Abstract
This research is motivated by the phenomenon of cyberbullying in adolescents. Cyberbullying has the potential to harm victims such as loss of self-confidence, depression and decreased performance. Therefore, this study aims to determine the behavior patterns of cyberbullying perpetrators and victims of adolescents in Jakarta. Cyberbullying behavior patterns in this study refers to the concept of Willard which classifies seven behaviors: flaming, online harassment, denigration, impersonation, outing and trickery, exclusion, and cyberstalking. This research has been conducted with descriptive research, by taking high school students in DKI Jakarta as sample. A total of 400 students have been chosen by using multistage random sampling. Data was collected through a questionnaire and measured using the Student Assessment Survey (SAS). The results showed the involvement of students as perpetrators and victims of cyberbullying. Behavior that tends to be used by students as cyberbullying is denigration (77.2%), harassment (74%), and flaming (70%). While students who are victims of cyberbullying, the treatment that tends to be experienced is denigration (79.2%), flaming (78.7%) and harassment (75.2). The results of this study suggest the need for strategies to prevent cyberbullying behavior by literacy using social media effectively.

Keywords: Cyberbullying behavior, Perpetrators and victims, Adolescents, Flaming, Online harassment

Cyberbullying Behavior Patterns in Adolescents in Jakarta

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Abstract
Penelitian ini dilatarbelakangi fenomena cyberbullying pada remaja. Cyberbullying berpotensi merugikan korban seperti kehilangan kepercayaan diri, depresi dan menurunnya prestasi. Oleh karena itu, penelitian ini bertujuan untuk mengetahui pola perilaku pelaku dan korban cyberbullying para remaja di Jakarta. Pola perilaku cyberbullying dalam penelitian ini mengacu pada konsep dari Willard yang mengklasifikasikan tujuh perilaku : flaming, online harassment, denigration, impersonation, outing and trickery, exclusion, cyberstalking. Penelitian ini dilakukan dengan penelitian deskriptif, mengambil sampel siswa SMA di Provinsi DKI Jakarta sebanyak 400 siswa dengan menggunakan multistage random sampling. Data dikumpulkan melalui kuesioner dan diukur dengan menggunakan Student Assessment Survey (SAS). Hasil penelitian menunjukkan keterlibatan para siswa sebagai pelaku dan korban cyberbullying. Perilaku yang cenderung digunakan oleh para siswa sebagai pelaku cyberbullying adalah denigration (77.2%), harassment (74%), dan flaming (70%). Sedangkan siswa yang menjadi korban cyberbullying, perilaku yang cenderung dialami adalah denigration (79.2%), flaming (78.7%) dan harassment (75.2%). Hasil penelitian ini menyarankan perlunya strategi pencegahan perilaku cyberbullying dengan literasi menggunakan media sosial secara efektif.
Introduction

The increasing use of communication technology among adolescents raises a new problem. One negative effect that needs to be anticipated is cyberbullying. The impact of cyberbullying is twice as adverse because victims find it difficult to avoid perpetrators, they can feel cyberbullying anytime and anywhere and often the perpetrators use anonymity when they do cyberbullying makes it difficult to track and stop (Willard, 2006).

Various studies have mentioned the adverse effects of cyberbullying via the internet, namely loss of self-confidence (Patchin & Hinduja, 2010), depression (McDermott, 2011), decreased student academic achievement (Faryadi, 2011), even allowing someone to commit suicide (Hinduja & Patchin , 2010). The physical absence of the victim before the perpetrators also causes less guilt and allows cyberbullying to be more aggressive (Ovejero et al, 2016).

Indonesia is a country that tends to embrace a culture of high power distance (uneven distribution of power), allowing more oppression to occur than countries with low power distance like in Western countries. This characteristic is also reinforced from the results of research by Kaman (2007), who conducted surveys on cyberbullying in various countries. Indonesia is ranked second after Japan, as a country with a high frequency of cyberbullying among students.

The results of the study conducted by Tempo also reinforce that cyberbullying in Indonesia have been rife in the last ten years (Tempo, 2015). Blasphemous activities through the internet and attacking people to destroy or channel hatred have been found in many social media accounts belonging to teenagers in Indonesia. Social media, which is the most popular application online within children and adolescents, turns out to be the gateway for entry cyberbullying (Safaria, 2016).

