

# The Influence of General Strain Factors on Cyberbullying Among University Students in Kenya

Christopher Odhiambo<sup>1\*</sup>, Dr. Bonface Ratemo, PhD<sup>2</sup>, Dr. George Musumba, PhD<sup>3</sup>

<sup>1\*</sup>Masters Scholar, Dedan Kimathi University of Technology

<sup>2,3</sup> Institute of Criminology, Forensics, and Security Studies, Dedan Kimathi University of Technology

\*Corresponding Author

DOI: <https://doi.org/10.51583/IJLTEMAS.2026.15020000140>

Received: 01 March 2026; Accepted: 07 March 2026; Published: 26 March 2026

## ABSTRACT

**Purpose:** This study aimed to examine the influence of general strain factors on cyberbullying among university students in Kenya, with a focus on emotional distress, coping mechanisms, peer reinforcement, and reduced empathy.

**Methodology:** A quantitative research design was employed, using a structured questionnaire to collect data from student leaders across 72 universities in Kenya. The data were analyzed using Pearson correlation and regression analysis to explore the relationships between general strain factors and cyberbullying behaviors.

**Findings:** The study found a moderate positive correlation ( $r = .492, p < .001$ ) between general strain factors and cyberbullying. Specific strain factors such as negative emotions and coping mechanisms ( $r = .453, p = .001$ ), and peer reinforcement ( $r = .404, p = .003$ ) were significantly associated with higher cyberbullying severity. However, reduced empathy showed a non-significant relationship ( $r = .214, p = .127$ ). Regression analysis revealed that general strain factors explained 24.2% of the variance in cyberbullying ( $R^2 = .242, p < .001$ ), confirming their significant predictive role.

**Unique Contribution to Theory, Practice, and Policy:** The study offers a unique contribution to General Strain Theory (GST) by demonstrating how emotional distress and peer validation processes contribute to cyberbullying in the Kenyan university context. It also highlights the importance of addressing strain factors such as stress, isolation, and peer reinforcement in university policies and intervention strategies. The study suggests the incorporation of mental health programs, stress-management initiatives, and digital ethics training in universities to mitigate the risks associated with cyberbullying.

**Keywords:** General Strain Theory, Cyberbullying, University Students, Kenya, Emotional Strain, Coping Mechanisms, Peer Reinforcement, Digital Ethics, Intervention Strategies.

## INTRODUCTION

### Background of the Study

Cyberbullying in university settings is a growing global concern, with serious implications for students' psychological well-being and academic performance (Khine et al., 2020). Research shows that cyberbullying among university students can lead to a range of negative outcomes, including anxiety, depression, social isolation, and declining academic achievement (Cassidy et al., 2021). While verbal and relational bullying remain more common forms of aggression among college students (Lund & Ross, 2016), the rise of digital communication tools has significantly altered the landscape. Cyberbullying has become a major issue, particularly in online dating contexts among university students (Martinez-Pecino & Durán, 2016). Estimates suggest that between 10% and 15% of university students experience cyberbullying, while up to 25% report

victimization from traditional, non-digital bullying (Lund & Ross, 2016). Beyond mental health consequences, cyberbullying disrupts social relationships, erodes trust, and in severe cases contributes to emotional distress, including suicidal thoughts (Cassidy et al., 2017).

This issue is not confined to specific countries; cyberbullying is a global phenomenon with varying rates of victimization and perpetration across regions. In the United States, Israel, and China, significant efforts have been made to understand its causes and impacts (Zhu et al., 2021). Risk factors include gender, age, online behavior, and prior victimization, while protective factors such as empathy, emotional intelligence, and supportive relationships can mitigate involvement as either perpetrator or victim (Zhu et al., 2021). Despite these insights, more research is needed to develop standardized tools for evaluating and combating cyberbullying worldwide.

In Africa, and particularly in Kenya, the rapid adoption of Information and Communication Technology (ICT) has contributed to an increased prevalence of cyberbullying in university settings. Ndiege et al. (2020) note that the rise of social media platforms such as Facebook, WhatsApp, and Instagram has fueled this trend, with Facebook identified as the most popular platform among Kenyan university students (Ogolla et al., 2022).

