there has been increased interest in better understanding the relationship between personality traits and the use of Information Systems. Extant research suggests that personality variables act as antecedents to attitudes, cognitive behaviors, and a priori involvement with information technology (Zmud 1979). As evidenced by research (Junglas et al. 2008), there are three reasons to focus on personality constructs: (1) personality variables are recognized to be important in the decision-making and IS literature as they add to our knowledge about people's information processing styles, attitudes, and behaviors; (2) information technologies become more personalized [1], and personality variables can influence its perception by others in terms of security (Gonzalez and Sawicka 2002); (3) and, perhaps most importantly, personality traits can account for the influence of individual differences in determining the power of the attitudinal constructs (Junglas et al. 2008). A growing body of IS research has pointed to the five-factor model (FFM) as a recurring and more or less comprehensive taxonomy of personality traits (McCrae and John 1992), integrating the FFM into existing IS models and theories. The Big Five traits consist of five constructs of personality that span across major personality inventories and research contexts. These include extraversion, agreeableness, conscientiousness, neuroticism, and openness to experience.

Though widely used in IS research, The Big Five trait model has faced criticism for failing to completely account for all individual differences in personality-related human behavior, specifically traits reflecting antisocial behavior (Veselka et al. 2012). Subsequently, attention has been brought to the darker antisocial behaviors within the Dark Triad personality traits. The Dark Triad embodies the most prominent, socially aversive personalities characterized by a common underlying deficit in empathy. The Dark Triad personality traits encompass three conceptually distinct, but empirically overlapping constructs: narcissism, Machiavellianism, and psychopathy (Jones and Paulhus 2014).

Narcissism, which has been widely studied as a personality disorder (*American Psychiatric Association* 2013), has been conceptualized as a "normal" personality variable characterized by dominance,

exhibitionism, and exploitation and feelings of superiority and entitlement (Raskin and Terry 1988). Individuals displaying narcissistic personalities have an inflated self-absorption and focus largely on themselves. Machiavellianism refers to individual differences in manipulativeness, insincerity, and callousness (Christie and Geis 1970) and has been widely studied in social psychological investigations involving persuasion, leadership, and ethical behaviors. According to prior researchers (Christie and Geis 1970), people who score high on this trait are cynical, unprincipled, believe in interpersonal manipulation as the key for life success, and behave accordingly. Psychopathic behavior, as defined by the Diagnostic and Statistical Manual of Mental Disorders (DSM-V), is a personality disorder and an important psychological construct (*American Psychiatric Association* 2013). The DSM-V uses a categorical classification approach, which has the advantage of simplicity and ease of communication (Widiger 1992). Three significant qualities that characterize psychopathy include an arrogant and deceitful interpersonal style, deficient affective experience, and impulsive and irresponsible behavior often exhibiting affective shallowness, lack of empathy and remorse, superficial charm, and manipulation (Hare 2003).

Accumulated research between 2004 and 2013 has not shown to examine new and pressing issues in social networks; available knowledge needs to be synthesized and research gaps need to be addressed (Bandara et al., 2011). There is currently a lack of IS research with relationship to dark personality traits and deviant behaviors. Presently, only a few papers have been published related to IS research based on Dark Triad personality traits. Past IS researchers (Alahmadi et al. 2015), explored the possibility of predicting an individual's dark personality traits based on his or her browsing history in order to detect potential insider threats. Current IS research (Maasberg 2015), examined insider threat incidents with malicious intent and proposed an explanation through a relationship between Dark Triad personality traits and insider threats.

Existing research (Sledgianowski and Kulviwat 2009) has argued that a SNS is a pleasure-oriented information system that the individual becomes more willing to use as more friends or peers join. Therefore SNSs are indeed and should be considered an information system. Rarely have IS studies examined the effect of Dark Triad personalities and deviant behaviors related to SNSs, especially with so many people using social networking technology. Boochever's (2012) investigation of psychopathy and social media usage was the first to examine machine prediction of all three Dark Triad personality traits. Consequently, Sumner et al. (2012) used Linguistic Inquiry and Word Count (LIWC) in a study to analyze and predict Dark Triad personality traits of Twitter users and examine whether machine learning could be used to predict these constructs based solely on Twitter usage.

