

The Relationship Between Social Media Use and Prosocial Behavior among Senior High School Students in Banda Aceh

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Article Info	ABSTRACT
Article history: Submitted: 30-05-2026 Accepted: 19-06-2026 Published: 20-06-2026	<i>Prosocial behavior refers to voluntary actions intended to help or benefit other individuals. One of the factors that influences prosocial behavior is social media use. This study aimed to examine the level of prosocial behavior among adolescents and to investigate the effect of social media use on the prosocial behavior of adolescents in Banda Aceh City. This study employed a quantitative approach using a survey method. Data were collected through questionnaires and analyzed using descriptive statistics (percentage) and simple linear regression. The population of this study consisted of adolescents in Banda Aceh City, with a sample of 520 adolescents. The results showed that prosocial behavior was in the high category (84.4%). The correlation coefficient ($R = 0.564$) indicates a strong positive relationship between social media use and prosocial behavior. The coefficient of determination ($R^2 = 0.319$, or 31.9%) indicates that social media use explains 31.9% of the variance in prosocial behavior. Furthermore, the regression coefficient ($B = 0.472$) indicates that for every one-unit increase in social media use, the prosocial behavior score increases by 0.472 units. Since the regression coefficient is positive, it can be concluded that social media use has a positive effect on the prosocial behavior of adolescent.</i>
Keyword: Social Media Use; Prosocial Behavior; Adolescents; Guidance and Counseling	ABSTRAK <i>Perilaku prososial mengacu pada tindakan sukarela yang bertujuan untuk membantu atau memberikan manfaat kepada orang lain. Salah satu faktor yang memengaruhi perilaku prososial adalah penggunaan media sosial. Penelitian ini bertujuan untuk mengkaji tingkat perilaku prososial pada remaja serta menganalisis pengaruh penggunaan media sosial terhadap perilaku prososial remaja di Kota Banda Aceh. Penelitian ini menggunakan pendekatan kuantitatif dengan metode survei. Data dikumpulkan melalui kuesioner dan dianalisis menggunakan statistik deskriptif (persentase) serta regresi linear sederhana. Populasi penelitian ini adalah remaja di Kota Banda Aceh dengan jumlah sampel sebanyak 520 remaja. Hasil penelitian menunjukkan bahwa perilaku prososial remaja berada pada kategori tinggi (84,4%). Nilai koefisien korelasi ($R = 0,564$) menunjukkan adanya hubungan positif yang cukup kuat antara penggunaan media sosial dan perilaku prososial. Nilai koefisien determinasi ($R^2 = 0,319$ atau 31,9%) menunjukkan bahwa penggunaan media sosial menjelaskan 31,9% variasi perilaku prososial, sedangkan 68,1% sisanya dipengaruhi oleh faktor-faktor lain yang tidak diteliti dalam penelitian ini. Selanjutnya, koefisien regresi ($B = 0,472$) menunjukkan bahwa setiap peningkatan satu satuan dalam penggunaan media sosial akan diikuti oleh peningkatan skor perilaku prososial sebesar 0,472 satuan. Karena koefisien regresi bernilai positif, dapat disimpulkan bahwa penggunaan media sosial berpengaruh positif terhadap perilaku prososial remaja.</i>
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Introduction

The rapid advancement of information and communication technology has transformed the way individuals communicate, interact, and participate in social activities. One of the most significant developments in the digital era is the widespread use of social media. Social media has become an integral part of adolescents' daily lives, providing opportunities for communication, self-expression, information sharing, and social engagement. According to recent studies, adolescents represent one of the largest groups of social media users worldwide, making digital platforms an important context for social and psychological development (Boer et al., 2021; Odgers & Jensen, 2020; Valkenburg et al., 2022). While social media offers numerous benefits, its influence on adolescents' social behavior remains a subject of ongoing discussion.