The ease of internet access and the anonymity it affords have created an environment where cyberbullying thrives. The United Nations Office on Drugs and Crime (UNODC) highlighted Kenya as one of the countries with the most active cyberbullying incidents on Twitter in 2020 (Parsitau, 2020). This situation is compounded by limited regulation and awareness, making Kenya's online environment fertile ground for both cyberbullying and other forms of digital violence, including gender-based and political aggression (Parsitau, 2020). Furthermore, the correlation between frequent online interactions and the likelihood of experiencing cyberbullying underscores the role of digital behaviors in shaping vulnerability (Giordano et al., 2021; Schultz et al., 2014).

Despite growing concern, particularly in Kenyan universities, limited research has examined the specific strain factors contributing to cyberbullying. Strain factors such as academic pressure, peer relationships, social isolation, and family issues may significantly influence students' vulnerability (Makori & Agufuna, 2020). Addressing these challenges requires a deeper understanding of how strain interacts with cyberbullying dynamics in higher education. This study seeks to fill that gap by identifying and analyzing general strain factors that contribute to cyberbullying in Kenyan universities, offering insights for prevention and intervention strategies. By examining the underlying stressors that drive such behavior, universities can develop more supportive environments that reduce the incidence of cyberbullying and its detrimental effects on students.

## Statement of the Problem

Social media has become an essential communication tool for young people, particularly university students, most of whom use at least one platform regularly. While these digital tools provide significant benefits for socialization and academic engagement, they have also introduced harmful consequences, especially cyberbullying. Cyberbullying involves the intentional use of electronic devices to harm or harass others, and it has emerged as a serious issue in educational settings. Studies indicate that cyberbullying can lead to depression, low self-esteem, academic difficulties, and even suicidal thoughts, making it a critical concern for university communities (Adebayo, 2020; Handono, 2019).

Kenya's higher education sector has experienced substantial growth, with rising numbers of universities and student enrollments (Mulinge et al., 2017). As more students gain internet access and engage in online activities, they are increasingly exposed to risks associated with technology, including cyberbullying. The Communication Authority of Kenya's National ICT Survey shows that youth aged 20 to 34, an age group typically associated with university students, are among the highest users of ICT facilities. This group is highly active online, and as internet usage in Kenya continues to rise, so does the prevalence of cyberbullying, affecting students both socially and academically.

Despite widespread social media use, research on the extent and impact of cyberbullying in Kenyan universities remains limited. Existing studies have often focused narrowly on female youth or specific platforms such as Facebook, while neglecting others like Twitter, where cyberbullying is also prevalent (Otieno et al., 2022). Moreover, these studies have not adequately examined the strain factors that contribute to cyberbullying behavior. Strain factors including academic pressures, social isolation, and challenges in managing online identities may increase students' vulnerability to either perpetrating or experiencing cyberbullying.

There is an urgent need to investigate the role of general strain factors in contributing to cyberbullying among university students in Kenya. Understanding these underlying factors will enable universities, educators, and parents to design more effective interventions to reduce the impact of cyberbullying. The stress experienced by victims can lead to significant mental health challenges and negatively affect academic performance. Therefore, examining strain factors is essential for creating safer, more supportive university environments that reduce the incidence of cyberbullying and its detrimental effects on students.

## LITERATURE REVIEW

### Theoretical Literature Review

#### General Strain Theory (GST)

General Strain Theory (GST), developed by Robert Agnew, provides a framework for understanding how strain or stress leads individuals to engage in deviant behaviors such as cyberbullying. According to GST, strain occurs when individuals are unable to achieve their goals, are exposed to negative stimuli, or experience the loss of positive influences. These strains can generate negative emotions, including frustration, anger, or sadness, which may increase the likelihood of deviant behaviors as a coping mechanism. In the context of cyberbullying, these strains often manifest as aggressive or harmful actions toward others as individuals attempt to alleviate their distress.

Strains can take different forms, including objective strain (e.g., physical harm or poverty), subjective strain (e.g., personal disappointment such as family conflicts or academic failure), and vicarious strain (e.g., witnessing others' misfortune).

These strains are typically experienced with varying intensity depending on the individual's personal circumstances. In the case of students, the strains they experience whether related to academic pressure, social exclusion, or family issues can lead to frustration or anger. These emotional responses may then lead to aggressive actions, such as cyberbullying, as individuals use these negative behaviors to cope with or release their feelings of stress.

GST suggests that when individuals experience strain, they may resort to deviant behaviors, like bullying, to deal with the negative emotions brought about by the strain. Agnew (1992) emphasizes that individuals are more likely to engage in harmful behavior if they lack the necessary resources to cope with their stress effectively.