As information systems become increasingly pervasive, and personalized (Lyytinen and King 2004), the use of SNSs and the personalities related to its use will increase. Ross et al. (2009) pioneered the study of the relation between personality and patterns of SNS use. They hypothesized many relationships between personality and Facebook features. Specifically, several lines of research suggest that the Dark Triad may facilitate a social style geared towards exploiting others in social contexts. Since traits play a common role in human reasoning and behavior, it is reasonable to anticipate that personality will play a part in an array of IS-related processes and outcomes; suggesting that an IS research-focus on the relationship between both the Dark Triad and deviant behaviors in SNSs is warranted.

Deviant Behaviors

Most SNSs are considered communal services and have specific policies of what they will or will not allow by users of their service. More specifically, Facebook has Community Standards guidelines to provide distinct clarity on the deviant behavior it allows or prohibits on its service. In particular, Facebook encourages respectful behavior, in which it outlines deviant behaviors such as nudity, hate speech and violent or graphic content as clear violations of their policies (*Facebook* 2016). This section will focus on the characteristics of these three deviant behaviors within SNSs based on research literature.

Nudity

With the increased use of social networking websites, social issues such as nudity and pornography are becoming problematic. It is well-known that Facebook, Instagram, YouTube and other SNS genres strictly prohibit nudity and pornographic material. There are no consistent or generally agreed on definitions among scholars who study pornography or among the political groups that advocate policy regarding the

regulation of pornography (Gossett and Byrne 2002). Facebook emphasizes its "strict policy against the sharing of pornographic content where a minor is involved" (*Facebook* 2016). Defining pornography is a difficult and controversial topic.

Facebook attempts to regulate nudity or pornography, based on the grounds that it violates community standards. Since there is no legal global community standard by which to regulate pornography, it is necessary to continue a discussion of deviant behaviors and pornography within SNSs.

Hate Speech

Social media and the Internet can be tools of oppression rather than liberation; it can help spread hate speech and propaganda rather than acceptance and democracy (Morozov 2012). With the emergence of SNSs, hate groups have added platforms such as Facebook and Twitter to their communicative networks. Most social media platforms have had to draw lines in their own policies about hate speech (Newcomb 2016).

Unlike the regulation of hate speech on websites by Internet service providers (ISPs), SNS platforms enjoy greater freedom to decide whether and how to address expressions of hate speech. Facebook reserves the right to remove hate speech, which includes content that directly attacks people based on their: race, ethnicity, national origin, religion, sex, gender, sexual orientation, disability or disease (*Facebook* 2016).

Violent or Graphic Content

Existing research shows that exposure to graphic violence generally causes aversion, disgust, and other unpleasant reactions for users (Weaver and Wilson 2009). The posting of graphic and violent content within SNSs exhibits a lack of empathy for the audience or victim.

Psychopaths are characterized by a general lack of empathy and remorse, and attenuated responding to emotional stimuli (Hare 2003). The importance of empathy as a social function has been expressed in previous research (Nathanson 2003). Ultimately, Facebook (2016) reserves the right to remove any images flagged with graphic or violent content without chance of rebuttal.

