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PRIMARY RESEARCH

ID verification to control cyberbullying: Juxtaposing the need and promise, with users' willingness

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Abstract

This study was conducted to investigate the idea of implementing identity verification to reduce cyberbullying prevalence in social media. Quantitative approach was used for this study through the use of a survey that was conducted in google forms. A total of 73 people participated in this study. Among all respondents, 83.5% think Identity Verification will decrease cyberbullying frequency. However, only 54.8% of the participants are willing to link their IDs to control cyberbullying. It was seen that privacy and security issues were the main reason the other participants opposed it. The survey results have also supported the previous literature about the relationship between anonymity and cyberbullying. The study has positive results regarding the implementation of Identity Verification, as seen in the participants' results. However, it's perceived that security and privacy issues must be first addressed. Further studies should be conducted on implementing identity verification in social media. Solutions to privacy and security concerns, especially the idea of blockchain, should be considered.

INTRODUCTION

The internet has brought great convenience to our lives, and one can interact with anyone from anywhere in the world anytime. Despite its great advantages, the internet gives people an opportunity to harm others. A familiar dilemma that we encounter online is cyberbullying, a form of bullying, harassment, or abuse of a person that is done over the internet.

Cyberbullying is highly common. According to Pew Research Center, 41% of Americans have experienced cyberbullying, and 66% have witnessed it. They also found that social media had the highest prevalence of it (Jam, Akhtar, Haq, Ahmad-U-Rehman, & Hijazi, 2010; Vogels, 2021)

The effects of cyberbullying are damaging to people, resulting in depression, anxiety, loneliness, and violent and self-harm behaviors (Dorol & Mishara, 2021; Shahbaz, Sherafatian-Jahromi, Malik, Shabbir, & Jam, 2016; Nixon, 2014). Previous studies also found that victims of cyberbullying are more likely to commit suicide or develop suicidal thoughts than non-victims (Hinduja & Patchin, 2010; John et al., 2018; T. I. Khan, Akbar, Jam, & Saeed, 2016; S. Khan, Jam, Shahbaz, & Mamun, 2018). Megan Meier, Rebecca Sedwick, and Amanda Todd were some people who took their own lives because of cyberbullying. Before ending their own lives, they suffered from severe depression and anxiety. They were also bullied through fake accounts and anonymous social media platforms (Crosby, 2018).

One great feature that the internet offers is anonymity. In the online world, we have the power to ask ourselves. If we wish to, we can use pseudo-names or have fake identities to exercise free speech and stay in our comfort zone. Despite those advantages, anonymity also has its downsides, including online harassment. The ability to hide our names and create fake accounts gives people the illusion that they are untraceable, motivating them to commit horrendous acts such as cyberbullying.

With the rise of cyberbullying prevalence and seeing that anonymity has a connection with cyberbullying, one solu-

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tion believed to solve the problem is identity verification through IDs. This solution is expected to decrease negative behaviors online because of self-accountability. If someone was bullied online, they could get traced easily because their identity was verified. According to the deterrence theory, people avoid offending a crime because they fear the consequences. If one can commit a crime and not get caught, the chances of that person to commit are high (Bosworth, 2005; Jam, Mehmood, & Ahmad, 2013). This means that with identity verification, people may behave well online as there is a higher chance of getting caught and facing the consequences of their actions.

In support of the solution, a recent study from BSC, a well-known institute for IT, stated that 64% of their IT professionals agreed with the idea of identity verification and more than half thought the solution was achievable (Matheson, 2021).

Research Objectives

This research aims to

1. Discover the relationship between cyberbullying and anonymity.
2. Study how ID Verification can help reduce the frequency of cyberbullying.
3. Determine possibilities of ID Verification in social media by gathering diverse opinions.

Research Questions

This research is to answer the questions:

1. Will ID Verification truly help control cyberbullying?
2. Will people give up their ability to remain anonymous to lessen cyberbullying?
3. Will there be repercussions for the implementation of identity verification on social media?

LITERATURE REVIEW

Online Anonymity & Cyberbullying

Anonymity describes an unknown or unidentifiable person, and researchers argue that the ability to be anonymous causes negative behaviors online. Suler (2004) believes that when people are inside the online world and their identity is hidden, they feel their behavior is not linked to their real lives. They may do or say things they wouldn't believe in a person as the aggressor believes they would not face any consequences. Whatever their actions are online, they won't feel accountable.