For example, a student who is struggling academically or facing rejection from peers may turn to cyberbullying as a way to express their anger, frustration, or sense of powerlessness. The theory indicates that without healthy coping mechanisms, these individuals may project their negative emotions onto others through harmful online behaviors.

In addition to explaining the emergence of bullying behaviors, GST also sheds light on how those who are subjected to cyberbullying may respond. Victims of cyberbullying experience significant emotional distress, which creates additional strain in their lives.

This strain may cause them to retaliate or engage in aggressive behaviors as a way to cope with their victimization. Heatherington and Coyne (2017) note that this reciprocal relationship between strain and deviant

behavior can exacerbate the cycle of cyberbullying, where both the perpetrators and victims experience emotional strain that perpetuates the issue.

Furthermore, GST provides an opportunity to explore the broader context of strain, such as the role of academic pressure, peer relationships, or family dynamics in the lives of university students. Students who face high levels of strain, such as failing grades, bullying from peers, or family conflict, may become more susceptible to engaging in cyberbullying as a form of coping.

By focusing on the role of strain in cyberbullying, universities and institutions can identify the root causes of this behavior and take proactive steps to address the emotional and psychological pressures that contribute to it.

In conclusion, General Strain Theory offers a valuable lens through which to examine the causes of cyberbullying. It emphasizes the role of stress, negative emotions, and inadequate coping mechanisms in fostering deviant behavior. By understanding these dynamics, universities can develop interventions that reduce the impact of strain on students, promote healthier coping strategies, and help create a safer, more supportive campus environment.

## Empirical Literature Review

As the influence of the online domain in daily life has increased, new crime types based on digital technology have emerged. Psychological stressors such as anxiety and depression are strongly associated with the perpetration of cyberbullying in university settings. Martínez-Monteaquedo et al. (2020) examined the relationship between aggressors and victims of cyberbullying, as well as the predictive power of emotional problems and university adaptation.

Their study of 1,282 university students in Spain revealed that both victimization and perpetration were more likely among individuals with high levels of stress and depression, indicating that poor academic and emotional adaptation increased the likelihood of cyberbullying. This aligns with Mataga (2022), who found that female students at the University of Cape Town with frequent social media use and low self-control were particularly vulnerable to cyberbullying. Similarly, Kemuma (2021) reported that problematic smartphone use at Mount Kenya University was linked to heightened anxiety and depression, reinforcing the connection between digital habits and psychological distress.

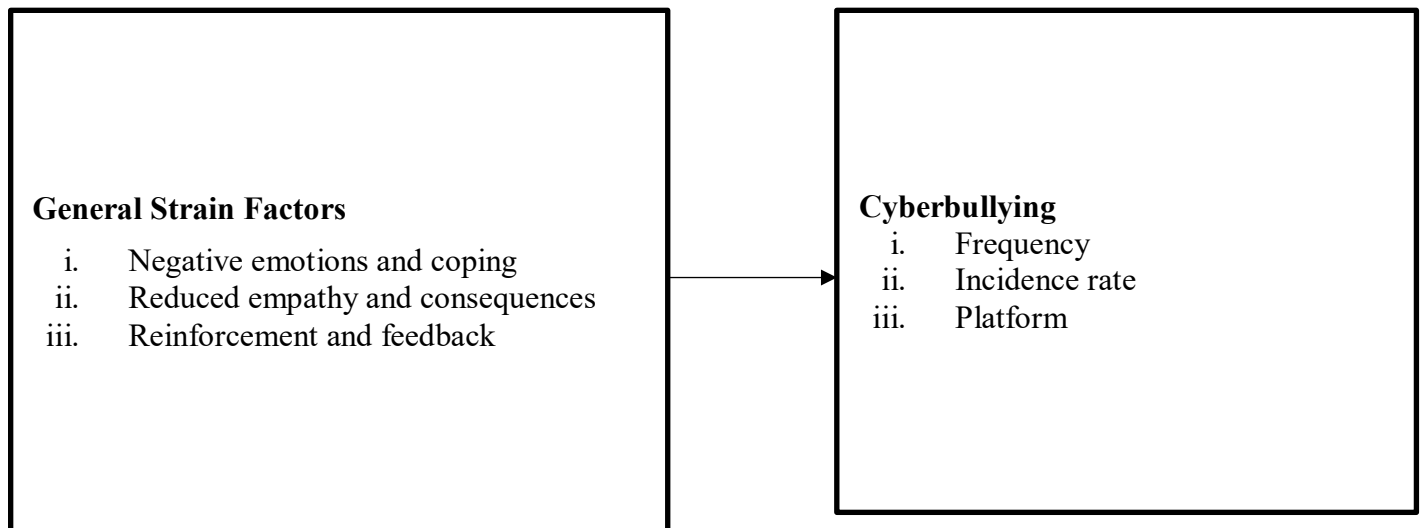
More recent scholarship has expanded this discussion by examining cyberbullying within broader digital aggression contexts. Gallegos et al. (2025) identified diverse forms of aggression, risk factors, and educational responses in digital environments, emphasizing the need for institutional strategies to mitigate cyberbullying among students. Tabuk and Akbaş (2025) explored the relationship between physical activity habits, aggressive behavior, and cyberbullying among young adult university students, finding that lifestyle factors can influence both vulnerability and perpetration. Extending this perspective cross-nationally, El-Ashry et al. (2026) investigated digital harassment among nursing students in Saudi Arabia and Egypt, highlighting cultural and contextual factors that shape cyberbullying experiences. Together, these studies underscore that cyberbullying is not only a psychological and behavioral issue but also a multidimensional phenomenon influenced by lifestyle, institutional responses, and cultural contexts. Incorporating these recent findings strengthens the scholarly relevance of the present study and situates it within the evolving discourse on digital aggression in higher education.