Conceptual Model

Based on the review of literature, the conceptual model and hypotheses to be tested are shown in Figure 1.
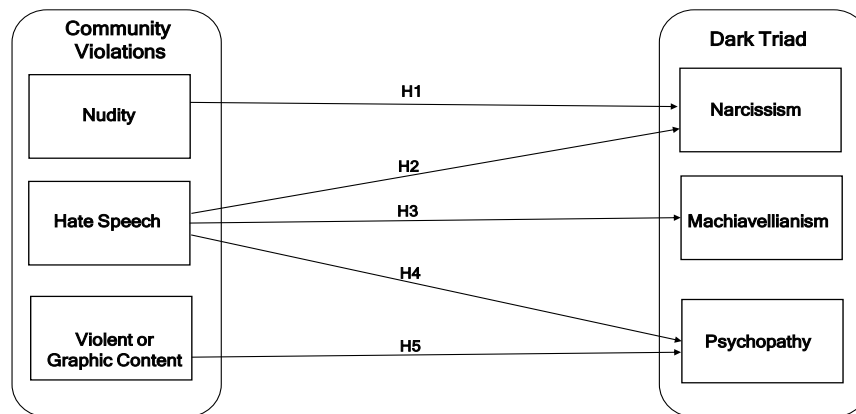

Figure 1. Conceptual model

Hypotheses and Their Correspondence to Research Design

Our conceptual model depicts the components of the "Dark Triad" and the proposed relationship that the levels of these traits have on the level of acceptance of violations of respectable behavior as outlined in the Facebook Community Standards. The chosen focus is on the SNS user level acceptance of violations of the Facebook Community Standards as a proxy for the probability that they would engage in such activities themselves because it may be possible that SNS users would be reluctant to self-disclose these activities. The logic of the hypotheses discussed below is framed on the review of literature and conceptual model and includes five testable hypotheses:

Individuals exhibiting high levels of narcissism find nudity acceptable on SNSs because it allows them a channel to express their self-love and receive admiration while also being a channel for them to be critical of and devalue others. In addition, this need to devalue others may extend beyond nudity and into the verbal comments and postings that they contribute to SNSs. With this reasoning, the first two of our hypotheses are presented:

H1: Acceptance of nudity on an SNS is positively related to narcissism, as measured by the SD3.

H2: Acceptance of hate speech on an SNS is positively related to narcissism, as measured by the SD3.

Based on the literature review, Machiavellians have been shown to use aggressive interactions in order to dominate and exploit other users, and it has been argued that hate speech and propaganda also are used for this type of domination and oppression (Morozov 2012). This leads us to our third hypothesis:

H3: Acceptance of hate speech on an SNS is positively related to Machiavellianism, as measured by the SD3.

Psychopathic behavior is a manipulative, sensation-seeking behavior, and a lack of empathy and remorse. Given that the use of hate speech and the posting of extremely violent or graphic images or graphic descriptions of violent events generally causes aversion, disgust, and other unpleasant reactions for viewers. In theory, those who post these types of images or engage in hate speech for the purposes of manipulating others or who take sadistic pleasure in these acts exhibit a lack of empathy for others in the community. It is along these lines that the final two hypotheses are presented:

H4: Acceptance of hate speech on an SNS is positively related to psychopathy, as measured by the SD3.

H5: Acceptance of violent or graphic content on an SNS is positively related to psychopathy, as measured by the SD3.

Having presented a conceptual model and hypotheses, the description of the study and methods used to test the model are explained.

Methodology

In order to test the stated hypotheses, a participant pool of 155 SNS users from diverse backgrounds and age groups was identified. The participant sample was recruited through social media, personal email, and snowballing.

The Short Dark Triad (SD3) (Jones and Paulhus 2014) survey has been successfully validated by a number of researchers (Belanger and Crossler 2011) and was used to assess the Dark Triad constructs. This scale is comprised of 27 items, with nine items measuring each of the three constructs. In addition to the 27 item survey of SD3, age, gender and social media demographics were added to data collection.

The SD3 survey measures a respondent's "dark side" characteristics by answering questions related to the three constructs. Using a Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree), respondents are asked to answer questions such as "I use clever manipulation to get my way" and "I hate being the center of attention" to determine their total score.

Even when assured of anonymity, due to perceived societal and legal repercussions, many individuals are unwilling to report their personal deviant behavior. Because of that, participants were asked to rate statements related to each behavior using a scale from 1 (Unacceptable) to 5 (Acceptable).

