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Neuroticism as a Moderator of the Relationship Between Peer Conformity and Cyberbullying

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Abstract

Cyberbullying is a phenomenon that often occurs in adolescents and can be caused by conformity or personality. This study aimed to evaluate whether neurotic personality can strengthen or weaken the relationship between conformity and cyberbullying in adolescents. The participants were 140 adolescents aged 12–15 years old, all of whom were active social media users and had been involved in cyberbullying. Cyberbullying was measured on a scale created by the researchers ($\alpha = 0.863$), conformity was measured using a peer conformity scale ($\alpha = 0.846$), and neuroticism was measured using a scale that had been previously adapted into the Indonesian language and culture ($\alpha = 0.766$). Data were analyzed quantitatively using PROCESS. The results showed that low levels of neuroticism could moderate or strengthen the relationship between conformity and cyberbullying. Future researchers might test moderating variables other than neuroticism to obtain new findings. Based on the current study, parents are advised to help children select their friendship environments to prevent cyberbullying behavior. Schools can create intervention programs to prevent cyberbullying, especially for adolescents who display neuroticism. School counselors and parents can create a positive friendship environment so that adolescents do not become perpetrators or victims of cyberbullying. Parents are additionally advised to limit the use of digital devices among their adolescents.

Social media is a set of digital tools that are entangled with adolescent lives. Most adolescents have reported that they have at least one social media account and check it several times a day (Moreno et al., 2018). Data from the Indonesian Internet Service Providers Association ([APJII], 2023) shows that Indonesia's internet penetration rate has reached 79.5%, with 34.40% of the users being Gen Z (born 1997–2012). However, not all adolescents can use social media wisely. Those who misuse it may easily fall into deviant behavior, such as cyberbullying (Hamm et al., 2015; Ragasukmasuci & Adiyanti, 2019).

Cyberbullying is a form of psychological violence carried out intentionally and repeatedly against vulnerable groups via the internet or electronic media (Turliuc et al., 2020; Unicef, 2020). Individuals may comment negatively on their victims, mock them, or even send cruel messages to them via social media accounts. In recent years, there has been an increase in cyberbullying cases in Indonesia. A survey conducted by APJII in 2022 showed that internet users in 2021–2022 made up around 210 million of the total population, with the penetration rate of adolescents aged 13–18 reaching 99.16% (Asosiasi Penyelenggara Jasa Internet Indonesia, 2024). In the 2011 Ipsos survey (Santhoso, 2019), 14% of parents admitted that their children had experienced cyberbullying, and 53% had experienced it in their residential environment.

Factors underlying this cyberbullying phenomenon include the excessive intensity of device and social media use. Adolescents who spend too much time on social media receive a large influx of information without any filtering, which can increase the tendency toward cyberbullying behavior (Mahadyasa & Wulanyani, 2024). Cyberbullying also emerges due to the ease of access to social media platforms, where people can post images and videos that contain negative elements (Putri & Budiman, 2024).

Conformity likewise has a positive relationship with cyberbullying behavior. Hinduja & Patchin as cited in Mahadyasa and Wulanyani (2024) stated that



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cyberbullying perpetrators have a significant level of peer attachment, so it can be concluded that the closer adolescents are to their peers, the more likely they are to engage in cyberbullying behaviors. This is highly relevant because adolescents with strong peer attachment typically spend more time interacting with their friends (Venticinque et al., 2024).

The next factor is the callous-unemotional traits possessed by adolescents. Callous-unemotional traits are those that cause individuals to lack empathy, have flat affect (inability to express emotions), and lack feelings of guilt when committing a deviant act. Sarifa and Mahanani (2020) found that adolescents who have callous-unemotional traits are more likely to be involved in cyberbullying.

Of the factors mentioned above, the researchers wanted to conduct an in-depth study on the relationship between cyberbullying and conformity, and chose to also include neuroticism as a moderating variable. Previous studies did not consider neuroticism as a moderator that might strengthen or even weaken the relationship between cyberbullying and conformity. Therefore, the inclusion of neuroticism as a moderator is the novelty offered by this study.