As social beings, individuals depend on one another and require social interaction to fulfill their needs. Therefore, the development of prosocial behavior is essential for maintaining positive social relationships and promoting community well-being. Prosocial behavior refers to voluntary actions intended to benefit others, such as helping, sharing, donating, caring, and cooperating (Penner et al., 2005). These behaviors contribute to social harmony and play an important role in adolescent development. Adolescents who demonstrate high levels of prosocial behavior tend to exhibit better social adjustment, stronger interpersonal relationships, and greater empathy toward others (Farahmita et al., 2021; Kusumaningrum, 2019; Markiewicz et al., 2001).

Several theoretical perspectives explain the emergence of prosocial behavior. The biological and evolutionary perspective suggests that helping behavior is rooted in human survival and adaptation mechanisms (Penner et al., 2005). In contrast, the social learning perspective argues that prosocial behavior is learned through observation, imitation, and reinforcement. Individuals develop helping behavior by observing models in their environment, including family members, peers, teachers, and media figures (Greitemeyer, 2009; Greitemeyer & Osswald, 2011; Mares & Woodard, 2005). This perspective is particularly relevant in the digital era, where adolescents are continuously exposed to various forms of social interaction through social media platforms.

Social media use, defined as the amount of time adolescents spend accessing various social media platforms in their daily lives, has become an integral part of their social interactions and information-seeking activities. Longer durations of social media use increase opportunities for adolescents to encounter diverse forms of online content and interact with broader social networks, which may influence their attitudes and behaviors. Consequently, the amount of time spent using social media may be associated with the development of prosocial behavior, although the nature of this relationship depends on the content encountered and how adolescents engage with social media. Previous studies have shown that prosocial content in digital media can increase empathy, helping intentions, and cooperative behavior (Greitemeyer, 2009; Greitemeyer & Osswald, 2011; Lavertu et al., 2020). Furthermore, social media enables individuals to participate in social actions beyond geographical boundaries, thereby expanding opportunities for prosocial engagement.

However, the influence of social media is not always positive. Excessive use of social media may contribute to cyberbullying, hate speech, misinformation, privacy violations, and reduced face-to-face interaction. Adolescents who are unable to regulate their social media use may become more vulnerable to negative online experiences that potentially affect their

social development (Boer et al., 2021; Odgers & Jensen, 2020; Valkenburg et al., 2022). Various incidents reported in the media also demonstrate that some individuals prioritize documenting events on social media rather than providing direct assistance to people in need.

Previous studies have produced mixed findings concerning the relationship between social media use and prosocial behavior. Several studies reported that social media positively influences helping behavior and social participation (Lavertu et al., 2020; Nugraha & Hertinjung, 2019), whereas other studies suggested that digital interaction may reduce direct social involvement and increase individualistic tendencies (Odgers & Jensen, 2020). These inconsistent findings indicate the need for further investigation, particularly in different cultural and educational contexts.

Although studies examining social media and prosocial behavior have increased in recent years, research focusing on adolescents in Aceh remains limited. Most previous studies were conducted in different socio-cultural settings and rarely discussed the implications of findings for guidance and counseling services in schools. In addition, empirical evidence involving a large sample of senior high school students in Banda Aceh is still relatively scarce. Therefore, this study seeks to fill these gaps by examining the level of prosocial behavior among adolescents in Banda Aceh and investigating the influence of social media use on prosocial behavior.

The findings of this study are expected to contribute to the development of knowledge regarding adolescent social behavior in the digital era and provide practical implications for school guidance and counseling services. Understanding how social media influences prosocial behavior may assist counselors, educators, and parents in designing interventions that promote positive social development and responsible digital citizenship among adolescents.

Method

This study employed a quantitative approach using a survey design to examine the influence of social media use on prosocial behavior among adolescents in Banda Aceh. The population consisted of senior high school students enrolled in public schools in Banda Aceh. A total of 520 students participated in the study and were selected to represent the target population.