## Conceptual Framework

The study adopts General Strain Theory as the guiding framework to explain the determinants of cyberbullying. This framework posits that strain factors such as negative emotions, reduced empathy, and reinforcement can increase the likelihood of individuals engaging in cyberbullying. The outcomes are reflected in the frequency, incidence rate, and platform of bullying behaviors. Figure 2.1 presents this relationship, visually summarizing how strain factors influence cyberbullying outcomes.

**Independent Variable**

**Dependent Variable**



**Figure 2.1: Conceptual Framework**

**RESEARCH METHODOLOGY**

The study adopted a quantitative research design to examine the influence of general strain factors on cyberbullying in universities. This approach followed a deductive logic, where hypotheses were developed and tested through data collection. A structured questionnaire was the primary data collection instrument, which was pilot-tested to ensure reliability and validity. The target population consisted of student leaders from 72 universities in Kenya, including both public and private institutions. These student leaders, such as club presidents and student council members, were directly involved with student welfare and were well-positioned to provide insights into the prevalence and impact of cyberbullying. A purposive sampling technique was used to select a sample of 61 universities, ensuring diverse representation from both public and private sectors (Shah & Al-Bargi, 2013; Antwi & Hamza, 2015). While this approach enhanced the relevance of the respondents by deliberately targeting individuals with pertinent expertise, the study acknowledges that the sample size is limited and may not fully capture the perspectives of all student leaders across Kenyan universities. This limitation is recognized as a constraint on the generalizability of the findings, though the purposive selection strengthens the credibility of the insights obtained.

Data collection was conducted by distributing the structured questionnaire either in-person or online, depending on accessibility. The responses were analyzed using SPSS Version 26, with descriptive statistics (such as frequencies, percentages, and weighted means) to summarize the data. To assess the relationships between the independent variable (General Strain Factors) and the dependent variable (cyberbullying), linear regression analysis was employed. Analysis of Variance (ANOVA) was used to evaluate the overall model's suitability. The results were presented through tables, charts, and figures to facilitate clear interpretation (Kothari, 2004; Pearse, 2019).

**Presentation Of Findings, Analysis, And Interpretation**

**Response Rate**

The questionnaire was distributed to 61 universities in Kenya (35 public and 26 private), with one respondent from each university. Out of the 61 issued questionnaires, 52 were completed and returned (33 from public and 19 from private universities), resulting in a response rate of 85.25%. According to Mugenda and Mugenda (2019), a response rate above 70% is considered "very good," which places this study's response rate in the high-receptivity category for Kenyan universities. The results were presented in Table 4.1.

**Table 4. 1: Response Rate by Category of University**

Category of University	Sampled Universities	Responses Received	Response Rate (%)
Public Universities	35	33	94.29%
Private Universities	26	19	73.08%
<b>Total</b>	<b>61</b>	<b>52</b>	<b>85.25%</b>

### Demographic Information of Respondents

The demographic profile of the 52 respondents, drawn from university student welfare departments in Kenya, included gender, age, university type, position, and experience. Of the respondents, 65.4% were male and 34.6% were female. Age-wise, 57.7% were aged 18-25, with other age groups represented in smaller percentages.