Conformity is a process of social influence that can push an individual to adopt (conform to) a particular group's norms, values and standards (DeLamater & Myers, 2010). Individuals strive to receive positive feedback and be considered part of the group. If an individual does not obey the rules in their group, they will be ostracized. Several previous studies have shown a relationship between adolescents and peer groups that plays an important role in cyberbullying among this age range (Velensia et al., 2021). One of the underlying factors is that adolescents have a strong desire to be accepted and liked by their peers. This prompts them to want to showcase conformist behaviors to gain recognition from the group (Apsari & Siswati, 2020). However, conformity is not always positive. Adolescents who are in deviant friendships have a greater chance of behaving deviantly themselves, including becoming involved in cyberbullying (Velensia et al., 2021).

Although peer conformity can influence individuals to engage in cyberbullying (Bleize et al., 2021), the impacts may vary depending on the characteristics of each individual. Several previous studies have stated that there is a significant relationship between cyberbullying behavior and neurotic personality (van Geel et al., 2017; Zhang et al., 2021; Zhou et al., 2018). However, research conducted by Herper (2013) found a significant negative correlation between cyberbullying and neuroticism. Furthermore, Ekinici (2023), in his research, found cyberbullying behavior to have a very weak influence on neuroticism.

Individuals with a neurotic personality are typically more impatient, restless, depressed, fearful, and sensitive to threats (Herper, 2013). Neuroticism may be categorized as low or high (Costa & McCrae, 1980). A highly neurotic personality is closely related to anxiety, fear of risky situations and conditions, difficulty making decisions, being vulnerable and withdrawn, and having difficulty im-

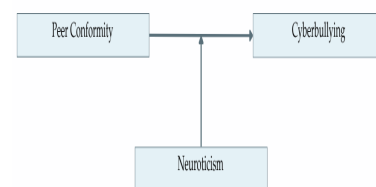
itating aggressive behavior. In contrast, individuals with a low level of neuroticism tend to be calmer when facing anxiety, more impulsive, and stronger than those with a highly neurotic personality (Costa & McCrae, 1980). These characteristics make them more daring, and thus more likely to engage in aggressive behavior. Therefore, the researchers aimed to learn whether neuroticism could moderate the relationship between conformity and cyberbullying behavior in adolescents. From the findings above, the authors proposed the following hypotheses:

H1: Conformity has a significant positive relationship with cyberbullying behavior.

H2: Neuroticism moderates the relationship between conformity and cyberbullying; the positive relationship between conformity and cyberbullying is strengthened by the increase in neuroticism.

Figure 1

The Relationship between Peer Conformity and Cyberbullying with Neuroticism as the Moderator



Ultimately, this study aimed to prove whether neuroticism can strengthen the relationship between conformity and cyberbullying behavior in adolescents. Its results are expected to contribute to future research, practices, and parenting for adolescents. Readers are also expected to gain new knowledge via this article.

Methods

Participants

Participants in this study were early adolescents aged 12-15 years who were active on social media and had committed cyberbullying. The early adolescent population was chosen due to the dominant conformity behavior that occurs at this age, with antisocial behaviors peaking among this age group (Mayara et al., 2016). In addition, neuroticism usually increases in early adolescence and then decreases with age (Zhang et al., 2021). Furthermore, researchers chose adolescent participants who had been perpetrators of cyberbullying because such actions represent the characteristics of early adolescence, a period of storm and stress which is typically marked by the emergence of deviant behaviors (Santrock, 2007). On the questionnaire that was distributed, participants were required to answer the following question: "Have you ever committed cyberbullying?"

The sampling technique used was random cluster sampling. The researchers first identified and created clusters of schools, then used a simple random sampling method to

select several clusters from the full list. Of these, Junior High School A in City B and Vocational High School B in City Y were chosen to be the locations of the study, and students who attended them were selected to participate. The researchers picked these two schools based on the results of interviews with their school counselor. The interviews showed that many students there were involved in aggressive behavior, such as bullying in real life and cyberspace.

