

Is Introversion, Neuroticism, Emotional Maturity, And Sensation Seeking As A Correlated Factor With Cyberbullying Behavior

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Abstract: The results of this study indicated that introversion and neuroticism has a role in cyberbully behavior. Meanwhile emotional maturity and sensation seeking was not related to cyberbullying behavior. Suggestions for further research is the need to add other variables that are hypothesized to play a role in the occurrence of cyberbullying. In addition, given the unsatisfactory number of samples in this study, it is recommended that future researchers consider a larger sample size so that they can better represent the population in Yogyakarta.

Keywords: Cyberbullying, neuroticism, emotional maturity, sensation seeking.

1. INTRODUCTION

The development of communication technology has brought many changes in human life. The progress of this communication technology has two contradictory sides. Positive impacts obtained from the advancement of communication technology include facilitating the sharing of information that is open and fast, e-commerces, e-learning, e-budgeting, and more. The internet also makes it easier for many people to get information, expand social networks, get social support, build relationships and communicate with others (Lee, & Shin, 2017; Wang & Chang, 2010). Meanwhile the negative impact of the internet has led to cybercrime activity, the rapid spread of pornography, hackers, and one of them is the phenomenon of cyberbullying (Wiguna et al., 2018; Quarshie, 2012; Peled, 2019; Macaulay, Betts, Stiller, & Kellezi, 2018). Cyberbullying is any deliberate action to harm another person, through messages that humiliate, demean, slander, open up the disgrace of others and threaten repeatedly, through internet communication technology either by individuals or groups of people, to weak victims (Tokunaga, 2010; Peter & Petermann, 2018; Wong, & McBride, 2018). Cyberbullying is a form of transformation from bullying by utilizing communication technology tools (Peled, 2019). This study aims to examine whether introversion, neuroticism, emotional maturity, and sensation seeking are factors that correlate with cyberbullying behavior. Previous research found several negative effects of cyberbullying. In cyberbullying victims, showing feelings of anger, decreased academic achievement, psychological problems and allowing them to become cyberbullying perpetrators or victims forever (Beran et al., 2012; Bhat, 2008; Glasner, 2010; Schenk & Fremouw, 2012; Wong-lo et al., 2011). Selkie, Kota, Chan, and Moreno (2015) also reported that 265 female students involved in cyberbullying as both perpetrators and victims showed high levels of depression and alcohol use. Many cyberbullying victims show an increase in severe social anxiety (Pabian & Vandebosch, 2016). Akbulut and Cuhadar (2011) and Schenk and Fremouw (2012) reported that cyberbullying victims showed sadness, crying, feeling ashamed, skipping school, becoming depressed, experiencing insomnia, and the worst effects were the emergence of suicide or suicide. While Spears et al. (2009) reported that some cyberbullying victims experienced chronic fear of safety. Of course the

impact of cyberbullying cannot be underestimated, so it requires deeper research to understand this phenomenon, and find solutions to its resolution. Regarding prevalence rates, recent studies show cyberbullying is quite common in the school age population globally, for example studies in Canada (Riddell, Pepler, & Craig, 2018); in the UK and Ireland (Gaffney & Farrington, 2018); and at U.S.A. (Espelage, Hong, & Valido, 2018). It also occurs in Latin American countries (Herrera-López, Romera, & Ortega-Ruiz, 2018) Spain (Zych, OrtegaRuiz, & Marín-López, 2016; Navarro, et al., 2013); Asian countries such as Korea (Lee & Shin, 2017); Israel (Heiman, & Olenik-Shemesh, 2015) Hong Kong of China (Ang & Goh, 2010); Japan (Udris, 2015), Indonesia (Handono, Laeheem, & Sittichai, 2019; Safaria, 2016). The prevalence of cyberbullying victimization and perpetration can vary with respect to demographic backgrounds (such as gender, age, ethnicity, ethnicity, education level, socioeconomic level), individuals (such as bullying, school climate, personality, learning achievement), family and peers (Kowalski, Limber, & McCord, 2018; Espelage, Hong, & Valido, 2018; Tokunaga, 2010). Apart from these variations, however, cyberbullying is now a common interpersonal aggression behavior in today's modern society, so it becomes an important topic for further exploration.

