

The relationship between toxic comment and the confidence of athletes' coaching volleyball achievements

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ABSTRACT

Social media has become a part of athletes' lives and can cause exposure to toxic comments that have an impact on psychological conditions, especially self-confidence. This study aims to determine the relationship between toxic comments on social media and the confidence of athletes coaching volleyball achievements at Sebelas Maret University. This study uses a quantitative, correlational method. The research subjects were 20 female volleyball athletes enrolled in the achievement coaching program. Data were collected using toxic comments and confidence questionnaires, then analyzed using Pearson correlation tests and simple linear regression in IBM SPSS 25, after meeting the normality and linearity prerequisite tests. The results showed a significant negative relationship between toxic comments and athletes' confidence ($r = -0.532$; $p = 0.016$) and a moderate relationship strength. The regression analysis showed that toxic comments accounted for 28.3% of athletes' confidence. These findings indicate that the higher the exposure to toxic comments that athletes receive, the lower the level of confidence they have. Therefore, attention is needed to the psychological aspects of athletes, as well as efforts to strengthen digital literacy and mental resilience to foster sports achievements in the digital era.

Keywords: toxic comments; athlete confidence; coaching; volleyball; achievements

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INTRODUCTION

Toxic comments are a form of negative communication on social media characterized by abusive, degrading, or insulting attacks on individuals. Such comments often appear in response to uploads on digital platforms and are often delivered without considering the psychological impact on the recipient. In the context of open, interactive social media, toxic comments have become a common phenomenon due to ease of access, user anonymity, and a culture of free expression that is not always

balanced with digital communication ethics. The existence of toxic comments not only creates an unhealthy digital environment, but also has the potential to cause psychological distress for the individuals who are targeted, including athletes who have a high level of public exposure (Saepudin Kanda & Oktaviani, 2024).

The use of social media by athletes not only allows them to promote themselves, interact with fans, and gain information, but it also carries negative impacts, such as social pressure that can lead to anxiety and mental health disorders (Rosyiana & Aditya Syaukani, 2025). Toxic comments on women's sports social media create a poor digital environment that makes athletes and fans more vulnerable to body shaming, degrading, and discriminatory comments (Cleland, 2024; Piché & Naraine, 2024).

In sports coaching, psychological factors are among those that affect success. Athletes who have higher levels of confidence tend to experience lower anxiety before a match (Amaliyah & Khoirunnisa, 2018; Raynadi et al., 2017). Athletes can achieve their best through confidence. In team sports, especially volleyball, confidence influences athletes to emphasize a cooperative attitude, built through decision-making, technical consistency, and mental resilience under competitive pressure. (Khasan et al., 2025; Saputra et al., 2025). Several studies have shown variations in confidence levels between clubs and the effect of mental training on volleyball athletes' confidence increases, confirming that psychological aspects are an important variable in coaching team sports achievement (Dewi Nurfadillah & Yamin Saputra, 2023).

Specific forms of toxic comments produce different impacts on confidence (Andročec, 2020). As athletes become more active on social media to promote themselves, communicate with fans, or share their training documentation, they also become more exposed to public comment. A study on the effects of cyberbullying on athletes found that digital bullying is often associated with decreased self-confidence and decreased performance, as well as increased psychological distress that impacts competency readiness (Rosyiana & Aditya Syaukani, 2025). The application of sports psychology, such as emotional management, motivation, and competition mentality, has a positive effect on increasing confidence, thereby helping athletes perform more optimally in matches (Kurniawan et al., 2020).

Social support, especially from family, has a significant positive relationship with athletes' confidence, thereby playing an important role in their psychological readiness during training and matches (Athira & Merdiaty, 2024). However, many athletes experience a decrease in confidence because of the toxic comments they get. Although there is international literature and some local studies on cyberbullying in the adolescent population or general social media users, there are no studies that specifically examine the relationship between *Toxic comments*. (as a form of bullying or verbal attack on digital platforms) Furthermore, the confidence of volleyball athletes remains relatively limited within achievement coaching institutions at universities in Indonesia.

Universitas Sebelas Maret (UNS), as one of the sports coaching centers in Central Java, fosters young athletes who actively use social media. This condition raises questions about the extent to which exposure to toxic comments on social media is related to athletes' confidence in performance coaching, as well as whether athletes who receive negative comments more often tend to have lower levels of confidence. This information is important for coaches and institutions to design coaching programs that focus not only on physical and technical aspects but also on strengthening athletes' mental and digital literacy.