The results of a research conducted by the Ministry of Communication and Informatics and UNICEF in 2011-2012 showed that adolescents aged 10-19 years were perpetrators and victims of cyberbullying, 23% of teenagers become perpetrators cyberbullying by sending messages of insults and anger through social media and text messages. In contrast, 13% of adolescents claimed to have experienced cyberbullying in the form of insults, threats and humiliation on social media and text messages (Kominfo & Unicef, 2012).

Likewise, Safaria’s (2016) study, which took 102 sample students at a lower secondary school in Yogyakarta, found that 80% of students had been victims of cyberbullying and 59.3% of students who were victims of cyberbullying did not know who had sent the message to cyberbullying them. While other research, Margono (2014) collected Indonesian words that are often used in cyberbullying on Twitter.

Based on the research published on the phenomenon of cyberbullying in Indonesia, empirically is still relatively small. Whereas with the growth of the internet, it is also increasingly important to prevent the adverse effects of behaviour cyberbullying. For this reason, this research is also based on the suggestion from Kowalski et al. (2014) that a further research on needs to be done cyberbullying, especially on cyberbullying phenomena in developing countries.

This study aimed to fill the void of research on cyberbullying in Indonesia, especially to identify behaviours cyberbullying frequently used by perpetrators and experienced by victims. Hopefully, the results of this study will lay a basis for policy and prevention strategies to be smart internet users, particularly among children and adolescents.

The objective of this research is to identify and map the trends of behavior patterns of cyberbullying among adolescents - in this case high school students in Jakarta as both perpetrators and victims of cyberbullying. In addition, this study aims to elaborate behavior patterns of cyberbullying based on gender and the level of internet use.

This research is expected to contribute practically to cyberbullying prevention strategies and academically enrich the study of cyberbullying in Indonesia from a communication perspective.

Theoretical Framework

Harassment via the internet, is often popularly referred to as cyberbullying, online bullying or digital bullying. Although cases of harassment through the internet are increasingly common, the definition of cyberbullying is complex, because researchers differ from one another in conceptualizing and operating the construct cyberbullying and there is no definite consensus among experts (Kowalski, et al, 2014). But basically,
cyberbullying always involves communication technology in the delivery of messages, using instant messaging, e-mail, short messages (Short Message Service/ SMS), web pages, social media, online games, online forums, and chat rooms.

Cyberbullying and face-to-face oppression (traditional bullying) are both aggressive actions to hurt others. Some experts claim that cyberbullying is an action intentionally, carried out repeatedly and cruelly by an individual or group to hurt others. However, some other experts still question that whether oppression must have a desire to hurt others, whether it has to be repeated and so on (Ovejero, et al, 2016).

In this study, cyberbullying is not seen from the side of the sender of the message of oppression, but rather the impact of the oppression itself on the victim. Cyberbullying to victims can affect mentally and physically, for example, sleep disorders, loss of appetite, feelings of fear, anxiety, sadness, anger, depression, even suicidal ideation (Kubiszewski, et al, 2013; Hoff & Mitchell, 2009; Hinduja & Patchin, 2010).

According to Smith (in Ovejero et al, 2016), differences in the characteristics of cyberbullying with face-to-face oppression are as follows: (1) cyberbullying requires certain technological specializations, (2) cyberbullying is a form of indirect aggression, because people who do not cope with bullying visible and unknown, (3) people who do not see directly the victim's reaction, so that the perpetrators have less empathy for the victim, (4) the diversity of the role of the perpetrators is more complex in cyberbullying than through face to face oppression, (5) involve the more number of potential audience in cyberbullying, (6) people who crack through the internet have access to victims 24 hours 7 days, whereas face-to-face oppression have limited access.

Regarding the types of behavior of cyberbullying, many researchers cite Willard (2007) who has identified several types of behavior of cyberbullying.

First, flaming -the act of sending messages that contain anger, abusive and vulgar to someone privately or in an online group. Second, online harassment- the act of sending messages that are insulting, attacking and hurting someone's feeling via e-mail and text messages.

Third, denigration -the act of sending a statement that is harmful, dangerous, untrue and cruel or gossiping about someone to another person or posting it online.

Fourth, impersonation - the act of pretending to be someone else by breaking into the account of the person who is a victim, and sending or posting material that makes the person considered bad, putting the person in trouble or danger, or damaging someone's reputation or friendship.