As reported by prior researchers, (Jones and Paulhus, 2014), Cronbach's alpha reliability scores of 0.71 for narcissism, 0.77 for Machiavellianism and 0.80 for psychopathy, demonstrated that the SD3 has a high level of internal consistency and reliability.

Participants

Pre-analysis data screening and descriptive statistics showed that ten of the collected 155 surveys had issues with missing data, leaving a sample frame of 145 participants; 63.4% female (N = 92) and 36.6% male (N = 53). Participants (ages 18 and older) were recruited using convenience sampling (Battaglia 2008), having responded to an online link to the study advertised via Facebook, personal emails, texts and snowballing (Browne 2005) techniques or "chain-referral" methods.

Measures

The 27-item version SD3 was used to assess the Dark Triad. After recoding the SD3 reversals (indicated with "R"), each subscale was formed by averaging the items (Jones and Paulhus 2014). Alpha values ranged from .62 to .74 (Table 1) and the inter-correlations ranged from .36 to .48 (Table 2). In sum, not all SD3 measures show a clear correspondence with their criterion counterparts. Of the three, the psychopathy measure showed the highest correlations with the SD3. The 15-item deviant behaviors survey anchors 1 (Unacceptable) to 5 (Acceptable). In this case, *alpha* values ranged from .80 to .93 and inter-correlations ranged from .18 to .47.

Research Findings

Pre-analysis revealed that narcissism, Machiavellianism, and psychopathy scores were symmetrical, and nudity, hate speech, violent and graphical content scores positively skewed. Multiple types of analyses were conducted both Statistical Package for the Social Sciences (SPSS) and SmartPLS statistical tools. Descriptive statistics, frequencies, inter-correlations and partial least squares (PLS) to test reliability and validity of the model. In addition, bivariate correlation analysis was conducted using SPSS to determine if constructs showed significance between each other of the variables cited in the conceptual model. Average Variance Extracted (AVE) is used as measure of convergent validity (Fornell and Larcker 1981). In addition, bivariate correlation analysis was conducted using SPSS to determine if constructs showed significance between each other of the variables cited in the conceptual model. The *"square root"* of AVE has been calculated in Table 1.

- Indicator reliability determined narcissism contained five values below the acceptable level of 0.4 and Machiavellianism had two values below the acceptable level. In exploratory research such as reported in this study, 0.40 or higher is acceptable (Hulland and *Richard Ivey School of Business* 1999).

- High levels of internal consistency reliability have been demonstrated among all reflective latent variables. Prior literature has suggested the use of composite reliability as a replacement (Hair et al. 2014; Bagozzi and Yi 1988). By using composite reliability scores, such values were shown to be larger than 0.6, proving reliability.

- The non-square root AVE scores for narcissism (0.21), Machiavellianism (0.29), and psychopathy (0.31), are below the acceptable level of 0.5 or higher (Bagozzi and Yi 1988); therefore convergent validity could not be established. AVE scores for the latent variables nudity, hate speech, violence and graphic content were higher, thereby establishing convergent validity.

Latent Variables	Mean	S.D.	Cronbach's Alpha	Composite Reliability	AVE
Narcissism – SD3	3.0	.51	0.62	0.68	0.458
Machiavellism – SD3	3.0	.62	0.70	0.77	0.542
Psychopathy – SD3	2.0	.57	0.74	0.79	0.552
Nudity	2.0	1.2	0.93	0.95	0.884
Hate Speech	1.2	.42	0.85	0.89	0.794
Violence & Graphic Content	1.1	.28	0.80	0.84	0.726

Table 1. Reliability scores

Traditionally, Cronbach's *alpha* is used to measure internal consistency reliability but it tends to provide a conservative measurement in PLS-SEM. Prior literature has suggested the use of *composite reliability* as a replacement (Hair et al. 2014). As suggested by (Fornell and Larcker 1981), the "*square root*" of AVE of each latent variable should be greater than the correlations among the latent variables. The results in Table 1 indicate that discriminant validity is well established in all variables with the exception of narcissism.