The participant recruitment process was carried out by sending a Google Form broadcast. There were a total of 196 participants in this study, with 125 male (63.8%) and 71 female (36.2%). At the time of the study, respondents were aged 12 to 15 with the following percentages: 12 years old ($N = 38$; 19.4%), 13 years old ($N = 56$; 28.6%), 14 years old ($N = 56$; 28.6%), and 15 years old ($N = 46$; 23.5%).

After the researchers obtained ethical clearance from the Ethics Commission at the Faculty of Psychology, Universitas Gadjah Mada, data collection was carried out online using the Google Form from November 10 to December 02, 2021. Participant recruitment was performed by sending out a broadcast poster detailing the characteristics of the individuals needed. After obtaining a list of possible participants, the school counselors shared a link to the Google Form. Individuals who met the research characteristics were guided by the counselor to fill out informed consent that indicated their willingness to take part in this study. Because the participants were under 19, the researchers also needed approval from their parents. The parents were contacted by the counseling teacher regarding the study and, once they had given parental consent, the participants could fill out the questionnaire that had been distributed.

The online form comprised five sections: Section 1 explained the mechanism and research information; Section 2 contained a parental consent sheet since the participants were minors; Section 3 contained a child's consent sheet stating that they were voluntarily involved in this study; Section 4 explained cyberbullying through text and video; and the last section comprised the demographic form and questionnaire items.

Research Instruments

Cyberbullying was measured using a scale developed by the researchers based on aspects of cyberbullying observed by Langos (2012). These aspects are power imbalance, aggression, repetition, and intention. One example of an item in the power imbalance aspect is: "I make fun of losing opponents when playing online games." A sample item in the aggression aspect is: "I have a fake social media account (on WhatsApp/Line/Instagram/Facebook/X/TikTok/Discord) and spam chat to other people with the intention of disturbing them." Finally, the repetition aspect is represented by an item asking the participants how often they have shown acts of aggression and power imbalance related to cyberbullying. The 20 favorable items are measured on a Likert scale with five alternative answers. The Cronbach's

alpha value of the scale is 0.863.

Conformity was measured using a peer conformity scale adapted from Mawardah (2012). This scale refers to the aspects of conformity identified by DeLamater and Myers (2010) and Sears et al. (1994), namely normative and informational conformity. Furthermore, in the process of cultural adaptation, the researchers first tested the scale on 45 adolescents who shared similar characteristics with the original respondents. This trial was conducted due to differences in participant characteristics compared to previous studies. The results of the trial showed that 20 items passed the validity test and the scale had a Cronbach's alpha value of 0.846.

Neuroticism was measured using a neurotic personality scale based on the characteristics of neurotic individuals reported by Costa and McCrae (1980), which was adapted to the Indonesian language and culture by Ramdhani (2012). It includes eight items, five favorable and three unfavorable. The present study employed this scale because it had already been adapted to the Indonesian context. Regardless, due to differences in participant characteristics compared to previous studies, the researchers conducted a pilot test of the scale on 45 adolescents who had the same characteristics as the original respondents before administering it to participants. The trial resulted in eight items passing the validity test using total item correlation and showed a Cronbach's alpha value of 0.766.

Analysis

The hypothesis testing was conducted using moderated regression analysis (Hayes & Little, 2018) with the PROCESS v3.5 extension. Statistical data were processed using the Statistical Package for the Social Sciences (SPSS) 24.0 for Windows. In this study, conformity was an independent variable, neuroticism was a moderator, and cyberbullying was a dependent variable.

Results

Of the total 196 participants, 115 (58.7%) were categorized as moderate in terms of cyberbullying behavior. Furthermore, 77 (39.3%) of the total participants showed a high level of neuroticism, and 71 (36.2%) showed a very high level. Finally, 100 participants (51%) were at a high level of conformity.