Respondents were primarily from public universities (63.5%) and held positions such as Student Representative (50%) and Student Affairs Officer (23.1%). Most had less than three years of experience in their roles (76.9%), suggesting a recent entry into student welfare work. These demographics provide insights into perceptions and experiences of cyberbullying. The results were summarized in Table 4.2.

**Table 4. 2: Demographic Characteristics of Respondents**

Type of university respondent is affiliated with	Public	33	63.5
	Private	19	36.5
	<b>Total</b>	<b>52</b>	<b>100.0</b>
Position held in student welfare department	Student representative	26	50.0
	Student affairs officer	12	23.1
	Dean of students	5	9.6
	Program coordinator	1	1.9
	Administrator	1	1.9
	Student counselor	4	7.7
	Director	1	1.9
	Security personnel	1	1.9
	None	1	1.9
<b>Total</b>	<b>52</b>	<b>100.0</b>	
Number of years respondent has held position in student welfare department	Less than 1 year	17	32.7
	1 - 3 years	23	44.2
	4 - 6 years	8	15.4
	7 - 10 years	2	3.8
	Over 10 years	2	3.8
<b>Total</b>	<b>52</b>	<b>100.0</b>	

### Descriptive Statistics for General Strain Factors

Respondents identified several general strain factors contributing to cyberbullying in universities. The most frequently cited was attention-seeking behavior (57.7%), followed by anger and dissatisfaction (53.8%) and unstable family backgrounds (46.2%).

Frustrations related to studies (46.2%) and the use of cyberbullying as a coping mechanism (40.4%) were also notable. Other reported factors included feelings of rejection (36.5%) and stress due to isolation (30.8%). These results, presented in Table 4.3, suggest that emotional and behavioral strains significantly influence cyberbullying among university students.

**Table 4.3: Respondents’ Perceptions of General Strain Factors Contributing to Cyberbullying in Kenyan Universities**

General Strain Factors	Responses		Percent of Cases
	N	Percent	
Unstable family background or poor upbringing contributes to cyberbullying	24	14.7%	46.2%
Stress due to isolation contributes to cyberbullying	16	9.8%	30.8%
Frustrations related to studies contribute to cyberbullying	24	14.7%	46.2%
Attention-seeking behaviors contribute to cyberbullying	30	18.4%	57.7%
Feelings of rejection contribute to cyberbullying	19	11.7%	36.5%
Anger and dissatisfaction contribute to cyberbullying	28	17.2%	53.8%
Cyberbullying used as a coping mechanism	21	12.9%	40.4%
Competition leadership spaces contribute to cyberbullying	1	0.6%	1.9%
<b>Total</b>	<b>163</b>	<b>100.0%</b>	<b>313.5%</b>

The study found a moderate overall influence of general strain factors on cyberbullying, with a mean score of 3.08 (SD = 0.92). Negative emotions and coping mechanisms were the most influential (M = 3.25, SD = 1.01), followed by reinforcement and feedback (M = 3.02, SD = 0.92). Reduced empathy and awareness of consequences had a slightly lower influence (M = 2.96, SD = 0.82). These findings, shown in Table 4.4, highlight that emotional strain, diminished empathy, and feedback mechanisms contribute to the likelihood of cyberbullying.

**Table 4.4: Descriptive Statistics of General Strain Factor Groups Influencing Cyberbullying in Kenyan Universities**

General Strain Factor Groups	N	Mean	Std. Dev.
Negative emotions and coping mechanisms	52	3.25	1.01
Reduced empathy and awareness of consequences	52	2.96	.82
Reinforcement and feedback	52	3.02	.92
<b>Average Score</b>	<b>52</b>	<b>3.08</b>	<b>0.92</b>

### Correlation between General Strain Factors and Cyberbullying

Correlation results (Table 4.5) revealed a moderate, statistically significant positive relationship between general strain factors and cyberbullying ( $r = .492, p < .001$ ). This indicates that higher levels of strain are associated with increased severity of cyberbullying.