Discussion

We hypothesized that Dark Triad personality traits would be instrumental in showing how those possessing the traits are more likely to exude deviant behaviors within SNSs. As suggested by (Kline 2015), a model trimming approach was used such that a model in which all five hypotheses were free to be evaluated. This allowed for a comparison of all the deviant behaviors within Dark Triad. The narcissism path was removed, but found to be necessary to the model. Therefore the hypothesized model appears to be the best fit and most parsimonious explanation for the data. The model and correlation matrix therefore did not evaluate model fit, reliability and validity.

All three constructs of the Dark Triad were significantly correlated amongst each other as well as the deviant behavior constructs correlating amongst each other. In testing the Dark Triad constructs using a two-tailed test, all were not significantly related to the deviant behaviors. Narcissism was negatively correlated to nudity, hate speech and violent graphic content, thus not supporting H1 and H2. Machiavellism was positively correlated to all three deviant behaviors with support of H3. Psychopathy positively correlated with nudity and hate speech behaviors, which supports H4. Interestingly psychopathy and violent graphic content had a negative correlation creating no support for H5. Ultimately, only two out of the five hypotheses were supported: H3, because Machiavellianism was positively correlated with all three deviant behaviors, and H4, because psychopathy was correlated with nudity and hate speech.

Table 2 details the relationship between the variables under investigation. A low value of Pearson's *r* for each of the comparisons indicates a lack of support for all stated hypotheses.

	Narcissism	Machiavellism	Psychopathy	Nudity	Hate Speech	Violence & Graphic Content
Narcissism	--	.45**	.36**	.10	.15	.05
Machiavellism		--	.48**	.16*	.17*	.23**
Psychopathy			--	.42**	.25**	.11
Nudity				--	.24**	.18*
Hate Speech					--	.47**
Violence & Graphic Content						--

*.Correlation is significant at the 0.05 level (2-tailed).

**.Correlation is significant at the 0.01 level (2-tailed).

Table 2. Intercorrelations

Research Limitations

This study is not without limitations. Pre-analysis revealed that narcissism, Machiavellianism, and psychopathy scores were symmetrical, but nudity, hate speech, violent and graphical content scores positively skewed. Despite attempts to recruit participants through several means, the sample size was not large enough and gender-biased (63.4% female; 36.6% male).

This gender bias was possibly the cause of reliability and validity issues within the narcissism construct, hence not supporting H1 and H2. This theory was tested by splitting data into a group of males only, rendering a Cronbach's alpha of .79 for the narcissism construct. A recent study on narcissism from the University at Buffalo School of Management reveals that men, on average, are more narcissistic than women (Grijalva et al. 2015). In relation to the nudity construct, a research study of pornography acceptance revealed that more men agree that viewing nudity or pornography is acceptable as compared to women (Carroll et al. 2008).

Another limitation is that only self-report measures were used. Although there is considerable empirical support for the validity of personality self-report measures (Williams et al. 2003), future studies may benefit from the use of informant-report personality measures or scenario-based surveys to alleviate dishonest responses.

Additionally, our study represented mostly ages from 30 to 60 years, with only three participants between the ages of 18 to 20. The effect of the disparity in the gender or age distribution cannot be determined, so the discrepancy warrants further research. The correlational nature of the data constrains the interpretability of the two sets of constructs in terms of causal inference. Replicating the research with a larger sample that would allow testing for gender and age as moderating variables is recommended.

Conclusion

Exploration of deviant and criminal behaviors through examination of what goes on inside the mind of an SNS user has taken a back seat to IS research. This paper examined the gap in IS research on the influence of deviant behaviors on SNSs by assessing the role of Dark Triad personality traits. It has been argued that SNSs are indeed considered a part of the information systems domain. Currently, not many IS studies have used all three Dark Triad traits at once in a study. Previous studies have shown that individuals high in any Dark Triad trait tend to engage in a variety of negative workplace behaviors and recently researchers proposed a relationship between Dark Triad personality traits and insider threats.

