The Relationship of Self-Efficacy with Cyberbystander Behaviour in Adolescents

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Abstract

The pervasive use of social media has exacerbated the issue of cyberbullying, with bystanders (cyberbystanders) playing a critical role in its dynamics. This study examines the relationship between self-efficacy and cyberbystander behaviour among adolescents. A quantitative correlational design was employed, involving 256 active social media users aged 18 to 21 years. Data were collected using the Cyberbullying Bystander Scale and the Defender Self-Efficacy Scale. Spearman's correlation analysis revealed a significant positive relationship between self-efficacy and cyberbystander behaviour ($r = 0.556$, $p < 0.001$). Adolescents with higher self-efficacy were more likely to act as defenders of cybervictims, whereas those with lower self-efficacy tended to remain passive outsiders.Furthermore, self-efficacy accounted for 34.1% of the variance in defender behaviour and 15.1% of the variance in passive outsider behaviour. The findings underscore the pivotal role of self-efficacy in promoting proactive defender interventions among adolescents in cyberbullying contexts. Enhancing self-efficacy could be a key component in interventions aimed at encouraging positive bystander behaviour online.
Keywords: self-efficacy, cyberbystander, cyberbullying, adolescent, defender behaviour

Abstrak

Penggunaan media sosial yang meluas telah memperburuk masalah cyberbullying, dengan pengamat (cyberbystanders) memainkan peran penting dalam dinamikanya. Studi ini mengkaji hubungan antara efikasi diri dan perilaku cyberbystander di kalangan remaja. Desain korelasi kuantitatif digunakan, melibatkan 256 pengguna media sosial aktif berusia 18 hingga 21 tahun. Data dikumpulkan menggunakan Skala Pengamat Cyberbullying dan Skala Efikasi Diri Pembela. Analisis korelasi Spearman mengungkapkan hubungan positif yang signifikan antara efikasi diri dan perilaku cyberbystander ($r = 0,556$, $p < 0,001$). Remaja dengan efikasi diri yang lebih tinggi lebih cenderung bertindak sebagai pembela korban siber, sedangkan mereka yang memiliki efikasi diri yang lebih rendah cenderung tetap menjadi orang luar yang pasif. Selain itu, efikasi diri menyumbang 34,1% dari varians dalam perilaku bek dan 15,1% dalam perilaku orang luar pasif. Temuan ini menggarisbawahi peran penting efikasi diri dalam mempromosikan intervensi pembela proaktif di kalangan remaja dalam konteks cyberbullying. Meningkatkan efikasi diri dapat menjadi komponen kunci dalam intervensi yang bertujuan untuk mendorong perilaku pengamat positif secara online.
Kata kunci: *efikasi diri, pengamat, cyberbullying, remaja, perilaku pertahanan*

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INTRODUCTION

Technology, especially the internet and social media, has become an integral part of everyday life. Globally, social media usage in 2022 reached more than 4.59 billion users, and it is estimated that the number of social media users will continue to grow to 6 billion by 2027 (Statista, 2023). In Indonesia, the number of internet users continues to increase every year. According to data from Asosiasi Penyelenggara Jasa Internet Indonesia (APJII), in 2023, internet users in Indonesia reached 215 million people out of a total population of 275 million, an increase of 1.17% on the previous year (APJII, 2023) Several platforms on the internet that are very popularly used by the public are social networks such as Instagram, Facebook, Twitter and so on. It is almost certain that most generations have felt very close to social media in their daily lives (Maurizka et al., 2021). However, in terms of age, the majority of internet users are Generation Z (born 1997-2012), accounting for around 34.40% of total users (APJII, 2023).

This connectedness provides positive opportunities for teenagers to interact and share information widely. However, behind the positive opportunities on social media, there is a hidden dark side that gives rise to the phenomenon of cyberbullying. Cyberbullying is the act of hurting or intimidating a person or group of people through the use of electronic communication technologies such as the internet, social media, and mobile devices (Henson, 2012). This phenomenon will become increasingly worrying because it can occur anytime, anywhere, as long as the perpetrator and victim are connected to the internet (Gadgil et al.,2022). The impact of cyberbullying can also be widespread because the harmful content that is spread can spread quickly and is difficult to eliminate (Hellfeldt, 2020). It can also significantly affect the psychological impact (Cassidy, Faucher, & Jackson, 2013). These adverse effects lead to anxiety, depression, suicidal ideation, low self-esteem, and poor academic performance (Bussey et al., 2020).