The BGCM model, designed by Barlett and Gentile (2012), predicted that anonymity is one major aspect that leads to positive attitudes toward cyberbullying. Consistent results of previous studies have supported the BGCM model, such as Barlett (2015), which indicated that anonymity is correlated to cyberbullying behaviors and increases the frequency of cyberbullying. Another study, which used a four-wave longitudinal design, showed that anonymity is a significant risk factor for cyberbullying. They stated that the more disguised people are, the chances of them cyberbullying increases (Barlett, Gentile, & Chew, 2016; Waheed, Kaur, Ain, & Hussain, 2016). The BGCM model is the only psychological model (Barlett, DeWitt, Maronna, & Johnson, 2018) that shows a relationship between cyberbullying and anonymity; therefore, it is highly significant work to the study being conducted.

Previous literature has also shown that anonymity is associated with cyberbullying. One of the most notable studies is Zimbardo (1969), where he experimented with anonymity and aggression. The subjects, who were college girls, were divided and assigned to deliver electric shocks to each other. The first half was anonymous, their names weren't disclosed, and they performed the task in the dark; the other half was identifiable. More aggressive behavior was seen in the anonymous group, performing the shocks twice the duration of the non-anonymous group. According to Zimbardo (1969), the shocks were performed willingly; no one was pressured to do so. They knew the experiment would go on if they didn't deliver the shock.

One research concluded in their study that anonymity is a major factor that increases online harassment. According to their survey results, more than half who experienced online harassment (54%) didn't know the real identity of the bully, and 89% of their participants agreed that anonymity prompts cyberbullying (Vogels, 2021). It was also discovered that anonymous content is greatly associated with cyberbullying, indicating that anonymous people tend to show aggressive behaviors because of their confidence in not getting caught (Kamara, 2020; Qazi et al., 2014; Waheed, Kaur, Ain, & Sanni, 2015).

Earlier works also examined cyberbullying, specifically in social media. A study showed that people experienced cyberbullying more on Twitter (where pseudo-name or hidden identity is common) and less on Facebook (where most users are registered with real names). Cyber aggression was also seen more in comments and forum replies than on Facebook, suggesting that the reason behind it could be anonymity (Sanni, Ngah, Karim, Abdullah, & Waheed, 2013; Whittaker & Kowalski, 2015). An experiment conducted by Chan, Kok, Ong, and Yuvitasari (2014) showed similar results to all previous studies. In their study, they used Facebook as the platform to experiment on and divided the participants in half. The first half is to log in

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to an anonymous account (disclosed name and no profile picture), while the second group is to log into a non-anonymous account (seemingly real name with a profile picture of a person). Both groups were tasked to examine a Facebook complaint post by a stranger. When the participants were asked, it was seen that participants in the anonymous account had a higher-level intention to cyberbully the target (Chan et al., 2014).

These relevant studies showed the link between cyberbullying and anonymity and how easy it is to bully someone when we're anonymous.

Identity Verification

As mentioned earlier, identity verification was a proposed solution for cyberbullying. This section is to show relevant studies about the solution.

In 2005, South Korea implemented a Real Name System (RNS) for all websites to reduce negative online behaviors. Within the RNS, the users must verify their identity by providing their resident registration number, credit card number, and other forms of ID. Once verified, they were free to choose any names and upload any content. Although it was discontinued, it has been shown that the RNS reduced negative online behaviors. Briefer research emphasized the effects of RNS in South Korea.

The study showed that the number of participants and postings was highly reduced for the short term (60 days after the law), but in the longer term (6 months after the law), they significantly increased. Moreover, the study also indicated that the RNS had reduced negative behaviors, resulting in fewer swear words and flaming posts. This suggests that the law has encouraged users to behave well (Cho, 2013). Cho, Kim, and Acquisti (2012) did extensive research, in which the decrease in negative posts was seen after the implementation of RNS. As for the number of postings and participants, they were slightly reduced in the short term, especially for postings, but in the longer term, it showed no effect. The number of postings and participants returned to value just like before the law, only a 1% decrease overall.