Intensified IS research is in demand on constructing a secure SNS platform as it is critical in turning SNSs into a successful collaboration tool. The threat landscape itself is constantly changing with old and new threats or exploits, particularly within SNSs. Other nefarious deviant behaviors, such as information deception, disruption, and destruction, may also be sought by those that possess dark personality traits. A potential avenue for future research could be to examine other types of deviant behaviors such as cyberstalking or cyberbullying or deception crimes such as social engineering, privacy threats and white-collar crimes within SNS groups or networks. Future research could also analyze the Dark Triad using "The Dirty Dozen" scale (Jonason and Webster 2010) in comparison to that of the SD3. In addition, structural modeling using AMOS (Hue and Bentler 1999) instead of SmartPLS will be beneficial in determining a suitable "model fit" and is highly recommended in the IS research community.

Despite the other than hypothesized results, the authors of this paper have shown and supported the need for more research investigating the relationship between SNS usage and deviant behavior. As more individuals move to SNSs, it is an ethical imperative for the IS research community to attempt to understand the underpinnings of the behaviors that could cause harm or cyber threats to others.

REFERENCES

Alahmadi, B. A., Legg, P. A., & Nurse, J. R. 2015. "Using Internet Activity Profiling for Insider-Threat Detection". In *ICEIS (2)* (pp. 709-720).

American Psychiatric Association. 2013. *Diagnostic and Statistical Manual of Mental Disorders, (5th Ed.)* Arlington, VA: American Psychiatric Association.

Bagozzi, R. P., & Yi, Y. 1988. "On the Evaluation of Structural Equation Models". *Journal of the Academy of Marketing Science, 16*(1), 74-94.

Bandara, W., Miskon, S., & Fielt, E. 2011. A systematic, Tool-Supported Method for Conducting Literature Reviews in Information Systems. In *Proceedings of the 19th European Conference on Information Systems (ECIS 2011)*.

Battaglia, M. 2008. *Convenience Sampling*. In Paul J. Lavrakas (Ed.), Encyclopedia of Survey Research Methods. (pp. 149-150). Thousand Oaks, CA: Sage Publications, Inc.

Bélanger, F., & Crossler, R. E. 2011. "Privacy in the Digital Age: A Review of Information Privacy Research in Information Systems". *MIS Quarterly, 35*(4), 1017-1042.

Berry, C. M., Ones, D. S., & Sackett, P. R. 2007. "Interpersonal Deviance, Organizational Deviance, and Their Common Correlates: A Review and Meta-Analysis". Journal of *Applied Psychology, 92*(2), 410.

Boochever, R. 2012. "Psychopaths Online: Modeling Psychopathy in Social Media Discourse (Honors Thesis)". Retrieved from https://ecommons.cornell.edu/handle/1813/29536

Bossler, A. M., & Holt, T. J. 2009. "On-line Activities, Guardianship, and Malware Infection: An Examination of Routine Activities Theory". *International Journal of Cyber Criminology, 3*(1), 400.

Boyd, D. M., & Ellison, N. B. 2008. "Social Network Sites: Definition, History, and Scholarship". *Journal of Computer-Mediated Communication, 13*, 210–230.

Browne, K. 2005. "Snowball Sampling: Using Social Networks to Research Non-Heterosexual Women". International *Journal of Social Research Methodology 8*(1).

Carroll, J. S., Padilla-Walker, L. M., Nelson, L. J., Olson, C. D., Barry, C. M., & Madsen, S. D. 2008. "Generation XXX Pornography Acceptance and Use among Emerging Adults". *Journal of Adolescent Research, 23*(1), 6-30.

Choi, K. S. 2008. *Structural Equation Modeling Assessment of Key Causal Factors in Computer Crime victimization*. ProQuest.

Christie, R., & Geis, F. 1970. *Studies in Machiavellianism*. New York, NY: Academic Press.