The rate of cyberbullying will always increase as adolescents' access to the internet increases (Kowalski et al., 2019). This is reinforced by a recent study published by the Cyberbullying Research Center (2023), which revealed that adolescents are often involved as bystanders when cyberbullying occurs, both actively and passively. In bullying events, both offline and through digital media (online), victims and perpetrators are almost always involved. In addition, others often witness the event. People who witness bullying events in person are referred to as bystanders, while in the online context, they are referred to as cyberbystanders. Cyberbystanders have a variety of roles, including as an outsider who simply watches without acting, as a reinforcer who supports the perpetrator, or as a defender who defends the victim of cyberbullying (Sarmiento et al., 2019).

Research conducted by Bastiaensens et al. (2014) indicates a relationship between self-efficacy and cyberbystander behavior. Cyberbystanders who have low self-efficacy tend to feel unable or hesitant to intervene and defend victims. In line with these findings, the results of interviews conducted by researchers on May 2, 2024, with 15 teenage social media users showed that 9 of 15 teenagers stated that they did not defend victims of cyberbullying because they felt less confident in their own abilities. Meanwhile, the other 6 teens revealed other reasons, such as fear of being the next target, feeling not too close to the victim, or considering cyberbullying not a big deal. This is also in line with research from Machackova et al. (2018) that shows that individuals are more likely to support victims of cyberbullying if they tend to behave prosocially, have a close relationship with the victim, feel upset after witnessing acts of cyberbullying, or when the victim directly asks for help.

In addition to Bastiaensens et al. 's results, several studies (Pöyhönen et al., 2010; Thornberg & Jungert, 2013) found that adolescents with high self-efficacy are more likely to defend or help friends who are victims of bullying, both directly and in cyberspace. In contrast, adolescents who have low self-efficacy tend to be passive. However, Barchia and Bussey (2011) the study found different results, stating that there is no relationship between self-efficacy and cyberbystander behavior in adolescents. In addition, research from Machackova et al. (2018) provides additional insights by suggesting that support for cyberbullying victims is more influenced by other factors, such as an individual's propensity for prosocial behavior, close relationship with the victim, and emotional reactions after witnessing cyberbullying.These contradictory findings encourage researchers to further examine the relationship between self-efficacy and adolescent cyberbystander behavior in this study. In addition, to date, no research in Indonesia has explored the relationship between self-efficacy and cyberbystanding among adolescents, so this research is expected to make an essential contribution to understanding this phenomenon.

Several studies have shown the different roles of bystanders in bullying (Leung et al., 2018, Wong et al., 2021). Bystanders can be passive, only knowing that bullying is occurring without taking any action. On the other hand, bystanders can act as defenders of the victim, intervening to stop the bullying. In addition, bystanders support the bully and encourage bullying.

To address cyberbullying, an active role for cyberbystanders is needed who can intervene and defend victims (Moxey & Bussey, 2020). Actions such as comforting or confronting the bull victim are among the ways that can be taken (Sarmiento et al., 2020). Actions such as comforting or confronting the bully are not only effective in stopping the incident but also provide emotional support for the victim, making them feel more accepted by their peers and increasing their self-confidence (Clark & Bussey, 2020).

Despite the potential of cyberbystanders to address cyberbullying (Olenik-Shemesh et al., 2017), only 10% of the 68% of social media users who witness a cyberbullying incident defend the victim during the incident (Dillon & Bushman, 2015). The lack of behavior to protect victims of cyberbullying is due to ignorance about the definition of cyberbullying itself (Alipan et al., 2019), as well as the cyberbystander effect (You & Lee, 2019). According to the bystander model (Darley& Latane, 1968), individuals tend not to intervene when others are present. This is due to the diffusion of responsibility, which is the belief that the obligation to act is shared between all present, the fear of negative evaluation, where individuals worry that their actions will be judged poorly by other bystanders, and pluralistic indifference, where, when an individual sees others not acting, they will conclude that nothing needs to be done.

This effect is particularly worrying because passive cyberbystanders not only fail to provide support to victims, but may also signal to perpetrators that their bullying behavior is tolerable (Bastiaensens et al., 2014). Therefore, factors are needed that can encourage bystanders or cyberbystanders to defend victims. One factor that can influence cyberbystanders' defensive actions is self-efficacy. Thornberg et al. (2017) reveal that self- efficacy is an individual's belief in his or her ability to successfully perform specific actions such as defending victims of bullying. In forming a foundation for cyberbystanders to act effectively in cyberbullying situations, cyberbystanders need to pay attention to aspects of self-efficacy. The elements of self-efficacy among cyberbystanders are divided into five aspects: sensitivity, social guidance, support for victims, climate of engagement, and online conflict management (Fischer & Bilz, 2019).