China also implemented a Real Name Verification policy for micro-blogging websites in 2012. The cause of the implementation is to catch the users who posted negative content online. A survey showed that although people have mixed feelings about identity verification, most users (51%) think that real name verification will purify the internet environment (Fong, Zhuang, Lu, & Tang, 2012).

RESEARCH METHODOLOGY

Research Design

A quantitative approach was implemented for this study to collect data about cyberbullying in social media and opinions about identity verification. The data was collected through a survey, providing questionnaires with 15 questions (4 unrequired) to the participants. The survey was conducted in google form.

Participants

There were a total of 73 participants in the survey. 32.9% were below 20, 61.6% were between 20-30, 1,4% were between 31-40, and 4.1% were above 40 years old.

The sample size had no limitations to imply that cyberbullying is present regardless of a person's age, gender, or individuality.

TABLE 1. Summary of the respondents'

Response Summary	Count | 73	Percentage
Age Group		
Below 20	24	32.9%
20 to 30	45	61.6%
31 to 40	1	1.4%
Above 40	2	4.1%

TABLE 2. Short quantitative survey

Survey Queries	Responses
Which of the following statements on cyber bullying would you most agree with?	
Cyberbullying is now beyond limits on social media.	31.5
Cyberbullying is now extremely common on social media.	47.9
Cyberbullying is now common on social media.	16.4
Cyberbullying is only occasional on social media.	4.1
Cyberbullying is rare on social media.	0%
Have you ever witnessed someone being cyberbullied on any social media platform?	
Yes	93.2
No	2.7
I don't know	4.1
Have you ever been cyberbullied on social media?	

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Table 2 Continue.....

Survey Queries	Responses
Yes	45.2
No	47.9
I don't know	6.8
If you've experienced or witnessed cyberbullying, on which platform was it?	%
Facebook	56.2
Twitter	49.3
Whatsapp	4.1
Youtube	35.6
Instagram	43.8
Tumblr	8.2
Ask.fm	15.1
Reddit	12.3
Curious Cat	27.4
None	17.8
Online Games	1,4
How huge was the effect of cyberbullying in your life?	%
I have not experienced being cyberbullied	31,5
Minor effect	16.4
Neutral	16.4
Moderate effect	20.5
No effect	8.2
Major effects	6.8
In your experience, the majority of the cyberbullies were...?	%
People you knew in real life.	30.1
People you knew only on social media but never met in real life	30.1
People who are total strangers	56.2
I have not experienced being cyber-bullied.	30.1
How big of a problem do you think cyberbullying is?	%
Serious problem	90.4
Moderate problem	8.2
Minor problem	1.4
Not at all a problem	0%
Have you ever cyberbullied someone?	%
Yes	17.8
No	76.70%
I don't know	5.5
If yes, did your victim know your identity?	%
Yes	55.6
No	31.1
I don't know	13.3
Do you agree that if we have our real identities linked, we will be more responsible for not perpetuating cyberbullying?	%
Agree	49.3
Strongly agree	34.2
Disagree	5.5
Strongly disagree	4.1
Neither agree nor disagree	6.8
Are you willing to link your identity card or verify your ID?	%
Strongly Favour	27.4
Somewhat Favour	27.4
Neutral	17.8
Strongly Oppose	11
Somewhat Oppose	16.4

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FINDINGS & DISCUSSION

Based on the data collected, the vast majority, which is 95.8% (70 out of 73 participants), believe that the presence of cyberbullying is common or more common in social media. It was also seen that nearly all of the participants (93.2%) have witnessed cyberbullying and almost half (45.2%) have experienced cyberbullying on social media. This shows that cyberbullying is very much present in social media, and people's personal lives can be directly affected by it.

Among those who were cyberbullied, more than half, 56.2% specifically, of those were involved with a stranger, not knowing their bullies at all, and 30% were with someone they just know from the internet, which those people could be using fake pictures and pseudo-names.

Furthermore, it has come upon that out of 73 participants, only 17.8% had perpetrated cyberbullying, leaving 76.7% of participants not involved in such activity and 5.5% unsure. Of those who have been cyberbullied, 69.2% of their victims didn't know their identity, and 1 participant was unsure if the victim knew. Note that data from this section isn't accurate as there seemed to be a mix-up on the question. Some who said they didn't cyberbully have also answered no to the question of their victim finding out their identity. However, to make the data accurate, the responses from the participants who answered yes were checked to see what they answered to the question "If yes, did your victim know your identity?".