Fifth, outing and trickery -the act of sending, posting and disseminating information that is embarrassing, sensitive, and personal, including forwarding private messages or pictures by tricking someone into revealing confidential or embarrassing information which is then distributed online.

Sixth, exclusion -the act of intentionally excluding or removing someone from the online group. Seventh, cyberstalking - the act of repeatedly sending messages that contain threats or other online activities that make others feel scared because of personal security.

Material and Methodology

This research is descriptive. To obtain data regarding the mapping of behavior patterns of cyberbullying in adolescents, this research uses a survey method with a questionnaire instrument aimed at high school students in DKI Jakarta. The consideration underlying the choice of DKI Jakarta Province is, this study refers to the results of a survey conducted by the Indonesian Internet Service Providers Association (APJII) in 2018 that internet users are dominated by those who live in urban areas of Indonesia. That is, the phenomenon of lifestyle native digitalis growing in Jakarta as an urban and metropolitan city.

The population of this study is all high school students in DKI Jakarta Province. High school students are selected as research objects, with the following considerations: (1) high school students are included in the adolescent age category; (2) high school students are digital natives who are assumed to be born and grow in the new technological era; (3) high school students have the potential to become perpetrators and victims of cyberbullying.

From the data obtained by the DKI Jakarta Provincial Education Office, there are 116 Public High Schools and 426 Private High Schools spread in 5 administrative cities of DKI Jakarta Province.

Meanwhile, the sampling technique in this study uses a probability technique, namely the sampling area. Five administrative cities in DKI Jakarta are assumed to be areas. In an effort to obtain representation from various conditions, sample selection is carried out through several stages.
The first stage, determine one high school in five administrative cities of DKI Jakarta province. The selection was carried out randomly at schools in five administrative cities. This stage produced five selected high schools, as follows:

| Administrative Cities | Samples          | Number of Samples |
|-----------------------|------------------|-------------------|
| West Jakarta          | High Schools 23  | 80 people         |
| South Jakarta         | High Schools 32  | 80 people         |
| Central Jakarta       | High Schools 20  | 80 people         |
| East Jakarta          | High-Schools Angkasa 2 | 80 people |
| North Jakarta         | Don-Bosco-High School | 80 people |
| Total                 |                  | 400 people        |

The second stage is to choose the sample purposively in five selected high schools, each of which is represented by 80 students who had cyberbullying and were victims of cyberbullying. From five high schools representing five city administration areas, the total number of respondents in this study was 400 students.

Data collection was carried out by distributing questionnaires to respondents by visiting 5 high school samples. The data collection was conducted from October 2018 to March 2019.

In this study, cyberbullying is defined as the behavior of hurting, harming and making others uncomfortable, which is carried out intensively and repeatedly by individuals and groups via email, chat, digital images, websites, blogs, chat rooms or discussion groups.

Operationally, cyberbullying behaviors refer to the classification of seven cyberbullying behaviors from Willard (2007) as follows:

| No | Behavior of Cyberbullying | Indicator |
|----|---------------------------|-----------|
| 1  | Flaming                   | 2         |
| 2  | Harassment                | 2         |
| 3  | Denigration               | 4         |
| 4  | Impersonation             | 8         |
| 5  | Outing & trickery         | 4         |
| 6  | Exclusion                 | 2         |
| 7  | Cyberstalking             | 2         |

Measurement of cyberbullying behaviors used a measurement that adapts to the Student Assessment Survey, while the scoring used the Revised Cyber Bullying Inventory (RCBI) from Topcu and Baker (2010). The higher the score obtained the higher the frequency of experiencing cyberbullying.

To test the validity of the cyberbullying behavior instrument, a factor analysis was used, namely the Kaiser-Mayer-Olkin Measure of Sampling Adequacy (KMO) and Bartletts's test of specity.

| Kaiser-Mayer-Olkin Measure of Sampling Adequacy. | .818 |
| Bartlett's Test of Sphericity  | Approx. 3264. |
| Sphericity  | Chi-Square 084 |
| Df  | 276 |
| Sig.  | .000 |

The test results show the instrument was declared valid with a KMO value of 0.818 > 0.6 with a significance of 0.000 < 0.05.