METHOD

This research uses a quantitative, correlational design. The reason for using a correlational design is because researchers want to identify the level or percentage of correlation between these two variables. Meanwhile, the study aimed to examine the relationship between self-efficacy and cyberbystander behavior. The operational definition of these variables is that cyberbystander behavior (Y) is an action to defend or help victims of cyberbullying, such as reprimanding the perpetrator and providing support to the victim. These actions ignore or fail to respond to incidents that occur, either intentionally or unintentionally, and only observe or witness incidents without intervening (Sarmiento et al., 2019). Self-efficacy (X) is a person's perception of how well they can interact with others in their environment, including beliefs about making friends, overcoming social conflict, and working with others (Patrick et al., 2019).

In this study, the technique used is probability sampling, which ensures that each member of the population has an equal chance of being selected as a respondent. The intended population is late adolescents, aged 18 to 21 years. The research sample consists of teenagers who meet specific criteria: they must be 18 to 21 years old, have completed their last education at the high school level or equivalent, and have an active social media account for at least 1 year. These criteria were chosen to ensure that the respondents had experiences relevant to the research context on cyberbystander behavior and efficacy in digital environments.

The Cyberbystander Behavior variable was measured using the Cyberbullying Bystander Scale (CBS), Sarmiento et al. (2019)which was translated into Indonesian. This measuring instrument has six aspects of cyberstander: passive online outsider, defender of the cybervictim online, reinforcer of the cyberbully online, passive face-to-face outsider, face-to-face defender of the cybervictim, and face-to-face reinforcer of the cyberbully. Of these six aspects, researchers chose to use three online aspects passive outsider online, defender of the cybervictim online, and reinforcer of the bullying online totaling 18 items, divided into six favorable items and 12 unfavorable items. Each statement item is given four alternative answers on a 4-point Likert scale, ranging from 1 = Never to 4 = Always.

The self-efficacy variable was measured using the Defender Self-Efficacy Scales created by Thornberg et al. (2017), which were then translated into Indonesian and adapted to examine cyberbystander self-efficacy. The scale contains five aspects — sensitivity, social guidance, support for victims, climate of engagement, and online conflict management totaling five favorable items. Each statement item is given four alternative answers using a Likert scale ranging from 1 = Strongly Unsuitable to 4 = Strongly Suitable.

Testing the reliability of measuring instruments using Statistical Package for the Social Sciences (SPSS) software, using the Cronbach's Alpha technique. According to Azwar (2013) reliability, it is said to be good if the reliability coefficient is closer to 1. Based on the reliability coefficients measured, the Cyberbullying Bystander Scale has a reliability coefficient of 0.798, while the Defender Self-Efficacy Scales have a reliability coefficient of 0.846. Based on the coefficient values for the two variables, their reliability is good. Furthermore, researchers conducted hypothesis testing using the Spearman Rho correlation, where the two variables are considered related if the p-value is below 0.05 ($p < 0.05$). However, before conducting the test, researchers need to perform a normality test and a linearity test.

RESULTS AND DISCUSSION

Character of Research Participants

There are five characteristics of the participants in this study, including:

Characteristics of Participants Based on Gender

Based on table 1, which shows the characteristics of participants based on gender, there were 256 participants who participated in this study. Of these, 84 participants were male, accounting for 32.8% of the total. Meanwhile, the number of female participants reached 172, which contributed 67.2% of the total.

Table 1.
Participants by Gender

Gender	Total	Percentage
Male	84	32.8%
Female	172	67.2%

Characteristics of Participants by Age

Table 2 shows that of the total participants, 18.8% were 18 years old, 17.2% were 19 years old, 13.7% were 20 years old, and 50.4% were 21 years old.

Table 2.
Participants by Age

Age	Total	Percentage
18	48	18.8%
19	44	17.2%
20	35	13.7%
21	129	50.4%

Characteristics of Participants Based on Last Education

Based on table 3, 89.8% had the highest educational level of SMA/SMK, 1.2% had a Diploma, and 9% had a Bachelor's degree.