Table 1 shows the results of the correlation test between the three variables using the Pearson correlation test. The Pearson correlation result for conformity vs. cyberbullying is ($r = 0.227$) with a significance level of ($p = 0.001$; $p < 0.05$), meaning that the higher the peer conformity, the higher the individual's likelihood to commit cyberbullying. There is no correlation between the cyberbullying variable and neurotic personality, as the Pearson correlation result shows a figure of ($r = -0.110$) with a significance level of ($\text{sig} = 0.126 > 0.05$). Likewise, there is no correlation between conformity and neurotic personality: the Pearson correlation result is ($r = 0.131$) with a positive relationship direction and a significance level of ($\text{sig} = 0.068 > 0.05$).

Table 1

Pearson Correlation Coefficients for Conformity, Neuroticism, and Cyberbullying

Variable		Neuroticism	Cyberbullying
Conformity	Pearson Correlation	.131	.227**
	Sig. (2-tailed)	.068	.001
	N	196	196
Neuroticism	Pearson Correlation	1	-.110
	Sig. (2-tailed)		.126
	N	196	196

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

Assumption Test

Normality testing using the Kolmogorov-Smirnov test found that all three variables showed a normal data distribution ($p = 0.200$; $p > 0.05$). The results of the linearity test also displayed linearity between cyberbullying and conformity ($p = 0.530$; $p > 0.05$) and cyberbullying and neuroticism ($p = 0.177$; $p > 0.05$). The multicollinearity test showed a tolerance value of 0.983 (> 0.10), and the variance inflation factors (VIF) were 1.017 (< 10.00), meaning that there was no multicollinearity in the two independent variables.

Hypothesis Testing

Based on the output in Table 1, the results obtained can be explained as follows:

1. The first model shows that peer conformity can significantly predict cyberbullying ($b = 0.285$; $p = 0.001$, $p < 0.05$) with a predictor contribution of 5.2% ($R^2 = 0.052$).
2. The second model shows that neuroticism provides an effective contribution from 5.2% to 7.1%. Neuroticism shows a b value of -0.297, while the b value of the conformity variable is 0.308.
3. The third model shows that conformity and neuroticism simultaneously provide an effective contribution from 7.1% to 9.4%. Neuroticism is proven to be a moderator ($b = -0.047$; $p = 0.029 < 0.05$).

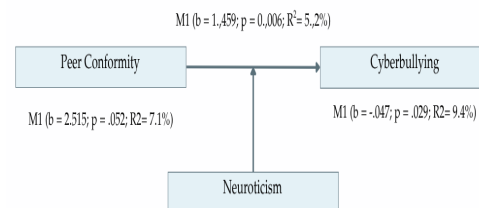
See Table 2

The researchers also examined the relationship between conformity and cyberbullying behavior moderated by neuroticism using visual moderation (Figure 2) and simple slope analysis (Figure 3) to strengthen the findings. Simple slope analysis was applied to prove whether the role of neuroticism as a moderator can strengthen or weaken the relationship between conformity and cyberbullying. The analysis confirmed that the role of conformity on cyberbullying is moderated by neuroticism.

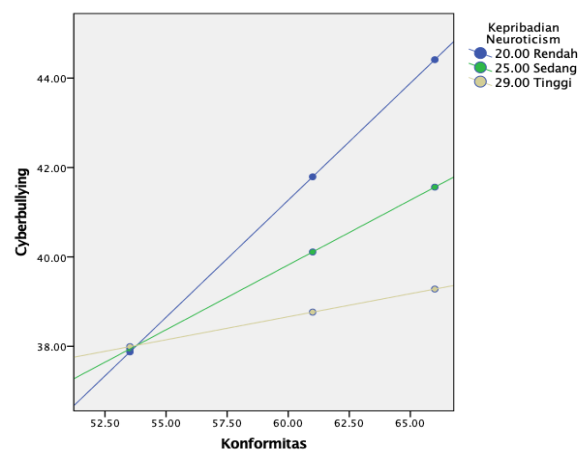
This moderation visual shows that in the low neuroticism group, there was a high increase in the effect of conformity on cyberbullying. Furthermore, in the moderate