Whereas, the reliability test was conducted with reliability analysis.

| Cronbach's Alpha | N of Items |
|------------------|------------|
| .873             | 24         |

The test results show indicators of cyberbullying behavior were reliable, with Cronbach's value of 0.873 > 0.7.

Results and Discussion

1. Characteristics of Respondents

The number of respondents in this study was 400 high school students in the province of DKI Jakarta, 45.5% male and 54.5% female.

The results showed that the majority of respondents accessed the internet every day. In more detail, almost half of the 400 respondents (49.3%) spent an average of more than seven hours per day accessing the internet. As many as 26.8% of respondents had between 4-6 hours per day to access the internet, while 24% of respondents stated that they accessed the internet only 1-3 hours per day.

Then, where did the respondents access the internet? The vast majority of respondents (89.5%) accessed the internet at home. In addition, 5.3% of respondents utilized public places that provide free internet access. Meanwhile, they accessed the internet in schools to do assignments. Nevertheless, almost all respondents said that their smart cellphones were equipped with internet access.
Some schools still impose restrictions on the use of cellular phones by their students, except for doing school work. This was stated by 37.3% of respondents. In contrast, the majority of respondents, 62.7%, claimed that they were not banned from using cellular phones in schools.

Then, did parents supervise respondents in using cell phones? The results of this research showed 60.3% of respondents claimed that sometimes their parents supervised them, while 27% said their parents never supervised them.

2. Behavior Cyberbullying

This research identifies cyberbullying behavior based on the classification of Willard and his status as a perpetrator or victim of cyberbullying. Therefore, the results of this research will describe the behavior of perpetrator and victim of cyberbullying.

Observing the tendency of flaming behavior, the results showed that the majority (70%) of 400 students became perpetrators of behavior flaming by sending messages addressed to someone with harsh and disrespectful words through the internet or social media. When elaborated in detail, 24.8% of respondents took a high action -flaming several times a week.

The number of students who were victims of flaming reached 78.7% of total respondents, with 26% of respondents classified as high frequency receiving messages with harsh and disrespectful words directed at victims. Table 6 describes in details the involvement of perpetrators and victims of flaming behavior.

Table 6. Involvement in Flaming

| Behavior | Role     | Level of Involvement | %   |
|----------|----------|----------------------|-----|
| Flaming  | Perpetrators | Never                | 30.0|
|          |           | Low                  | 26.5|
|          |           | Medium               | 18.8|
|          |           | High                 | 24.8|
|          | Victims   | Never                | 21.3|
|          |           | Low                  | 30.5|
|          |           | Medium               | 22.3|
|          |           | High                 | 26.0|

What is about the involvement of respondents in harassment behavior? The results showed that the majority of respondents (74%) were perpetrators of harassment action and 26% of respondents had never taken harassment action. In details, the percentage between the involvement of actors classified as low, medium and high is not much different, namely 25%, 24% and 25%.

The percentage of students who were victims of harassment was 75.2% and 26% of them said they had never experienced being victims of harassment behavior. In detail, students who were victims of harassment behavior, 23.8% were classified as high and 29% were low.

Table 7. Involvement in Harassment

| Behavior   | Role     | Level of Involvement | %  |
|------------|----------|----------------------|----|
| Harassment | Perpetrators | Never                | 26.0|
|            |           | Low                  | 25.0|
|            |           | Medium               | 24.0|
|            |           | High                 | 25.0|
|            | Victims   | Never                | 24.8|
|            |           | Low                  | 29.0|
|            |           | Medium               | 22.5|
|            |           | High                 | 23.8|

Denigration behavior in this study consisted of four indicators, each with two indicators for the perpetrators and victims of cyberbullying. The results showed that 77.7% of respondents were involved as perpetrators of denigration actions. However, 46.5% of respondents involved as perpetrators of denigration behavior were still at a low level, only 1-2 times in the past year.

On the other hand, the number of respondents who were victims of denigration actions reached 79.2%, with 46.0% of them experiencing denigration actions only 1-2 times in the past year, 24.5% being victims of denigration with a frequency of 2-3 times a month and 8.8% experiencing several times a week.