Table 3.
Participants Based on Last Education

Last Education	Total	Percentage
High School (SMA/SMK)	230	89.8%
Diploma	3	1.2%
Bachelor	23	9%

Characteristics of Participants Based on Length of Social Media

Based on table 4, 0.4% of participants have social media accounts for 0-1 year, 1.2% of participants have social media accounts for 1-2 years, 6.3% of participants have social media accounts for 2-3 years, and 92.2% of participants have social media accounts for more than 3 years.

Table 4.
Participants Based on Length of Social Media

How Long Have Social Media Accounts (years)	Total	Percentage
0-1	1	0.4%
1-2	3	1.2%
2-3	16	6.3%
>3	236	92.2%

Characteristics of Participants Based on Location of Residence

Based on table 5, Central Java recorded the highest number of participants, accounting for 83.2%.

Table 5.
Participants Based on Location of Residence

Location of Resident	Total	Percentage
Central Java	213	83.2%
Special Region of Yogyakarta	5	2%
East Java	2	0.8%
NTT	5	2%
North Sulawesi	1	0.4%
South Sulawesi	1	0.4%
North Maluku	2	0.8%
West Java	8	3.1%
Special Capital Region of Jakarta	3	1.2%
Banten	1	0.4%
Central Kalimantan	3	1.2%
South Kalimantan	3	1.2%
West Kalimantan	1	0.4%
East Kalimantan	1	0.4%
Lampung	3	1.2%
North Sumatra	2	1%
West Papua	1	0.4%
Southwest Papua	1	0.4%

Descriptive Statistics Result

A descriptive analysis of this research variable is presented in table 6 below. Based on empirical data, the mean self-efficacy score is 14.45 (SD = 2.882), while the mean of the cyberbystander behavior variables is 25.21 (SD = 5.473). =The minimum score of self-efficacy = 5 and the maximum score of the self-efficacy variable is 20, and the minimum score of cyberbystander behavior = 10 and the maximum of cyberbystander 40.

Table 6.
Statistics Results

	N	Min.	Max.	Mean	Std. Deviation
Self Efficacy	256	5	20	14.45	2.882
Cyberbystander Behaviour	256	10	40	25.21	5.473

Self Efficacy Categorization

Based on table 7, participants with self-efficacy in the moderate category have a large enough share (38.3%, 98 participants), and participants with self-efficacy in the low category amounted to 23.0% (59 participants).

Table 7.
Self-Efficacy Categorization

Category	Interval	N	Percentage
Very low	X≤10.13	23	9.0%
Low	10.13<X≤13.01	59	23.0%
Medium	13.01<X≤15.89	98	38.3%
High	15.89<X≤18.77	52	20.3%
Very High	X < 18,77	24	9.4%
Total		**256**	**100%**

Self-efficacy is an individual's belief in their ability to successfully perform specific actions, such as defending victims of bullying (Thornberg et al., 2017). This belief is fundamental because it can influence adolescents' decisions to engage and act in situations that require courage, such as confronting bullying. However, the results of self-efficacy categorization show that 38.3% of adolescents are in the moderate category. This occurs due to the influence of the social environment, where many adolescents do not get adequate support from friends and family, so their belief in their abilities is in a moderate stage. In addition, many adolescents feel that responsibility for action lies with others and are also worried about the negative social impact of acting.

Cyberbystander Behaviour Categorization

Based on table 8, participants who exhibit cyberbystander behavior in the moderate category have the largest share (42.6%) among the categories.

Table 8.
Cyberbystander Behaviour Categorization

Category	Interval	N	Percentage
Very low	X≤ 17.00	25	9.8%
Low	17.00< X≤22.47	42	16.4%
Medium	22.47<X≤27.95	109	42.6%
High	27.95<X≤33.42	64	25.0%
Very High	X < 33.42	16	6.3%
Total		**256**	**100%**

The results of the data analysis show that, in general, cyberbystander behavior among adolescents falls into the moderate category (42.6%). This indicates that on average adolescents tend to have moderate cyberbystander behavior. Moderate cyberbystander behavior in most adolescents is due to several things. One of the things to note is that many adolescents have sufficient awareness about the importance of intervention in cyberbullying cases. Still, they feel hesitant to act because of uncertainty about how the right way to do it. When adolescents feel confident, they are more likely to take initiative in social situations, including in dealing with cyberbullying. Conversely, if they feel inadequate or doubtful, they will be more likely to avoid or to act in ways that are not effective. In addition to this, cyberbystander behavior is influenced by various variables that support or weaken it. The focus of this study is self-efficacy.