Data were collected using two Likert-scale questionnaires measuring social media use and prosocial behavior. The prosocial behavior instrument consisted of five dimensions, namely helping, sharing, donating, caring, and cooperation. Prior to data collection, the instruments were tested for validity and reliability. The validity test was conducted using SPSS version 16.0 with a minimum criterion of $r \geq 0.355$. The results indicated that 28 out of 41 items on the social media use scale and 36 out of 46 items on the prosocial behavior scale were valid. Reliability analysis showed Cronbach's Alpha coefficients of 0.943 for the social media use scale and 0.965 for the prosocial behavior scale, indicating excellent reliability.

Data were analyzed using descriptive statistics and simple linear regression through SPSS version 23. Descriptive analysis was used to determine the level of prosocial behavior among adolescents, whereas linear regression analysis was employed to examine the influence of social media use on prosocial behavior.

Results and Discussion

Results

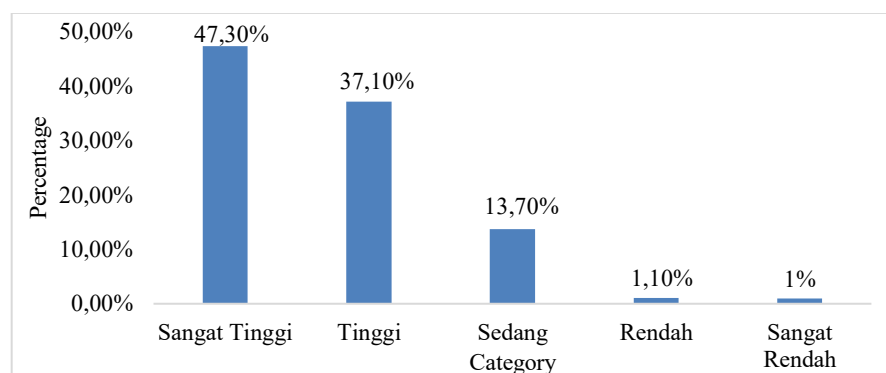
The purpose of the study was to determine prosocial behavior on social media in Banda Aceh students. To get the results, the researchers first analyzed the percentage of prosocial behavior as a whole and analyzed it by linear regression to determine the effect of using social media on prosocial behavior. The description of the results of the data analysis can be seen as follows:

Prosocial Behavior

The purpose of the study was to determine the prosocial behavior of teenagers in Banda Aceh as follows:

Table 1. Description of Prosocial Behavior Data

Interval	Category	Frequency	Percentage (%)
$X > 99$	Very high	246	47,3 %
$83 < X < 98$	High	193	37,1 %
$68 < X < 82$	Normal	71	13,7 %
$54 < X < 67$	Low	5	1,1 %
$X < 53$	Very Low	5	1 %
Total		520	100 %



Picture 1. Prosocial behavior

Based on the data above, it can be seen that prosocial behavior carried out by students is in the high category with a value of 84.4%, meaning that most teenagers perform prosocial behavior, it can be helping, sharing, donating, caring, and cooperation.

Prosocial Behavior by Gender

Prosocial behavior based on gender by students can be seen as follows:

Table 2. Prosocial Performers by Gender

		Gender			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	196	37.7	37.7	37.7
	Female	324	62.3	62.3	100.0
	Total	520	100.0	100.0	

Based on the data above, it can be seen that the prosocial behavior of male students is 37.7%, while the prosocial behavior of female students is 62.3%. This means that the prosocial

behavior of high school students in Banda Aceh shows that female students are higher in prosocial behavior compared to male students.

Prosocial Behavior by Age

Prosocial behavior based on age by students can be seen in Table 3 below, as follows:

Table 3. Prosocial by Age

		Age			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	14 years old	41	7.9	7.9	7.9
	15 years old	156	30.0	30.0	37.9
	16 years old	184	35.4	35.4	73.3
	17 years old	114	21.9	21.9	95.2
	18 years old	25	4.8	4.8	100.0
	Total	520	100.0	100.0	

Based on the data above, it reveals that students aged 16 years are higher in carrying out prosocial behavior, this can be seen from the total percentage of each age, namely at the age of 14 years by 7.9%, 15 years by 30%, 16 years by 35.4%, 17 years 21.9% and 18 years 4.8%.