1.1. Cyberbullying

The concept of cyberbullying is different from the concept of bullying which is generally in adolescents. Bullying takes place in a school context (Besley, 2009). Cyberbullying is a new phenomenon, as advances in information technology through the internet and cell phones develop, and penetrate in every aspect of individual life. The main difference between the two lies in the perpetrators of cyberbullying that can disturb victims outside of school, to the home through information technology such as mobile phones, e-mail and other social media (Dooley, Pyzalski, & Cross, 2009). In the early literature, Cyberbullying was likened to the concepts of online bullying, electronic bullying, and internet harassment (Dooley, Pyzalski, & Cross, 2009). Tokunaga (2010) explains that in this cyberbullying phenomenon, the identity of the perpetrators can be known or not. Cyberbullying can occur through electronic communication media in schools when victims bring their gadgets; but cyberbullying generally occurs outside the school environment, for example at home

through the victim's social media accounts (Griezel, Craven, Yeung, & Finger, 2008). According to Dehue, Bolman, and Vollink (Tokunaga, 2010) there are three requirements that must be met for a situation that is categorized as cyberbullying namely, first, the action must be repeated, secondly, it involves psychological torture, and finally, it is done intentionally. Several definitions of cyberbullying have been put forward by many experts including, Besley (2009) defines cyberbullying as the use of information and communication technology to support repetitive, intentional, and hostile actions by individuals or groups aimed at hurting others.

1.2. Factors that influence cyberbullying

Previous research found several factors that influence cyberbullying behavior. Marden (2010) found a loose role for parents in watching teenagers' online activities helped encourage cyberbullying behavior. Research Smith et al. (2008) found that male adolescents were more likely to engage in cyberbullying behavior. Research Schneider et al (2012) found that adolescents aged 15-18 years were more engaged in cyberbullying behavior. Research Patchin and Hinduja (2010) found low self-esteem tends to encourage adolescents to cyberbullying. Research conducted by researchers (Safaria, 2016a) found out of 102 junior high students 14.28% (14) have never been victims of cyberbullying, 25.5% (26) have experienced one or two times, 20.6% (21) have been victims of cyberbullying two to three times, 27.5% (28) have been victims four to five times. The remaining 12.7% (13) experienced cyberbullying almost every day. From the data it is concluded that 80% of respondents have been victims of cyberbullying twice to almost every day.

2. METHOD

2.1. The design

This research uses quantitative research (Creswell, Clark, and Garrett, 2008). To test the hypothesis proposed, the researcher spreads the scale to be filled by respondents. The type of research conducted is correlational survey research. To test the hypotheses proposed in this study quantitative data analysis techniques were used using the method of regression analysis

2.2. Respondents

Respondents of this study have the following characteristics male and female students and aged between 19-23 years. The sampling technique used was purposive sampling. The sample of this study is students / private universities in Yogyakarta. The number of research samples was 194 students. Inform consent was sign by all respondents without coercion.

2.3. Method of collecting data

Cronbach alpha internal consistency is used to test the reliability of measuring instruments. Meanwhile content validity is used to test the validity of the measuring instrument through rational analysis testing with professional judgment to see whether the item can cover the entire content area of the object to be measured. Cyberbullying Scale. Cyberbullying scale which is a form of cyberbullying