**Table 4.5: Correlation between General Strain Factors and Cyberbullying**

		Cyberbullying Index	General Strain Factors
Cyberbullying Index	Pearson Correlation	1	.492**
	Sig. (2-tailed)		.000
	N	52	52
General Strain Factors	Pearson Correlation	.492**	1
	Sig. (2-tailed)	.000	
	N	52	52

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

Further analysis (Table 4.6) showed that negative emotions and coping mechanisms ( $r = .453, p = .001$ ) and reinforcement and feedback ( $r = .404, p = .003$ ) were significantly correlated with cyberbullying severity. Reduced empathy and awareness of consequences were positively associated but not statistically significant ( $r = .214, p = .127$ ).

**Table 4.6: Correlation between General Strain Factors Metrics and Cyberbullying**

General Strain Metrics		Cyberbullying Index
Negative emotions and coping mechanisms	Pearson Correlation	.453**
	Sig. (2-tailed)	.001
	N	52
Reduced empathy and awareness of consequences	Pearson Correlation	.214
	Sig. (2-tailed)	.127
	N	52
Reinforcement and feedback	Pearson Correlation	.404**
	Sig. (2-tailed)	.003
	N	52
**. Correlation is significant at the 0.01 level (2-tailed).		
*. Correlation is significant at the 0.05 level (2-tailed).		

Regression results (Table 4.7) confirmed that general strain factors significantly predict cyberbullying, explaining 24.2% of the variance ( $R^2 = .242$ ). The model was statistically significant ( $F = 15.99, p < .001$ ), with an unstandardized coefficient ( $B = .543$ ) indicating that increases in strain factors are associated with greater cyberbullying severity.

**Table 4.7: Linear Regression Results for General Strain Factors**

Model Summary						
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	.492 <sup>a</sup>	.242	.227	.66136		
ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	6.993	1	6.993	15.988	.000 <sup>b</sup>
	Residual	21.870	50	.437		
	Total	28.863	51			
Coefficients <sup>a</sup>						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.444	.428		3.373	.001
	General Strain Factors	.543	.136	.492	3.998	.000
a. Dependent Variable: Cyberbullying Index						
b. Predictors: (Constant), General Strain Factors						

### Discussion of Findings on the Influence of General Strain Factors on Cyberbullying

The study aimed to assess the influence of general strain factors on cyberbullying in Kenyan universities. The results indicated a moderate, statistically significant positive correlation ( $r = .492, p < .001$ ) between general strain factors and cyberbullying. This finding directly supports General Strain Theory (Agnew, 1992; Agnew & Cullen, 2017), which posits that strain arising from negative stimuli or the failure to achieve valued goals generates negative emotions that may lead to deviant coping behaviors. In this case, cyberbullying emerges as a maladaptive coping mechanism for students experiencing strain.

Specifically, negative emotions and coping mechanisms ( $r = .453$ ,  $p = .001$ ) were strongly associated with cyberbullying severity, reinforcing GST's emphasis on emotional strain as a driver of deviant behavior. Reinforcement and feedback ( $r = .404$ ,  $p = .003$ ) also showed significant associations, highlighting the role of peer validation and social rewards in sustaining cyberbullying. This aligns with GST's assertion that deviant behaviors are more likely when individuals perceive reinforcement or lack effective coping resources. In contrast, reduced empathy and awareness of consequences showed a weaker, non-significant relationship ( $r = .214$ ,  $p = .127$ ), suggesting that empathy may be culturally mediated. This nuance reflects GST's recognition that strain responses vary across contexts, and it resonates with El-Ashry et al. (2026), who found cultural differences in empathy and harassment among nursing students in Saudi Arabia and Egypt.

Regression analysis further confirmed the predictive role of strain, with general strain factors explaining 24.2% of the variance in cyberbullying ( $R^2 = .242$ ). This reinforces GST's explanatory power while extending its application to the Kenyan university context. The findings are consistent with Martínez-Monteaquedo et al. (2020) and Mataga (2022), who linked stress, depression, and social media use to increased vulnerability to cyberbullying. However, the prominence of reinforcement and feedback in this study underscores that cyberbullying is not only an emotional response but also a socially sustained behavior. This nuance enriches GST by showing that external validation mechanisms can amplify strain-induced deviance in digital environments.

Overall, the results demonstrate that General Strain Theory provides a robust framework for understanding cyberbullying in higher education. By situating the findings within both local and global scholarship, the study highlights the importance of addressing emotional strain, peer reinforcement, and contextual factors in designing interventions to reduce cyberbullying among university students.

## SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

### Summary of the Findings on General Strain Factors and Cyberbullying

The study assessed the extent to which general strain factors influence cyberbullying in Kenyan universities. Findings indicated that strain factors significantly predict cyberbullying. Correlation analysis revealed a moderate positive relationship ( $r = .492$ ,  $p < .001$ ), demonstrating that students experiencing heightened emotional distress are more likely to engage in cyberbullying. Negative emotions and coping mechanisms ( $r = .453$ ,  $p = .001$ ) and reinforcement through peer validation ( $r = .404$ ,  $p = .003$ ) were both significantly associated with cyberbullying severity, while reduced empathy showed a weaker, non-significant link ( $r = .214$ ,  $p = .127$ ). Regression analysis confirmed these results, explaining 24.2% of the variance in cyberbullying ( $R^2 = .242$ ,  $F = 15.99$ ,  $p < .001$ ), with general strain factors emerging as significant predictors ( $\beta = .492$ ,  $p < .001$ ). These findings highlight that while emotional strain fuels aggressive online behavior, peer approval mechanisms sustain it.

### Conclusion

The study concludes that general strain factors significantly influence cyberbullying in Kenyan universities. Correlation results indicated a moderate positive relationship, while regression analysis confirmed that strain factors explain 24.2% of the variance in cyberbullying. Negative emotions and coping, along with reinforcement and feedback, were key drivers, showing that psychological stressors and peer validation heighten cyberbullying severity. Reduced empathy, however, was not significant. These findings affirm that strain is a critical predictor of cyberbullying behavior in higher education contexts.

### Recommendations

Since general strain factors significantly predicted cyberbullying, universities should integrate mental health and stress-management programs into student support services. Counseling initiatives should emphasize adaptive coping strategies to reduce reliance on cyber aggression. Peer mentorship programs can encourage positive reinforcement and discourage harmful validation-seeking. Digital ethics training should highlight the impact of online behaviors, while policies should limit algorithms that reward toxic content. Anonymous reporting

mechanisms can help identify at-risk students early. By combining psychosocial support with digital accountability, institutions can address both emotional strain and reinforcement dynamics, thereby fostering a healthier online culture.

## REFERENCES

1. Adebayo, D. O., Ninggal, M. T., & Bolu-Steve, F. N. (2020). Relationship between Demographic Factors and Undergraduates' Cyberbullying Experiences in Public Universities in Malaysia. *International Journal of Instruction*, 13(1), 901-922.
2. Agnew, R. (1992). Foundation for a general strain theory of crime and delinquency. *Criminology*, 30(1), 47-88.
3. Agnew, R., & Cullen, F. T. (2017). Challenging Kornhauser's Critique of Strain Theory. In *Challenging Criminological Theory* (pp. 145-164). Routledge.
4. Antwi, S. K., & Hamza, K. (2015). Qualitative and quantitative research paradigms in business research: A philosophical reflection. *European journal of business and management*, 7(3), 217-225.
5. Cassidy, W., Faucher, C., & Jackson, M. (2021). Bullying among college and university students. *The Wiley Blackwell handbook of bullying: A comprehensive and international review of research and intervention*, 2, 37-54.
6. El-Ashry, A. M., AlOtaibi, N. G., AlSaleh, N. S., Karim, N. A. H. A., Amin, S. M., Mohamed, H. A. A., ... & Machaly, E. R. (2026). Navigating digital harassment: A cross-country study of factors affecting cyberbullying among nursing students in Saudi Arabia and Egypt. *Archives of Psychiatric Nursing*, 152091.
7. Gallegos, A., García Ampudia, L., Morales Córdova, H., Londoño-Celis, W., Velazco Mendoza, O. A., & Valencia, J. (2025). Cyberbullying in students: Forms of aggression, risk factors, and educational responses in digital environments. *F1000Research*, 14, 880.
8. Giordano, P., Schott, C., & He, Y. (2021). The impact of social media interactions on cyberbullying among university students.
9. Handono, S. G. Factors Associated with Cyberbullying among the Youth in Jakarta, Indonesia.
10. Heatherington, W., & Coyne, I. (2017). Understanding individual experiences of cyberbullying encountered through work. *International Journal of Organization Theory & Behavior*, 17(2), 163-192.
11. Kemuma, J. H. (2021). Relationship Between Problematic Smartphone Use and Psychological Distress Among University Students-a Case Study of Mount Kenya University, Kiambu County (Doctoral dissertation, University of Nairobi).
12. Khine, A. T., Saw, Y. M., Htut, Z. Y., Khaing, C. T., Soe, H. Z., Swe, K. K., ... & Hamajima, N. (2020). Assessing risk factors and impact of cyberbullying victimization among university students in Myanmar: A cross-sectional study. *PloS one*, 15(1), e0227051.
13. Kothari, C. R. (2004). *Research methodology: Methods and techniques*. New Age International.
14. Lund, E. M., & Ross, S. W. (2016). Bullying perpetration, victimization, and demographic differences in college students: A review of the literature. *Trauma, Violence, & Abuse*, 18, 348-360. <https://doi.org/10.1177/1524838015620818>.
15. Makori, A., & Agufana, P. (2020). Cyber Bulling among Learners in Higher Educational Institutions in Sub-Saharan Africa: Examining Challenges and Possible Mitigations. *Higher Education Studies*.
16. Martínez-Monteagudo, M. C., Delgado, B., García-Fernández, J. M., & Ruíz-Esteban, C. (2020). Cyberbullying in the university setting. Relationship with emotional problems and adaptation to the university. *Frontiers in psychology*, 10, 3074.
17. Martinez-Pecino, R. y Durán, M. (2016). I Love You but I Cyberbully You. The Role of Hostile Sexism. *Journal of Interpersonal Violence*, 25, 1-14. doi:10.1177/0886260516645817.
18. Mataga, V. T. (2022). Factors influencing university female students' response to cyberbullying and effects on academic performance (Master's thesis, Faculty of Commerce).
19. Mugenda, O. M., & Mugenda, A. G. (2019). *Research Methods: Quantitative and Qualitative Approaches* (3rd ed.). Nairobi: Acts Press.