Prosocial Behavior by School

Prosocial behavior based on schools in Banda Aceh can be seen in Table 4 below, as follows:

Table 4. Prosocial Performers by School

		School			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	SMAN 1 BANDA ACEH	77	14.8	14.8	14.8
	SMAN 2 BANDA ACEH	6	1.2	1.2	16.0
	SMAN 3 BANDA ACEH	78	15.0	15.0	31.0
	SMAN 4 BANDA ACEH	9	1.7	1.7	32.7
	SMAN 7 BANDA ACEH	73	14.0	14.0	46.7
	SMAN 8 BANDA ACEH	132	25.4	25.4	72.1
	SMAN 11 BANDA ACEH	145	27.9	27.9	100.0
	Total	520	100.0	100.0	

Based on the data above, it shows that SMAN 11 Banda Aceh is higher in carrying out prosocial behavior, this can be seen from the total percentage of each school, namely at SMAN 1 Banda Aceh by 14.8%, SMAN 2 Banda Aceh 1.2%, SMAN 3 Banda Aceh 15 %, SMAN 4 Banda Aceh 1.7%, SMAN 8 Banda Aceh 25.4% and SMAN 11 Banda Aceh 27.9%.

Social Media Use and Prosocial Behavior

A linear regression test was conducted to understand the influence of social media on students' prosocial behavior.

Table 5. Coefficient of Determination Test

Model Summary				
Model	R	Rsquare	Adjusted Rsquare	Std. Error of the Estimate
1	.564 ^a	.319	.317	12.004924
a. Predictors: (Constant), Social media				

Based on the output of data processing, it can be found that the correlation coefficient (R) of $0.564 > 0.05$ means that it has a strong correlation. The value of the coefficient of determination (R^2) is 0.319 or 31.9%, which means that the variable use of social media influences prosocial behavior by 31.9%.

Table 6. Correlation Coefficient of the Impact of Social Media Use on Students' Prosocial Behavior

Coefficients ^a					
Model		Unstandardized Coefficients		Standardized Coefficients	t
		B	Std. Error	Beta	Sig.
1	(Constant)	56.855	2.672		21.278
	Social media	.472	.030	.564	15.563

Based on the significance value of the coefficient table, the value of $0.000 < 0.05$ is obtained, and it is known that the t count is $15.563 > t$ table 1.964, so it can be concluded that the variable use of social networks affects the prosocial behavior variable.

Discussion

Prosocial Behavior

The findings revealed that prosocial behavior among adolescents in Banda Aceh was generally high, with 84.4% of respondents classified in the high and very high categories. This result indicates that most adolescents frequently demonstrate positive social behaviors, including helping, sharing, donating, caring, and cooperating. The findings suggest that prosocial behavior is well developed among adolescents in this setting and may reflect the influence of supportive social environments that encourage positive interpersonal relationships and social responsibility. Adolescents with stronger prosocial tendencies are generally better able to establish healthy relationships and contribute positively to their communities (Farahmita et al., 2021; Markiewicz et al., 2001; Penner et al., 2005).

The high level of prosocial behavior observed in this study is consistent with the view that prosocial development results from the interaction of individual and environmental factors. Penner et al. (2005) argued that prosocial behavior develops through the interaction of personal values, empathy, social norms, and situational influences. Likewise, Bronfenbrenner's Ecological Systems Theory emphasizes that adolescent development is shaped by multiple environmental systems, including family, school, peer relationships, and the broader sociocultural context (Bronfenbrenner & Morris, 2006). During adolescence, these environments provide repeated opportunities to learn, practice, and reinforce helping behaviors, thereby strengthening prosocial tendencies.