as stated by Willard (Beran & Li, 2007) consists of seven forms of cyberbullying, namely: Flaming, Online Harassment, cyberstalking, denigration, masquerade, outing and exclusion. Each item has four alternative answers, which are often, sometimes, rarely and never. Likert scaling is used on a cyberbullying scale with favorable responses starting with a very appropriate answer (SS) given a score of 4, corresponding (S) given a score of 3, not appropriate (TS) given a score of 2 and very unsuitable (STS) given a score of 1. While at Unfavorable answers very unsuitable (STS) were given a score of 4, unsuitable (TS) were given a score of 3, Appropriate (S) were given a score of 2 and very appropriate (SS) were given a score of 1. Example item "I intentionally sent insults to someone at social media accounts". "I send inappropriate pictures to someone's social media account." "I post someone's personal secrets on my social media account". The alpha-cronbach coefficient of this cyberbullying scale = 0.738. Scale of Introversion. Introversion scale was arranged by researchers based on a modification of the Revised Eysenck Personality Questionnaire (EPQR) scale (Eysenck, Eysenck, & Barrett, 1985). Each item has four alternative answer choices, namely (STS) is very inappropriate, (TS) is not appropriate, (S) is appropriate, (SS) is very appropriate. Examples of items used "I find it very difficult to start conversations with people I just met" "I prefer to work alone" "I avoid activities that involve many people". Alpha-Cronbach's coefficient of introversion = 0.708. Emotional Maturity Scale. Emotional maturity scale compiled by researchers based on the Wong and Law emotional intelligence scale (WLEIS: (Wong & Law, 2002). Each item has four alternative answer choices, namely (STS) is very inappropriate, (TS) is not appropriate, (S) is appropriate, (SS) is very appropriate. Examples of items that are used "I can understand the changes in my feelings" "I can feel what other people feel" "I can control what I feel so as not to be excessive". The Alpha-Cronbach coefficient on this emotional maturity scale = 0.770. Sensation seeking scale. Sensation seeking scale was arranged and modified by researchers based on the Sensation Seeking Scale Form V (SSS-V; (Zuckerman, 2007). Each item has four alternative answer choices, namely (STS) is very inappropriate, (TS) is not appropriate, (S) is appropriate, (SS) is very appropriate. Examples of items that are used "I enjoy being in a new situation where I cannot predict how the situation will occur / change" "I enjoy the sensation of speeding with a motorbike or car." "I like some physical activity rather risky." The Alpha-Cronbach coefficient of sensation seeking scale = 0.592. The Neuroticism Scale, the neuroticism scale was arranged by the researcher based on a modification of the Revised Eysenck Personality Questionnaire (EPQR) scale (Eysenck, Eysenck, & Barrett, 1985). Each item has four alternative answer choices, namely (STS) is very inappropriate, (TS) is not appropriate, (S) is appropriate, (SS) is very appropriate. Examples of items used "My mood is often tense and restless throughout the day" "I often feel my life pathetic for no apparent reason" "I often feel anxious about my future". The Alpha-Cronbach coefficient on this neuroticism scale = 0.847.

3. RESULTS

The results of this study indicate that gender has a significant negative relationship to cyberbully behavior ($\beta = -.260, p = .000$). Likewise with the variable introversion ($\beta = -.129, p = .047$) and neuroticism ($\beta = .190, p = .022$), while

the emotional maturity variable ($\beta = .006, p = .939$), and sensation seeking ($\beta = -.020, p = .752$) has no significant relationship with cyberbully actions. Table 1 below presents the results of the regression analysis conducted.

Table 1

Regression analysis of introversion, neuroticism, sensation seeking, emotional maturity, with cyberbullying

Measure	M	SD	1	2	3	4	5	6
Cyberbullying	8.8	2.3	1.000					
Gender	1.74	.44	-.232	1.000				
Introversion	26.7	4.5	-.066	.009	1.000			
Emotional maturity	29.5	3.4	-.072	-.091	-.148	1.000		
Neuroticism	24.2	4.7	.108	.135	.335	-.622	1.000	
Sensation seeking	15.7	2.5	.055	-.206	-.140	.138	.016	1.000

While the mean data, standard deviations, and correlations between variables are presented in table 2 below.