Given these conditions, this study is important for examining the relationship between toxic comments on social media and the confidence of volleyball coaches at Sebelas Maret University. In particular, this study aims to determine the direction and strength of the relationship between exposure

to toxic comments and athletes' confidence levels, with the hypothesis that there is a negative relationship between toxic comments and athletes' confidence.

METHOD

This research is a quantitative study using a correlational approach. The process involves data collection and preparation, as well as data analysis and interpretation. The research subjects were 20 female athletes who were members of the volleyball achievement coaching program at Sebelas Maret University. Data was collected through a self-administered questionnaire. The research instrument consists of demographic data, a scale of toxic comments that measures the frequency, intensity, and source of negative comments adapted from the Cyberbullying Questionnaire (Topcu & Erdur-Baker, 2010) And, and confidence is built on a scale (Jang et al., 2018) with aspects of calm, hesitation, persistence, and physical prime. The way to answer the scale is to use a 5-point Likert scale (1=strongly disagree to agree 5=strongly) to ensure measurable data. The collected data were analyzed using IBM SPSS version 25. Data analysis was carried out in several stages: descriptive statistical analysis to characterize toxic comments and athletes' confidence levels; normality tests to assess data distribution; and linearity tests to assess linear relationships between variables. Next, the Pearson correlation test was used to identify the direction and strength of the relationship between toxic comments and self-confidence. To determine the extent to which toxic comments contribute to athletes' confidence, a simple linear regression analysis was conducted.

RESULTS

Table 1. Data Description

	N	Range	Minimum	Maximum	Sum	Red	Std.Deviation
Toxic Comment	20	59	19	78	815	40.75	16.463
Confidence	20	50	45	95	1483	74.15	11.357
Valid N (listwise)	20						

Data analysis began with descriptive statistics to characterize the variables for toxic comments and athlete confidence. Based on Table 1, the toxic comments variable has an average of 40.75, a minimum of 19, and a maximum of 78. In contrast, the confidence variable has an average of 74.15, ranging from 45 to 95. The reasonably wide range of scores on both variables indicated variation in the level of exposure to toxic comments and in confidence in athletes' coaching of volleyball achievements at Sebelas Maret University.

Table 2. Normality Test

Variable	Shapiro-Wilk		Sig.	Remarks
	Statistic	df		
Toxic comment	0.937	20	0.208	Normal
Confidence	0.958	20	0.505	Normal

Table 3. Linearity Test

Variable	N	Df	Mean Square	F	Sig.	Remarks
Toxic Comment Confidence	20	16	98.545	1.059	0.579	Linear

The prerequisite analysis test is conducted before hypothesis testing. The Shapiro–Wilk normality test showed that the toxic comments variable had a p-value of 0.208 (> 0.05) and a confidence level of 0.505 (> 0.05), as presented in Table 2. These results show that the data of both variables are normally distributed. Furthermore, a linearity test is performed to assess the pattern of relationships among variables. Based on the results of the linearity test in Table 3, the significance value of 0.579 (> 0.05) indicates that the relationship between toxic comments and confidence is linear.

Table 4. Correlation Test

Variable	Toxic Comment	Confidence
Toxic Comment	Person Correlation	1
	Sig. (2-tailed)	.532
	N	20
Confidence	Person Correlation	-.532
	Sig. (2-tailed)	.016
	N	20

Based on the results of Pearson's correlation analysis, $r = -0.532$ was obtained; thus, there was a sufficient negative relationship between the variables X (toxic comment) and Y (confidence). The negative value of this correlation coefficient clearly indicates the inverse relationship between the two variables. Based on 20 research data, the degree of freedom ($df = n - 2 = 18$). With a significance level of 0.05, $r_{table} = 0.4438$ was obtained, while $r_{calculation} = -0.532$. Since r is calculated ($-0.532 > r_{table} (0.4438)$ or $p\text{-value} < 0.05$, then H_0 is rejected, and H_1 is accepted. Thus, it can be concluded that there is a sufficient and significant negative relationship between the variables X (toxic comment) and Y (confidence). This means that, the higher the level of exposure to toxic comments that an athlete receives, the lower the level of confidence. And vice versa: the higher a person's confidence, the lower their exposure to toxic comments.