The relatively high level of prosocial behavior observed in this study may also be understood within the sociocultural context of Acehnese society. Acehnese culture is deeply

rooted in Islamic teachings and local wisdom that emphasize mutual assistance, cooperation, social solidarity, and respect for others. These values are reflected in cultural traditions such as Peumulia Jamee, which promotes hospitality, empathy, generosity, and collective responsibility as fundamental principles of social interaction. Rather than being expressed only in welcoming guests, these values represent broader social norms that encourage individuals to care for and assist others in everyday life. They are continuously transmitted through family socialization, religious education, schools, and community activities, allowing adolescents to repeatedly observe and practice prosocial behaviors.

From Bronfenbrenner's ecological perspective, these cultural values constitute part of the macrosystem that shapes adolescents' development by influencing the social norms and expectations embedded within their immediate environments (Bronfenbrenner & Morris, 2006). Consistent exposure to cultural values emphasizing empathy, cooperation, and social responsibility may strengthen adolescents' prosocial orientations through interactions with parents, teachers, peers, and the wider community. Therefore, the high level of prosocial behavior identified among adolescents in Banda Aceh may reflect not only individual characteristics but also the influence of a sociocultural environment that consistently reinforces helping behaviors and collective responsibility.

Although prosocial behavior was generally high across the sample, the descriptive analysis revealed variations according to gender and age. Female students demonstrated higher levels of prosocial behavior than male students, a finding consistent with previous research indicating that females tend to exhibit greater empathy, emotional sensitivity, and caring behaviors than males (Eagly & Crowley, 1986; Markiewicz et al., 2001). In addition, students aged 16 years showed the highest level of prosocial behavior. This finding may reflect developmental characteristics of middle adolescence, during which empathy, perspective-taking, moral reasoning, and peer relationships become increasingly important in shaping social behavior (Hurlock, 2003; Sarwono, 2016). These differences suggest that prosocial development is influenced not only by the broader sociocultural environment but also by developmental and demographic characteristics. Nevertheless, the consistently high levels of prosocial behavior across all groups indicate that adolescents in Banda Aceh generally possess well-developed prosocial tendencies.

Social Media Use and Prosocial Behavior: A Social Learning Theory Perspective

The results of the regression analysis revealed a significant positive association between social media use and prosocial behavior among adolescents in Banda Aceh. The coefficient of determination ($R^2 = .319$) indicates that social media use accounted for 31.9% of the variance in prosocial behavior. Although this contribution is moderate, the findings suggest that the amount of time adolescents spend using social media is meaningfully associated with their prosocial behavior. However, given the cross-sectional design of the study, these findings should be interpreted as demonstrating an association rather than a causal relationship.

The observed association can be understood from the perspective of Social Learning Theory, which proposes that individuals acquire new behaviors through observation, imitation, and reinforcement within their social environment (Bandura, 1977, 1986). Adolescents who spend more time using social media have greater opportunities to observe diverse online interactions and behavioral models. Through repeated exposure, these interactions may attract adolescents' attention, be retained in memory, and contribute to the development of cognitive

representations of socially appropriate behaviors. When such behaviors are perceived as socially valued or rewarded, adolescents may become motivated to reproduce them in their own social interactions (Bandura, 1986; Schunk & DiBenedetto, 2020). Thus, longer durations of social media use may facilitate observational learning processes that are associated with prosocial development.

Nevertheless, the present findings should not be interpreted as evidence that longer social media use directly causes higher levels of prosocial behavior. In this study, social media use was operationalized as the duration of use rather than the specific content accessed by participants. Consequently, longer use simply provides adolescents with greater opportunities to encounter a wide variety of online interactions, including both prosocial and non-prosocial content. It is therefore plausible that observational learning partially explains the relationship identified in this study. Moreover, the possibility of reverse directionality should also be considered. Adolescents who already possess stronger prosocial tendencies may be more likely to engage with positive online communities or interact with prosocial content. Future longitudinal studies incorporating measures of content exposure are therefore needed to clarify the mechanisms underlying this relationship (Bandura, 1986; Valkenburg et al., 2022).