Emmons, R. A. 1984. "Factor Analysis and Construct Validity of the Narcissistic Personality Inventory". *Journal of Personality Assessment, 48*, 291-300.

Facebook. 2016. "Community Standards", from https://www.facebook.com/communitystandards

Fornell, C., & Larcker, D. F. 1981. "Evaluating Structural Equation Models with Unobservable Variables and Measurement Error". *Journal of Marketing Research*, 39-50.

Gillespie, T. 2010. "The Politics of 'Platforms'". *New Media & Society*, *12*(3), 347-364.

Gonzalez, J. J., & Sawicka, A. 2002. "A Framework for Human Factors in Information Security. In *WSEAS International Conference on Information Security, Rio de Janeiro* (pp. 448-187).

Gossett, J. L., & Byrne, S. 2002. "Click Here" A Content Analysis of Internet Rape Sites. *Gender & Society*, *16*(5), 689-709.

Gove, W. R. 1985. *The Effect of Age and Gender on Deviant Behavior: A Biopsychosocial Perspective*. In A. Rossi (Ed.), Gender and the Life Course (pp. 115-144). Chicago: Aldine.

Grijalva, E., Newman, D. A., Tay, L., Donnellan, M. B., Harms, P. D., Robins, R. W., & Yan, T. 2015. "Gender Differences in Narcissism: A Meta-Analytic Review". *Psychological Bulletin, 141*(2), 261.

F. Hair Jr, J., Sarstedt, M., Hopkins, L., & G. Kuppelwieser, V. 2014. "Partial Least Squares Structural Equation Modeling (PLS-SEM): An emerging Tool in Business Research". *European Business Review, 26*(2), 106-121.

Hare, R. D. 2003. *The Hare Psychopathy Checklist-Revised*. (PCL-R; 2nd Ed.).Toronto, Canada: Multi-Health Systems.

Henson, B., Wilcox, P., Reyns, B. W., & Cullen, F. T. 2010. "Gender, Adolescent Lifestyles, and Violent Victimization: Implications for Routine Activity Theory". *Victims & Offenders, 5*(4), 303-328.

Hulland, J., & Richard Ivey School of Business. 1999. "Use of Partial Least Squares (PLS) in Strategic Management Research: A Review of Four Recent Studies". *Strategic Management Journal*, *20*(2), 195-204.

Hu, L. and Bentler, P. M. 1999. "Cutoff Criteria for Fit Indexes in Covariance Structure Analysis: Conventional Criteria versus New Alternatives". *Structural Equation Modeling, 6(1),* 1-55.

Jonason, P. K., & Webster, G. D. 2010. "The Dirty Dozen: A Concise Measure of the Dark Triad". *Psychological Assessment, 22*(2), 420.

Jones, D. N., & Paulhus, D. L. 2014. "Introducing the Short Dark Triad (SD3): A Brief Measure of Dark Personality Traits". *Assessment*, *21*(1), 28-41.

Junglas, I. A., Johnson, N. A., & Spitzmüller, C. 2008. "Personality Traits and Concern for Privacy: An Empirical Study in the Context of Location-Based Services". *European Journal of Information Systems, 17*(4), 387-402.

Kierkegaard, S. 2008. Cybering, Online Grooming and Age Play. *Computer Law & Security Review*, *24*(1), 41-55.

Kim, W., Jeong, O. R., & Lee, S. W. 2010. "On Social Web Sites". *Information Systems, 35*(2), 215-236.

Kline, R. B. 2015. *Principles and Practice of Structural Equation Modeling*. Guilford publications.

Lau, V. C. S., Au, W. T., & Ho, J. M. C. 2003. "A Qualitative and Quantitative Review of Antecedents of Counterproductive Behaviors in Organizations". *Journal of Business and Psychology, 18*, 73–99.

Lyytinen, K., & King, J. L. 2004. "Nothing at the Center? Academic Legitimacy in the Information Systems Field". *Journal of the Association for Information Systems, 5*(6), 8.