Figure 2

Visual Moderation

**Figure 3**

Simple Slope Analysis of the Interaction Between Conformity and Neuroticism on Cyberbullying



Note: Model 1 ($b = 1.459$, $p = .006$, $R^2 = 5.2\%$)

neuroticism group, the effect of conformity on cyberbullying decreased compared to the group with low neuroticism. In the high neuroticism group, conformity's effect on cyberbullying decreased significantly compared to the low neuroticism group. This proved that higher neuroticism can buffer the influence of conformity on cyberbullying. Thus, hypothesis 2, which theorized that the positive relationship between conformity and cyberbullying would be strengthened by an increase in neuroticism, was rejected.

Discussion

This study aimed to determine the role of peer conformity in adolescent cyberbullying as moderated by neurotic personality. The Pearson correlation analysis showed a significant positive correlation between conformity and cyberbullying behavior ($r = 0.227$; $p < 0.05$), meaning that the higher the peer conformity, the more likely the individual is to commit cyberbullying. This is in accordance with research conducted by Yurifa (2022), which found a significant relationship between conformity and cyberbullying behavior in adolescent social media users. Another study by Apsari and Siswati (2020) also found a positive and significant relationship between conformity and cyberbullying tendencies. The current study proved that the peer environment has a significant influence on attitudes, communication methods, appearance interests, and behavior in adolescents. This supports the work of Dishion as cited in Hinduja and Patchin (2008), who

Table 2
Hierarchical Regression Analysis Predicting Cyberbullying

Predictor	<i>B</i>	<i>SE</i>	β	<i>t</i>	<i>p</i>	ΔR^2
Model 1						.052**
Constant	22.606	5.289		4.274	.001	
Conformity	0.285	0.088	.227	3.249	.001**	
Model 2						.020*
Constant	28.574	6.017		4.749	.001	
Conformity	0.308	0.088	.246	3.512	.001**	
Neuroticism	-0.297	0.146	-.142	-2.027	.044*	
Model 3						.023*
Constant	-40.459	31.940		-1.267	.207	
Conformity	1.459	0.530	1.162	2.752	.006**	
Neuroticism	2.515	1.286	1.201	1.955	.052	
Conformity $\times$ Neuroticism	-0.047	0.021	-1.729	-2.200	.029*	

Note: *N* = 196. Dependent variable: Cyberbullying.
Int_1 represents the Conformity $\times$ Neuroticism interaction term.
p* < .05, *p* < .01

stated that adolescents in a deviant peer environment will have more opportunities to commit crimes and display negative behaviors because the social environment encourages them to act in accordance with the norms and customs of their group. Group members will adjust their behaviors in order to be more accepted by other members and avoid punishment and rejection for being different Apsari and Siswati (2020). The social pressure within the group makes adolescents willing to engage in negative conformity, such as cyberbullying.

The present study found that neuroticism can act as a moderator between conformity and cyberbullying behavior. The results of the moderated regression analysis show that neuroticism provides an effective contribution of 2.3%. However, its role differs from what was stated in the second hypothesis. The researchers hypothesized that the positive relationship between conformity and cyberbullying would be strengthened by an increase in neuroticism, but the results of the study did not support this outcome.

Results showed that the relationship between peer conformity and cyberbullying tends to be stronger in adolescents with low neuroticism. This is in line with research conducted by Resett and Gamez-Guadix (2017), which found that cyberbullying perpetrators have lower neuroticism than perpetrators of traditional or direct bullying. This is because individuals with low neuroticism have higher confidence, are calmer when facing problems, have firm stances, and are self-aware (Piechurska-Kuciel, 2020). These characteristics give adolescents with low neuroticism the daring necessary to undertake cyberbullying. According to Resett and Gamez-Guadix (2017), individuals with low neuroticism are more likely to perpetrate cyberbullying because they understand the anonymity provided by social media, making them feel safer. Conversely, individuals with high neuroticism tend to become easily anxious and fearful (Zamila & Nugrahawati, 2023), and will therefore feel uneasy when attempting to carry out

cyberbullying, despite the anonymity. Based on this explanation, researchers concluded that individuals with low neuroticism will have greater ease in conducting aggressive actions, including cyberbullying.