Assumption Test

Normality Test

Based on Table 3.9, the self- efficacy variable shows a KS-Z of 0.134 with a sig value. = 0.000 (p <0.05) while the self-efficacy variable shows a KS-Z value of 0.094 with a sig value. = 0,000 (p < 0,05).

Table 9.
Normality Test Result

	KS-Z	Sig.	Description
Self Efficacy	0.134	0.000	Not Normal
Cyberbystander Behaviour	0.094	0.000	Not Normal

Linearity Test

Based on table 10, the results indicate an F difference of 1.635 and a significance of 0.076 (p>0.05), suggesting that the variables of self-efficacy and cyberbystander behavior have a linear relationship.

Table 10.
Linearity Test Results

	F	Sig.	Description
Deviation from Linearity	1.635	0.076	Linear

Hypothesis Test

Correlation Result Between Self Efficacy and Cyberbystander Behaviour

Based on table 11, the correlation coefficient (r) is 0.566 with a significance value = 0.000 (p < 0.05), which means that there is a significant relationship between self-efficacy and cyberbystander behavior. The hypothesis in this study is accepted.

Table 11.
Correlation Test Results

Variables	r xy	Sig.	Description
Self Efficacy and Cyberbystander Behaviour	0.566	0.000	Significant

Correlation Results Between Self-Efficacy and Cyberbystander Type

Self-efficacy with Passive Outsider Online

Based on table 12, there is a significant association between self-efficacy and online passive outsiders (R = 0.388), with self-efficacy accounting for 15.1% of the variance in online passive outsiders.

Tabel 12.

Correlation Results of Self-Efficacy on Passive Outsider Online

Type of Cyberbystander	R	R Square
Passive outsider online	.388	.151

Efficacy with Defender of the Cybervictim Online

Based on table 13, there is an influence between self-efficacy and online defender of the cybervictim, with an R value of 0.584, and self-efficacy accounts for 34.1% of the variance in online defender of the cybervictim.

Table 13.

Correlation Results of Self-Efficacy On Passive Outsider Online

Type of Cyberbystander	R	R Square
Defender of the cybervictim online	.584	.341

The results showed a significant relationship between self-efficacy and cyberbystander behavior among adolescents, with a correlation coefficient of r = 0.566 ($p < 0.05$). Adolescents with high self-efficacy tend to be more active in defending victims of cyberbullying, while those with low self-efficacy tend to be passive. This finding is in line with research by. Thornberg et al. (2017), which asserts that self-efficacy plays a vital role in motivating individuals to act when witnessing bullying. Furthermore, research by Pöyhönen et al. (2010) showed that social and emotional factors, such as proximity to the victim and emotional response to bullying, also influence the decision to act. This supports the results of this study, which found that adolescents who felt moved or had a close relationship with victims were more likely to help them.

Furthermore, Machackova et al. (2018) found that social and emotional factors, such as proximity to the victim and emotional response to the bullying also influenced support for cyberbullying victims. This study showed that adolescents who felt moved or had a close relationship with the victim were more likely to act. For example, adolescents who felt upset after witnessing an act of bullying or when the victim directly asked for help were more likely to support the victim. This underscores that while self-efficacy is essential, the social and emotional context also plays a key role in motivating action. However, different results were found in a study Barchia and Bussey (2011) which stated that there was no relationship between self-efficacy and cyberbystander behavior in adolescents.

This study highlights the complexity of the bystander behavior phenomenon, where other factors such as social norms, fear of negative consequences, and environmental influences may also affect adolescents' decision to act. For example, adolescents may hesitate to intervene for fear of negative judgment from their peers or fear of becoming the next target of bullying. Thus, while self-efficacy significantly influences positive

behaviors among adolescents, it is essential to consider the broader social and emotional context.

CONCLUSION

The findings confirm a significant relationship between self-efficacy and cyberbystander behaviour in adolescents, with self-efficacy accounting for 34.1% of the variance in online defender behaviour and 15.1% in passive outsider behaviour, thereby supporting the hypothesis and aligning with prior research on its role in intervention. However, the generalizability of these results is constrained by the study's limitation to adolescents aged 18-21 and its reliance on self-report measures, which may impact data reliability. Future research should expand the participant pool to include younger adolescents and adults and incorporate additional influential variables, such as empathy, social support, and environmental factors, to provide a more holistic understanding of the determinants of cyberbystander behaviour.

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