Maasberg, M., Warren, J., & Beebe, N. L. 2015. "The Dark Side of the Insider: Detecting the Insider Threat through Examination of Dark Triad Personality Traits". *In System Sciences (HICSS), 2015 48th Hawaii International Conference* (pp. 3518-3526). IEEE.

Melander, L. A. 2010. "College Students' Perceptions of Intimate Partner Cyber Harassment". *Cyberpsychology, Behavior, and Social Networking, 13*(3), 263-268.

McCrae, R. R., & John, O. P. 1992. "An Introduction to the Five-Factor Model and Its Applications". *Journal of Personality*, *60*(2), 175-215.

Morozov, E. 2012. T*he Net Delusion: The Dark Side of Internet Freedom*. Public Affairs.

Nathanson, A. I. 2003. "Rethinking Empathy". In J. Bryant, D. Roskos-Ewoldsen, & J. Cantor (Eds.), *Communication and emotion: Essays in honor of Dolf Zillmann* (pp. 107–130). Mahwah, NJ: Lawrence Erlbaum Associates.

Newcomb, Alyssa. 2016. "Facebook, YouTube, Microsoft, Twitter Crack Down on Hate Speech", from http://abcnews.go.com/Technology/facebook-youtube-microsoft-twitter-crack-hate-speech/story?id=39499583

Paulhus, D. L. 2001. "Normal Narcissism: Two Minimalist Accounts". *Psychological Inquiry, 12*(4), 228-230.

Paulhus, D. L., & Williams, K.M. 2002. "The Dark Triad of Personality". *Journal of Research in Personality, 36*, 556-563.

Raskin, R., & Terry, H. 1988. "A Principal-Components Analysis of the Narcissistic Personality Inventory and Further Evidence of Its Construct Validity". *Journal of Personality and Social Psychology, 54*, 890–902.

Ross, C., Orr, E. S., Sisic, M., Arseneault, J. M., Simmering, M. G., & Orr, R. R. 2009. "Personality and Motivations Associated with Facebook Use". *Computers in Human Behavior, 25*(2), 578-586.

Sampson, R. J., & Lauritsen, J. L. 1990. "Deviant Lifestyles, Proximity to Crime, and the Offender-Victim Link in Personal Violence". *Journal of Research in Crime and Delinquency, 27*(2), 110-139.

Sledgianowski, D., & Kulviwat, S. 2009. "Using Social Network Sites: The Effects of Playfulness, Critical Mass and Trust in a Hedonic Context. *Journal of Computer Information Systems, 49*(4), 74-83.

Sumner, C., Byers, A., Boochever, R., & Park, G. J. 2012. "Predicting Dark Triad Personality Traits from Twitter Usage and a Linguistic Analysis of Tweets". In *Machine Learning and Applications (ICMLA), 2012 11th International Conference* (Vol. 2, pp. 386-393). IEEE.

Vandebosch, H., & Van Cleemput, K. 2008. "Defining Cyberbullying: A Qualitative Research into the Perceptions of Youngsters". *CyberPsychology & Behavior, 11*(4), 499-503.

Veselka, L., Schermer, J. A., & Vernon, P. A. 2012. "The Dark Triad and an Expanded Framework of Personality". *Personality and Individual Differences, 53*(4), 417-425.

Weaver, A. J., & Wilson, B. J. 2009. "The Role of Graphic and Sanitized Violence in the Enjoyment of Television Dramas". *Human Communication Research, 35*, 442–463.

Widiger, T. A., & Boyd, S. 2009. "Personality Disorder Assessment Instruments". *Oxford Handbook of Personality Assessment*, 336-363.

Williams, K. M., Nathanson, C., & Paulhus, D. L. 2003. "Structure and Validity of the Self-Report Psychopathy Scale-III in Normal Populations". *Presentation at the 11th annual convention of the American Psychological Association*, Toronto, Canada.

Zmud, R. W. 1979. "Individual Differences and MIS Success: A Review of the Empirical Literature". *Management Science, 25*(10), 966-979.