Table 8. Involvement in Denigration

| Behavior   | Role     | Level of Involvement | %  |
|------------|----------|----------------------|----|
| Denigration| Perpetrators | Never                | 22.3|
|            |           | Low                  | 46.5|
|            |           | Medium               | 22.8|
|            |           | High                 | 8.5 |
|            | Victims   | Never                | 20.8|
|            |           | Low                  | 46.0|
|            |           | Medium               | 24.5|
|            |           | High                 | 8.8 |

For impersonation behavior, this study included eight indicators. Each four indicators used for the results of this research showed 69.3% of respondents have never taken an act of impersonation. Only 30.7% of respondents became
impersonation actors, 21% of whom were involved as low-level perpetrators. The findings of this study indicate that students tend not to impersonate behavior.

The data collected also shows that 82% of respondents have never been victims of impersonation behavior. Meanwhile, 18% of respondents experienced as victims of impersonation behavior, 14% were still classified as low category, which experienced only 1-2 times in the past year.

Table 9. Involvement in Impersonation

| Behavior      | Role       | Level of Involvement | %   |
|---------------|------------|----------------------|-----|
| Impersonation | Perpetrators| Never                | 69.3|
|               |            | Low                  | 21.0|
|               |            | Medium               | 5.8 |
|               |            | High                 | 4.0 |
| Victims       | Never      | 82.0                 |     |
|               | Low        | 14.0                 |     |
|               | Medium     | 2.5                  |     |
|               | High       | 1.5                  |     |

For outing and trickery behavior, this study found that the results were not much different between respondents who have done and who have never done outing and trickery behavior, reaching 47.7% and 52.3% respectively.

For outing and trickery perpetrators by 47.7%, the research findings showed 38% were classified as low involvement. Only 1.5% of respondents were classified as high to do outing and trickery behavior.

Table 10. Involvement in Outing & Trickery

| Behavior      | Role       | Level of Involvement | %   |
|---------------|------------|----------------------|-----|
| Outing & trickery | Perpetrators| Never                | 2.3 |
|                |            | Low                  | 38.0|
|                |            | Medium               | 8.3 |
|                |            | High                 | 1.5 |
| Victims       | Never      | 46.3                 |     |
|               | Low        | 42.3                 |     |
|               | Medium     | 10.5                 |     |
|               | High       | 1.0                  |     |

For exclusion behavior, the results of the study showed that the majority of respondents (68.5%) stated that they never excluded someone from the group chat. Meanwhile, 31.5% of respondents who had exclusion behavior, 22% were in the low category, 1-2 times in the past year. The percentage of respondents who frequently excluded someone from the group chat was not very significant, only 3.5%.

Then, have respondents ever fallen victim to being excluded or ignored from group chats? The research findings show 63% of respondents claimed to have never experienced exclusion from group chats, and 25.3% of them were classified as low - only 1-2 times in the past year. Whereas respondents who often became victims of exclusion behavior were only 2.5%. In details, the level of respondents’ involvement in exclusion behavior can be seen in table 11.

Table 11. Involvement in Exclusion

| Behavior | Role     | Level of Involvement | %   |
|----------|----------|----------------------|-----|
| Exclusion| Perpetrators | Never             | 68.5|
|          |          | Low                  | 22.0|
|          |          | Medium               | 6.0 |
|          |          | High                 | 3.5 |
| Victims  | Never    | 63.0                 |     |
|          | Low      | 25.3                 |     |
|          | Medium   | 9.3                  |     |
|          | High     | 2.5                  |     |

For cyberstalking behavior, the data collected shows that 80.3% of respondents claimed to have never threatened and intimidated someone through the internet/social media. Whereas 19.7% of respondents had made threats and intimidation via the internet or social media, 16.3% were classified as low in frequency, only 1-2 times in the past year. The percentage of respondents who frequently threatened and intimidated others was only 1.8%.

Looking at the data about respondents who have been threatened and intimidated by someone through the internet or social media (28%), the majority of respondents said they only experienced such a threat and intimidation 1-2 times in the past year. Meanwhile, the percentage of respondents who often experienced threats and intimidation was not too significant, only at 2%.

Table 12. Involvement in Behavior Cyberstalking

| Behavior | Role     | Level of Involvement | %   |
|----------|----------|----------------------|-----|
| Cyberstalking | Perpetrators | Never             | 80.3|
|            |          | Low                  | 16.3|
|            |          | Medium               | 1.8 |
|            |          | High                 | 1.8 |
| Victims   | Never    | 72.0                 |     |
|           | Low      | 21.5                 |     |
|           | Medium   | 4.5                  |     |
|           | High     | 2.0                  |     |
The tendency of students’ involvement in cyberbullying can be summarized in the following table.