Table 2

Means, standard deviations, and intercorrelation of variables

Measure	M	SD	1	2	3	4	5	6
Cyberbullying	8.8	2.3	1.000					
Gender	1.74	.44	-.232	1.000				
Introversion	26.7	4.5	-.066	.009	1.000			
Emotional maturity	29.5	3.4	-.072	-.091	-.148	1.000		
Neuroticism	24.2	4.7	.108	.135	.335	-.622	1.000	
Sensation seeking	15.7	2.5	.055	-.206	-.140	.138	.016	1.000

4. DISCUSSION

This study confirms previous studies, such as the Ayas (2016) study which showed a significant negative relationship. Meanwhile the results of this study refute previous studies such as White, Fields, Hall, and White (2016) and Satalina (2014) who found a positive relationship between high extraversion personality associated with bullying and cyberbullying behavior. Ojedokun and Idemudia (2013) also found a positive relationship between high extraversion personalities and a tendency to cyberbullying. Meanwhile Oztürk and Ozmen's research (2016) did not find a significant relationship between extraversion personality and cyberbullying behavior. The results of this study indicate that a high extraversion personality decreases the tendency of cyberbullying behavior, whereas a low extraversion personality (high in an introverted personality) encourages a tendency for cyberbullying behavior. The next question is why does introverted personality encourage respondents in this study to cyberbullying? Individuals with introverted personality have weaknesses that they are easily anxious, too sensitive to the surrounding situation, difficult to express their feelings openly, have a lot of anger, and have a closed communication style (McIntyre et al., 2015; Mitchell et al., 2011). This might encourage them to be easily offended and angry with their surroundings, when there are other people who offend them, so they encourage them to easily cyberbullying when they feel offended or frustrated. In

addition, individuals with a high introvert tendency exhibit a risk of experiencing social phobia and chronic major depression (Clark, Watson, & Mineka, 1994; Trull & Sher, 1994). High introverted personalities also tend to show low levels of warmth, friendship intentions, assertiveness, activity, excitement, and positive emotions (Costa & McCrae, 1995). McIntyre, et al (2015) found that introverts were more involved in compulsive internet use symptoms than individuals who were extroverts, and were less socially related to their surroundings. This means that introverts are more likely to socialize through cyberspace, not in real life. This explanation is the background of why introverted individuals in this study tend to engage in cyberbullying behavior. The results of this study found that gender has a relationship with cyberbullying behavior. The results of further analysis using the t test found that male students cyberbullying more than female students. The results of this study confirm the results of previous studies (Doane et al., 2013; Li, 2005; Li, 2007; Slonje & Smith, 2008; Wong, Chan, & Cheng, 2014), which found male students more involved in cyberbullying behavior. But the results of this study contradict the findings of Smith et al. (2008) who found that female students were more involved in cyberbullying. For this reason, further research is needed to find out why there are differences in the findings of the role of this sex with cyberbullying behavior. The results of this study found that personality neuroticism has a significant

positive relationship with cyberbullying behavior. The results of this study confirm previous studies such as research (Alonso & Romero, 2019; Balakrishnan, Khan, Fernandez, & Arabnia, 2019; Corcoran, Connolly, & Moore, 2012; Kircaburun & Tosuntaş, 2017; Atak, Celik, & Erguzen, 2012) who discovered the contribution of this neuroticism personality to cyberbullying behavior. However there are limitations to this study that need to be understood in generalizing the results of this study. First the sample from this study was taken from a private tertiary institution, so the subjects of this study could not represent the population. Both of these studies are correlational studies so they cannot show the relationship of influence as experimental research. These three studies are a shot study, not longitudinal studies which will provide more valid images of the variable phenomena under study.

5. CONCLUSION

The results of this study indicated that introversion and neuroticism has a role in cyberbully behavior. Meanwhile emotional maturity and sensation seeking was not related to cyberbullying behavior. Suggestions for further research is the need to add other variables that are hypothesized to play a role in the occurrence of cyberbullying. In addition, given the unsatisfactory number of samples in this study, it is recommended that future researchers consider a larger sample size so that they can better represent the population in Yogyakarta.

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