Table 5. Regression Analysis

Variable	R	R Square	df2	Sig. F Change
Toxic Comment				
Confidence	0.532	0.283	18	0.016

Based on the results of simple regression analysis, the value of $R = 0.532$, $R^2 = 0.283$, and the value of $\text{Sig.} = 0.016 (< 0.05)$ were obtained. This shows that toxic comments have a significant effect on confidence. This means that the higher the level of exposure to toxic comments that an athlete receives, the lower the level of confidence. And vice versa: the higher a person's confidence, the lower their exposure to toxic comments. Toxic comments accounted for 28.3% of the variance in athletes' confidence

DISCUSSION

The study found a significant relationship between toxic comments on social media and the level of confidence in coaching for volleyball achievement among athletes at Sebelas Maret University. A correlation coefficient value of -0.532 with a significance of $0.016 (< 0.05)$ indicates a negative relationship with moderate or moderate strength, which means that the higher the exposure to toxic comments, the lower the athlete's confidence. The descriptive analysis showed that athletes had a relatively high level of confidence, but exposure to negative comments could still affect their psychological state. Regression analysis showed that *toxic comments* accounted for 28.3% of the

variation in athletes' confidence, with the remaining variation attributed to other factors not studied. The findings of this study are in line with the results of the study (Wiyata et al., 2025) that exposure to toxic comments negatively correlated with volleyball athletes' confidence significantly in another study in Indonesia, where athletes who received derogatory comments more often tended to show lower levels of confidence than athletes who were less exposed to negative comments.

Some studies find that athletes with higher confidence tend to experience lower anxiety before a match (Widya Putri et al., 2024). Negative comments on social media can interfere with an individual's self-evaluation and trigger a decline in confidence in one's own abilities. The study *The Impact of Hate Comments on Social Media Users' Self-Confidence* found a negative relationship between exposure to hate comments on social media and self-confidence: the more often a person receives negative comments, the lower their self-confidence (Ismail et al., 2024). The application of the Hot Seat Strategy in volleyball learning not only increases spike accuracy but also plays an important role in building student confidence, as this strategy encourages active engagement, the courage to perform, and confidence in one's abilities during the learning process. The application of the Hot Seat Strategy in volleyball learning not only increases spike accuracy but also plays an important role in building student confidence, as this strategy encourages active engagement, the courage to perform, and confidence in one's abilities during the learning process (Alaa Naji, 2025).

In the context of team sports such as volleyball, confidence is a strong psychological asset because it affects teamwork, quick decision-making, and performance stability during competitions. Athletes with high levels of confidence tend to be better able to manage pressure, focus, and emotions in competitive situations (Nisa & Jannah, 2021). An athlete's confidence plays an important role in mental readiness for a reasonable match. Confidence helps athletes appear calmer, more focused, and at their best when competing (Sin, 2017). Athletes who lose confidence due to exposure to negative comments are at risk of experiencing doubt, excessive anxiety, and decreased performance in basic techniques such as passing serves or blocking. Athletes have high confidence and enthusiasm in training, as shown by their efforts to perform their best without focusing on their body proportions or friends and opponents (Rahmi et al., 2023).

In addition to negative impacts, other research shows that social media also shapes users' self-image and confidence; Netizens' comments can affect a person's perception of themselves and their reputation in the digital world (Hermawan & Gassing, 2023). This phenomenon reinforces the understanding that social media can be a source of support as well as psychological distress, depending on the quality of public interaction that occurs.

In the context of achievement coaching in higher education, exposure to these negative comments poses its own challenges, as young athletes often lack strong digital literacy skills and emotional regulation to cope with social pressure in digital media. Thus, the results of this study emphasize the need for a holistic approach in athlete coaching that includes technical aspects of sports and psychological assistance, including digital literacy education and coping strategies against negative comments.

CONCLUSION

Based on the results of the research and discussion, it can be concluded that there is a significant relationship between *toxic comments* on social media and the confidence of athletes coaching volleyball achievements at Sebelas Maret University. The relationship was negative and of moderate strength, suggesting that the greater the exposure to negative or degrading comments an athlete receives on social media, the lower their confidence. The study also showed that *toxic comments*

accounted for 28.3% of the variation in athletes' confidence, indicating that negative comments on social media are among the psychological factors that need attention in coaching for sports achievement. Therefore, coaches and institutions are expected to develop coaching strategies that not only focus on physical and technical aspects but also include psychological support, mental strengthening, and digital literacy education to maintain psychological well-being and support optimal athlete performance in the digital era.

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CONFLICT OF INTEREST

The authors state that there was no conflict of interest in this study.

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