The present findings are consistent with previous studies demonstrating that digital media can promote prosocial outcomes under appropriate conditions. Greitemeyer (2009) reported that exposure to prosocial media content enhances prosocial thoughts, emotions, and behaviors. Likewise, Greitemeyer and Osswald (2011) found that prosocial digital content increases the accessibility of prosocial cognitions, which subsequently encourages helping behavior. Similarly, Mares and Woodard (2005) concluded that repeated exposure to prosocial media messages contributes positively to children's and adolescents' social development. Collectively, these studies support the notion that social media may function as a meaningful context for observational learning when adolescents are exposed to positive social models.

The present findings are also supported by Lavertu et al. (2020), who found that engagement with prosocial content on social media encourages helping behavior in real-life contexts. Social media provides opportunities for adolescents to participate in fundraising campaigns, volunteer initiatives, social advocacy programs, and community-based activities. Although the current study did not measure the specific types of content viewed by participants, these findings suggest that positive online interactions may strengthen empathy, increase social awareness, and encourage adolescents to become more actively involved in helping others.

Despite the significant relationship identified in this study, social media use explained only 31.9% of the variance in prosocial behavior, indicating that a substantial proportion of prosocial behavior is influenced by other factors. Family environment, parenting practices, peer relationships, school climate, empathy, personality characteristics, and cultural values have all been identified as important determinants of prosocial development (Markiewicz et al., 2001; Penner et al., 2005). Therefore, prosocial behavior should be understood as a multidimensional construct shaped by the interaction of personal, social, and environmental influences.

From the perspective of guidance and counseling, these findings have important practical implications. School counselors may utilize social media as one component of preventive and developmental counseling services by disseminating educational materials that promote empathy, cooperation, helping behavior, digital citizenship, and positive social

values. Because adolescents spend considerable time engaging with social media, these platforms provide valuable opportunities to reinforce positive behavioral models and encourage constructive online interactions.

Furthermore, comprehensive school counseling programs should integrate digital literacy and digital citizenship as essential competencies for adolescents. Students need to develop the ability to critically evaluate online information, communicate respectfully in digital environments, and use social media responsibly. Such competencies may help adolescents maximize the positive potential of social media while reducing its associated risks, thereby supporting the development of prosocial behavior and healthy social relationships.

Conclusion

The findings of this study indicate that prosocial behavior among adolescents in Banda Aceh is generally high, with 84.4% of respondents classified in the high and very high categories. This suggests that most adolescents demonstrate positive social behaviors, including helping, sharing, donating, caring, and cooperating in their daily lives.

The study also found a significant positive association between social media use and prosocial behavior. Social media use accounted for 31.9% of the variance in prosocial behavior ($R^2 = .319$), indicating that adolescents who spend more time using social media tend to report higher levels of prosocial behavior. However, because this study employed a cross-sectional design, the findings should be interpreted as demonstrating an association rather than a causal relationship. These findings highlight the potential role of social media as an important context for adolescents' social interactions and prosocial development while suggesting that other personal, social, and environmental factors also contribute substantially to prosocial behavior.

CRedit Authorship Contribution Statement

All authors contributed to the study conception and design, methodology, data collection, data analysis, manuscript preparation, critical revision, and approval of the final manuscript. All authors have read and approved the final version of the manuscript and take full responsibility for its content.

Data Availability Statement

The data supporting the findings of this study are available from the corresponding author upon reasonable request. Public access to the data is restricted due to ethical considerations and the need to maintain the confidentiality of the participants.

Declaration of AI-Assisted Writing

The authors declare that AI-assisted writing tools were used only to improve language, grammar, and readability. All scientific content, analysis, interpretation, conclusions, and academic responsibility remain entirely with the authors.

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The authors declare no financial or non-financial competing interests that could influence the research process, manuscript writing, data interpretation, or publication of this article.

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