These findings suggest that people use anonymity to harass someone, thereby supporting the previous works of literature concerning cyberbullying and anonymity. Additionally, these findings may indicate that identity verification will substantially contribute to reducing and containing cyberbullying to a great extent.

The survey outcome also shows that only 6.8% of the cyberbullied participants were majorly affected, and 20.5% were somewhat affected by cyberbullying. Even though only a small number of people had been crucially affected by cyberbullying, almost all participants, 90.4% (66 out of 73), believe that cyberbullying is a serious problem we are currently facing.

It also seems that the suggested solution can be made possible as a total of 83.5% (61 out of 73) participants believe that linking identities to their accounts will contribute to the reduction of cyberbullying as it gives users a sense of responsibility to be more careful with their actions and words online. In further detail, 49.3% have agreed to this matter, while 34.2% have strongly agreed.

Although, even with 83.5% of the people agreeing on the matter, only over half (54.8%) of the participants are inclined to link to their accounts. A total of 27.4% of the participants opposed the idea, having 16.4% somewhat opposed and 11% strongly opposed. In comparison, the remaining 17.8% are neutral about it. This discovery might cause resistance with online users if every linkage of identities were in place. It was found that most of the reasoning received as to why they oppose or are neutral on the subject was their concern for privacy and safety issues.

These concerns, however, may be coming from a lack of information on the linkage of IDs, as what's being discussed is on social media. They have such concerns, yet users tend to link their important information as passports, to airline sites and store their financial information on a website. Phone numbers linked to our social media accounts could be valuable information, yet we still do it. The point is that security issues are always possible anywhere, as currently, almost all data are stored digitally. Even the government has been using the cloud to store data. Those issues are preventable with strong security systems, which all social media sites have.

Moreover, if a data breach happens, social media sites would be held responsible, tarnishing the site's reputation. Data breaches are also very costly to handle as there would be many processes to go through. Social media sites would undoubtedly try their best to prevent this from happening.

There are also several ways for users to protect themselves, such as authentic factors and strong passwords. Additionally, A study by Irvine, Balasubramaniam, and Henderson (2020) has looked over and proposed using a blockchain database to store the ID card of the user, wherein before going through the database, the ID will be first hashed. Blockchain is a distributed database that is made difficult to change, hack or cheat the system. Its highly secure system is used by large companies such as Bitcoin, Microsoft, Amazon, Paypal, Tencent, and much more. With the use of blockchain for the solution, all the users' identities will be secured. Additionally, the Linkage of ID cards on social media doesn't necessarily mean that it will become public information. The process would be the same as how our private data is being stored, but in this case, it may be obtained if one's behavior has been reported and reviewed by governing parties of the website and authorities.

South Korea has tried to implement a linkage of IDs to social media accounts. However, it was discontinued because it removed freedom of expression and caused users to move to sites where identity was not mandatory to link (2010 Heon Ma 47, 252 (consolidated), 2012). Additionally, there was a non-cooperation with Google as they created a solution so

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Koreans wouldn't have to link their IDs. If the solution is to be implemented, all sites should be required to participate for us to see the positive results. Seeing that most users had chosen not to have their identities linked to sites, the methods used by the Korean government should be improved to mitigate the resistance.

CONCLUSION

Cyberbullying is an issue we must address, as it is causing emotional distress to online users worldwide. The negative effects it can bring to our mental health are a serious cause of concern, as anyone can have access to it. Hence, anyone could be a victim of cyberbullying, no matter how young or old a person is. There is irreversible damage that it can cause to people, such as depression and anxiety, which on several occasions have led to suicide.

In my conclusion, linking identities to online accounts would be a great solution to reduce cyberbullying as, referring to the survey conducted substantially, it is believed that the main reason for cyberbullying is anonymity with a lack of responsibility and accountability for the actions. Although, some online users are still not ready for it to be put in place because they believe that their IDs are important information and are afraid that this may breach their privacy and security. Security concerns would need to be addressed, and users need to have an assurance that important information like that is in safe hands and it should not be in the public eye for everyone to see for them to feel confident in linking their ID cards online. Even with all the security measures being put in place, hacking accounts will still be possible.