Individuals with low neuroticism tend to be more impulsive, braver, stronger, and calmer when facing threatening events (Costa & McCrae, 1980). In addition, adolescents with low neuroticism will easily adopt the values, norms, and habits that exist in their friendship groups. This means that they are more likely to conform to negative behaviors that are common among their friends, as well as more daring in undertaking risky behavior. So, if these adolescents are involved in friend groups that perform negative behaviors, they will tend to follow what their group does, including partaking in aggressive behavior like cyberbullying.

On the other hand, the relationship between peer conformity and cyberbullying will be weak if adolescents have high neuroticism. This is because highly neurotic adolescents are easily anxious, withdrawn from their environment, vulnerable to risky events, intolerant, and averse to threatening events. In addition, adolescents with high neuroticism tend to be apathetic, indifferent, and disinterested in engaging in new activities, as well as suffer from general lack of interest, despair, and difficulty in making decisions (Piechurska-Kuciel, 2020). McCrae and Costa as cited in Piechurska-Kuciel (2020) likewise stated that individuals with high levels of neuroticism suffer from disinterest and despair, which cause them to be pessimistic, unhappy, and struggle with decision-making. Highly neurotic individuals also experience constant anxiety, worry, and heightened vigilance. Batigun and Hasta as cited in Semerci (2017) found that, while individuals with low neuroticism will easily connect with their peers, those with high neuroticism tend to feel lonely. They have an excessive fear of losing friendships and act more carefully because they are afraid of being disliked by their friends if they express themselves too much (Piechurska-Kuciel,

2020).

Furthermore, this study showed that high neuroticism has no relationship with conformist behavior. As we know, individuals with high neuroticism tend to avoid conflict (Piechurska-Kuciel, 2020). The researchers suspect that these results are influenced by cultural elements. Sasongkowati as cited in Larasati and Fitria (2016) stated that culture determines human behavior. Behavior can be seen as something assertive and in accordance with local culture. However, outspoken behavior tends to be considered more desirable by people from certain Eastern cultural backgrounds (Larasati & Fitria, 2016). In Eastern cultures, almost every teenager wants to express their feelings openly and frankly, including their neurotic tendencies. However, this is very inconsistent with Indonesian community norms, especially in Central Java and Yogyakarta, which emphasize politeness, discretion, and so on. Javanese cultural values serve as a guide to locals' behavior, to the point of functioning as concrete rules regarding positive and negative norms, most of which are followed because they become individual beliefs (Rachim & Nashori, 2007). The Javanese cultural value system encompasses religion, manners, politeness, harmony, and discipline (Rachim & Nashori, 2007). It restrains individuals from expressing themselves in ways that are considered vulgar, especially as related to their neurotic behavioral tendencies (Larasati & Fitria, 2016).

Rachim and Nashori (2007) stated that adolescents may display their neurotic behaviors in other forms than cyberbullying. However, it could also be that, because the studied adolescents live in the Javanese culture, they do not express their neuroticism via cyberbullying. They may choose not to express their feelings because it is considered impolite and may lead to ostracism. This study proved that previous findings cannot be generalized to all cultures, especially Javanese culture. The researchers argue that cultural background strongly influenced the results of this analysis, since it involved adolescent respondents who lived in Central Java and Yogyakarta, which have a strong Javanese culture. In contrast, studies finding a positive relationship between neuroticism and cyberbullying were done in adolescents growing up in the West.

Limitations

Overall, the researchers acknowledge that the present study had many limitations. It did not examine other factors that might contribute to the increase in the relationship between peer conformity and cyberbullying, e.g., anonymity, culture, parenting, or internet addiction. Future researchers can employ other variables, such as culture or internet addiction, as moderators. In addition, the researchers explained the dynamics of cyberbullying before participants filled out the questionnaire, which may have influenced the way they responded to the scale items (e.g., in a socially desirable manner).