Table 13. Perpetrators and victims of Cyberbullying Behavior

| Behavior          | Perpetrators (%) | Victims (%) |
|-------------------|------------------|-------------|
| Flaming           | 70               | 78.7        |
| Harrassment       | 74               | 75.2        |
| Denigration       | 77.2             | 79.2        |
| Impersonation     | 30.7             | 18          |
| Outing & trickery | 47.7             | 43.7        |
| Exclusion         | 31.5             | 37          |
| Cyberstalking     | 19.7             | 28          |

The results showed that the involvement of students as perpetrators and victims of cyberbullying behavior that tends to be used by students as cyberbullying is denigration (77.2%), harassment (74%), and flaming (70%). When it comes to students who are victims of cyberbullying, the treatment that tends to be experienced is denigration (79.2%), flaming (78.7%) and harassment (75.2%).

Conclusions

The conclusions that can be drawn from this study showed that adolescents-in this case high school students-in Jakarta have been involved both as perpetrators and victims of cyberbullying. Cyberbullying behavior that tends to be often used by students as cyberbullying are denigration (77.2%), harassment (74%), and flaming (70%), while the treatment that tends to be often experienced by students who were victims of cyberbullying, is denigration (79.2%), flaming (78.7%) and harassment (75.2).

To anticipate an increase in cyberbullying behavior in adolescents, the results of this study are expected to serve as a reference to develop strategies to prevent cyberbullying behavior and regulations concerning interaction and communication. In addition, it is necessary to carry out literacy using social media effectively.

Academically, this research is expected to contribute to enriching the communicative behavior of cyberbullying.

References

Farmita, A.R. (2016). Tim Unair: 83 Persen Remaja Tak Pernah Lepas dari Medsos. https://m.tempo.co/read/news/2016/06/02/072776148/tim-unair-83-persen-remaja-tak-ternah-lepas-dari-medsos.

Faryadi, Qais. (2011). Cyberbullying and Academic Performance. Internasional Journal of Computational Engineering Research. 1(1).

Hoff, D.L., & Mitchell, S.N. (2009). Cyberbullying: causes, effects, and remedies, Journal of Educational Administration, 47(5): 652-665

Kowalski, R. M., Giumetti, G. W., Schroeder, A. N., & Lattanner, M. R. (2014). Bullying in the Digital Age: A Critical Review and Meta-Analysis of Cyberbullying Research Among Youth. Psychological Bulletin. Advance online publication.

Kubiszewski, V., Fontaine, R., Huré, K., Rusch, E. (2013). Cyber-bullying in adolescents: Associated psychosocial problems and comparison with school bullying. L’Encéphale. 39: 77-84.

McDermott, M. (2012). The Relationship Between Cyberbullying and Depression in Adolescents. Master Theses. Eastern Illinois University. http://thekeep.eiu.edu/cgi/viewcontent.cgi?article=1893&context=theses.

Ovejero, et al. (2016). Cyberbullying: Definitions and Facts from a Psychosocial Perspective. Chapter in “Cyberbullying Across The Globe : Gender, Family and Mental Health”. Switzerland: Springer.

Patchin, J.W., & Hinduja, S. (2006). Bullies move beyond the schoolyard: A preliminary look at cyberbullying. Youth Violence and Juvenile Justice, 4: 148–169.

Patchin, J.W., Hinduja, S. (2010). Cyberbullying and Self-Esteem. Journal of School Health. 80(12).
Safaria, T. (2016). Prevalence and impact of cyberbullying in a sample of Indonesian junior high school students, *The Turkish Online Journal of Educational Technology*, 15(1): 82-91.

WHO, Kementrian Kesehatan & Kementrian Pendidikan. (2007). Global School, Based Student Health Survey. [http://www.who.int/chp/gshs/GSHS_Country_Report_Indonesia_2007.pdf](http://www.who.int/chp/gshs/GSHS_Country_Report_Indonesia_2007.pdf).

Willard, N.E. (2007). Cyber-safe kids, cyber-savvy teens: Helping young people learn to use the Internet safely and responsibly, Jossey-Bass.

Willard, N. (2006). Educator’s Guide Cyberbullying Addressing The Harm Caused By Online Social Cruelty