With almost half of the participants being unfavorable or neutral to the suggested solution, it is material enough for it to be unimplemented unless their concerns are addressed and resolved.

LIMITATIONS AND RECOMMENDATIONS

There are a few limits that this study wasn't able to achieve. The first is the sample size, in which the study only acquired 73 participants when it should contain more as the sample size had no boundaries. Any gender, age, or nationality could participate. The second limit is the type of respondents. Most of the participants were in the age group of 20-30. Few participants belonged to the other age group, indicating that most opinions received are limited to that group and can imply some similarities. Lastly, this research could only examine the possibility of Identity Verification based on people's opinions. There were no experiments conducted to enhance this study further.

It is recommended that further studies be done about how to implement Identity Verification in the forms of ID in social media and how the security and privacy concerns should be faced and handled. Furthermore, the blockchain solution must also be studied as there's a possibility that this idea could be a big help to the problem. Once there's a desirable solution for those concerns, I believe that the users would change their minds regarding Identity Verification as they have the assurance that their data is secured.

REFERENCES

Barlett, C. P. (2015). Anonymously hurting others online: The effect of anonymity on cyberbullying frequency. *Psychology of Popular Media Culture*, *4*(2), 70-79. doi:https://doi.org/10.1037/a0034335

Barlett, C. P., DeWitt, C. C., Maronna, B., & Johnson, K. (2018). Social media use as a tool to facilitate or reduce cyberbullying perpetration: A review focusing on anonymous and nonanonymous social media platforms. *Violence and Gender*, *5*(3), 147-152. doi:https://doi.org/10.1089/vio.2017.0057

Barlett, C. P., & Gentile, D. A. (2012). Attacking others online: The formation of cyberbullying in late adolescence. *Psychology of Popular Media Culture*, *1*(2), 123-135. doi:https://doi.org/10.1037/a0028113

Barlett, C. P., Gentile, D. A., & Chew, C. (2016). Predicting cyberbullying from anonymity. *Psychology of Popular Media Culture*, *5*(2), 171-180.

Bosworth, M. (2005). *Encyclopedia of prisons and correctional facilities* (Vol. 1). Thusand Oaks, CA: Sage.

Chan, H. L., Kok, Y., Ong, J., & Yuvitasari, F. (2014). *Social cues & cyberbullying in facebook: The effects of flaming messages, friend count and anonymity on cyberbullying behaviors.* Retrieved from https://bit.ly/3aTRrp2

Cho, D. (2013). Real name verification law on the internet: A poison or cure for privacy? In B. Schneier (Ed.), *Economics of information security and privacy iii* (p. 239-261). New York, NY: Springer. doi:https://doi.org/10.1007/978-1-4614-1981-5_11

Cho, D., Kim, S., & Acquisti, A. (2012). Empirical analysis of online anonymity and user behaviors: The impact of real name policy. In *45th Hawaii International Conference on System Sciences,* Maui, HI.

ISSN: 2414-3111
DOI: 10.20474/jahss-7.3.4

Crosby, S. (2018). *The connection between cyberbullying and teenage suicide* (Master thesis). University of Maine, Orono, ME.

Dorol, O., & Mishara, B. L. (2021). Systematic review of risk and protective factors for suicidal and self-harm behaviors among children and adolescents involved with cyberbullying. *Preventive Medicine*, *152*, 1-12. doi:https://doi.org/10.1016/j.ypmed.2021.106684

Fong, S., Zhuang, Y., Lu, L., & Tang, R. (2012). Analysis of general opinions about Sina Weibo micro-blog real-name verification system. In *The First International Conference on Future Generation Communication Technologies,* London, UK.

Hinduja, S., & Patchin, J. W. (2010). Bullying, cyberbullying, and suicide. *Archives of Suicide Research*, *14*(3), 206-221. doi:https://doi.org/10.1080/13811118.2010.494133

Irvine, C., Balasubramaniam, D., & Henderson, T. (2020). Short paper: Integrating the data protection impact assessment into the software development lifecycle. In J. Garcia-Alfaro, G. Navarro-Arribas, & J. Herrera-Joancomarti (Eds.), *Data privacy management, cryptocurrencies and blockchain technology.* Cham, UK: Springer. doi:https://doi.org/10.1007/978-3-030-66172-4_13

Jam, F. A., Akhtar, S., Haq, I. U., Ahmad-U-Rehman, M., & Hijazi, S. T. (2010). Impact of leader behavior on employee job stress: Evidence from Pakistan. *European Journal of Economics, Finance and Administrative Sciences*(21), 172-179.