Conclusion

Based on the study findings, the researchers concluded that neuroticism can buffer the relationship between peer conformity and cyberbullying. This means that the higher the level of neuroticism, the weaker the relationship between the two. Conversely, individuals with low neuroticism might see a stronger relationship between peer conformity and cyberbullying. This finding is contrary to the initial hypothesis that this relationship would be stronger among those with high neuroticism, since these individuals tend to be more withdrawn and avoid direct conflict. Instead, results show that individuals with high neuroticism tend to feel greater anxiety and worry, which leads them to avoid cyberbullying. Meanwhile, individuals with low neuroticism have high self-confidence, so they are more nonchalant when committing such actions (Piechurska-Kuciel, 2020). In addition, online anonymity makes individuals with low neuroticism feel more at ease in carrying out cyberaggression, while those with high neuroticism tend to avoid threatening events because they have higher levels of anxiety and more depressive reactions. Individuals with high neuroticism show discomfort in the face of conflict.

Cultural influences may also play a role in the results of this study. Participants grew up in the Javanese culture, which upholds politeness, caution, and prudence. As a result, those with high neuroticism may display aggressive behavior in forms other than cyberbullying (Larasati & Fitria, 2016).

This study emphasized a positive relationship between negative peer conformity and cyberbullying. The peer environment can have a very large influence on attitudes, communication methods, interests in appearance, and behaviors in adolescence. Adolescents who are part of negative friendship groups tend to adapt and participate in negative behaviors with their peers, including cyberbullying. Conformity at this age is strong because adolescents are closer to their peers than to their own family members. According to them, the friendship environment is very meaningful, offering them intimacy and social support. Therefore, adolescents tend to conform to their peers so that they will be accepted rather than ostracized from their friendship group.

Implication

The practical implications of this study can be applied by parents, psychologists, teachers, counselors, and schools in dealing with cyberbullying. Parents, teachers, and school counselors should cooperate in preventive efforts against such behavior. Schools can hold psychoeducational events to be attended by parents and students. Psychoeducational programs can discuss how to prevent and overcome cyberbullying behaviors. School counselors need to determine whether students have ever been victims or perpetrators of cyberbullying, and if so, conduct private or group counseling. School counselors must also collaborate with psychologists to curate efforts to deal with children involved in cyberbullying, whether as vic-

tims or perpetrators. Meanwhile, parents need to create a comfortable atmosphere for children to encourage open communication. This will lead children to be open with their parents about the problems they are experiencing, including cyberbullying.

Parents are also advised to help foster a positive friendship environment for early adolescents, so that children do not participate in negative conformity, and monitor or limit their adolescents' social media use so that they do not engage in aggressive behavior online. For educational counselors, it is important to identify students' behaviors and characteristics as early as possible to determine key guidance topics. Initial screening is useful for schools as a benchmark for program development.

Recommendation

This study highlights that neuroticism can buffer the relationship between cyberbullying behavior and conformity in adolescents. Based on its results, schools should offer programs that develop students' emotional skills and promote self-regulation. This solution aims to prevent other aggressive behaviors in the future. By learning to manage emotions, adolescents can think before acting and become more able to distinguish positive and negative behaviors.

In this modern era, adolescents cannot simply be parted from the internet and social media. Even online games are currently designed so that players can interact directly with their opponents from a distance. Instead, adolescents should be taught about the ethics of social media or cyberspace interactions, including the impacts and consequences of cyberbullying.

Providing training and intervention to adolescents with neuroticism is crucial. Therefore, future researchers or educational psychologists should compile and provide training modules or interventions adjusted for individuals with low or high neuroticism. It is also recommended to complement the training with education on the peer pressure aspect, as this can also influence cyberbullying behavior.

Declaration

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Conflict of Interest

The authors declare that there is no conflict of interest that might influence this study or the publication of its manuscript.

Authors' Contributions

AAP contributed to the study design, data collection, and manuscript writing. AF contributed to overseeing the study design, recommendations on data analysis, and manuscript review.

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