20. Mulinge, M., Arasa, N., & Wawire, V. (2017). Governance of Higher Education. The Status of Student involvement in University Governance in Kenya: The Case of Public and Private Universities. African Books Collective. <https://muse.jhu.edu/book/52167>, 344.
21. Ndiege, J. R., Okello, G., & Wamuyu, P. K. (2020). Cyberbullying among university students: The Kenyan experience. *The African Journal of Information Systems*, 12(1), 2
22. Ogolla, E. O., Kibe, L. W., Kwanya, T., Kogos, A. C., & Onsare, C. K. (2022). Factors influencing the occurrence of cyberbullying on Facebook among undergraduate students in Kenyan Universities. *East African Journal of Education and Social Sciences*, 3(6), 109-120.
23. Otieno, D. O., Kirigha, F. H., & Akwala, A. O. (2022). Communication on Social Network Sites: Assessing Cyberbullying Among Young Women in Nairobi, Kenya—Case of Facebook Platform. In *Research Anthology on Combating Cyber- Aggression and Online Negativity*, 669-680.
24. Paez, G. R. (2018). Cyberbullying among adolescents: A general strain theory perspective. *Journal of school violence*, 17(1), 74–85.
25. Parsitau, D. (2020). Cyberbullying: The digital pandemic.
26. Pearse, N. (2019, June). An illustration of deductive analysis in qualitative research. In *18th European conference on research methodology for business and management studies* (p. 264).
27. Schultz, B., Lee, C., & Peterson, J. (2014). The relationship between time spent on social media and the likelihood of experiencing cyberbullying. *Social Media Studies*, 13(3), 209-223.
28. Shah, S. R., & Al-Bargi, A. (2013). Research Paradigms: Researchers' Worldviews, Theoretical Frameworks and Study Designs. *Arab World English Journal*, 4(4).
29. Tabuk, M. E., & Akbaş, M. (2025). Relationship between Physical Activity Habits, Aggressive Behaviour and Cyberbullying among Young Adult University Students. *Eurasian Journal of Sport Sciences and Education*, 7(1), 96-116.
30. Zhu, C., Huang, S., Evans, R., and Zhang, W. (2021). Cyberbullying among adolescents and children: A comprehensive review of the global situation, risk factors, and preventive measures. *Front. Public Health* 9:634909. doi: 10.3389/fpubh.2021.634909.
31. Zsila, Á, Urbán, R., Griffiths, M.D., & Demetrovics, Z. (2019). Gender differences in the association between cyberbullying victimization and perpetration: The role of anger rumination and traditional bullying experiences. *International Journal Mental Health Addict.*, 17(5), 1252-67.