Jam, F. A., Mehmood, S., & Ahmad, Z. (2013). Time series model to forecast area of mangoes from Pakistan: An application of univariate ARIMA model. *Academy of Contemporary Research*, *2*, 10-15.

John, A., Glendenning, A. C., Marchant, A., Montgomery, P., Stewart, A., Wood, S., … Hawton, K. (2018). Self-harm, suicidal behaviours, and cyberbullying in children and young people: Systematic review. *Journal of Medical Internet Research*, *20*(4).

Kamara, A. M. (2020). *The role of anonymous content type in cyberbullying*. Unpublished doctoral dissertation, Colorado Technical University, Colorado Springs, CO.

Khan, S., Jam, F. A., Shahbaz, M., & Mamun, M. A. (2018). Electricity consumption, economic growth and trade openness in Kazakhstan: Evidence from cointegration and causality. *OPEC Energy Review*, *42*(3), 224-243. doi:https://doi.org/10.1111/opec.12130

Khan, T. I., Akbar, A., Jam, F. A., & Saeed, M. M. (2016). A time-lagged study of the relationship between big five personality and ethical ideology. *Ethics & Behavior*, *26*(6), 488-506. doi:https://doi.org/10.1080/10508422.2015.1055493

Matheson, A. (2021). *Social media must verify users' IDs to end online abuse according to the BCS member poll.* Retrieved from https://bit.ly/3ISuD5A

Nixon, C. L. (2014). Current perspectives: The impact of cyberbullying on adolescent health. *Adolescent Health, Medicine and Therapeutics*, *5*, 143-158. doi:https://doi.org/10.2147/AHMT.S36456

Qazi, A., Raj, R. G., Tahir, M., Waheed, M., Khan, S. U. R., & Abraham, A. (2014). A preliminary investigation of user perception and behavioral intention for different review types: Customers and designers perspective. *The Scientific World Journal*, *2014*, 1-8. doi:https://doi.org/10.1155/2014/872929

Sanni, S. A., Ngah, Z. A., Karim, N. H. A., Abdullah, N., & Waheed, M. (2013). Using the diffusion of innovation concept to explain the factors that contribute to the adoption rate of e-journal publishing. *Serials Review*, *39*(4), 250-257. doi:https://doi.org/10.1016/j.serrev.2013.10.001

Shahbaz, M., Sherafatian-Jahromi, R., Malik, M. N., Shabbir, M. S., & Jam, F. A. (2016). Linkages between defense spending and income inequality in Iran. *Quality & Quantity*, *50*(3), 1317-1332. doi:https://doi.org/10.1007/s11135-015-0207-z

Suler, J. (2004). The online disinhibition effect. *Cyberpsychology & Behavior*, *7*(3), 321-326. doi:https://doi.org/10.1089/1094931041291295

Vogels, E. A. (2021). *The state of online harassment.* Retrieved from https://pewrsr.ch/3IRiePb

Waheed, M., Kaur, K., Ain, N., & Hussain, N. (2016). Perceived learning outcomes from Moodle: An empirical study of intrinsic and extrinsic motivating factors. *Information Development*, *32*(4), 1001-1013. doi:https://doi.org/10.1177/0266666915581719

Waheed, M., Kaur, K., Ain, N., & Sanni, S. A. (2015). Emotional attachment and multidimensional self-efficacy: Extension of innovation diffusion theory in the context of ebook reader. *Behaviour & Information Technology*, *34*(12), 1147-1159. doi:https://doi.org/10.1080/0144929X.2015.1004648

ISSN: 2414-3111
DOI: 10.20474/jahss-7.3.4

Whittaker, E., & Kowalski, R. M. (2015). Cyberbullying via social media. *Journal of School Violence*, *14*(1), 11-29. doi:https://doi.org/10.1080/15388220.2014.949377

Zimbardo, P. G. (1969). The human choice: Individuation, reason, and order versus deindividuation, impulse, and chaos. *Nebraska Symposium on Motivation*, *17*, 237–307.

ISSN: 2414-3111
DOI: 10.20474/jahss-7.3.4