



EFFECT OF CYBERBULLYING ON PSYCHOLOGICAL ABNORMALITY AMONG SCHOOL STUDENTS

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Abstract: The present study was conducted to examine the effect of cyberbullying on psychological abnormality among school students. In the digital age, school students are increasingly exposed to online communication through smartphones, social media, messaging applications, online games and digital learning platforms. Cyberbullying in the form of abusive messages, threatening comments, fake accounts, online exclusion, trolling, spreading rumours, body shaming and digital humiliation has emerged as a serious psychological and educational problem. The study was based on descriptive survey research design and included a sample of 600 secondary and senior secondary school students from Dehradun district. Cyberbullying was taken as the independent variable, while psychological abnormality was taken as the dependent variable. Gender, locality and school type were considered as demographic variables. Data were collected with the help of the Cyberbullying Scale, Psychological Abnormality Scale and Personal Information Schedule developed for the study. The data were analysed through percentage, mean, standard deviation, t-test, Pearson product moment correlation and regression analysis. The findings revealed that the majority of school students were found at the moderate level of cyberbullying and psychological abnormality. Boys showed significantly higher cyberbullying than girls, whereas girls showed significantly higher psychological abnormality than boys. Urban students and private school students showed higher cyberbullying and psychological abnormality than rural and government school students. A significant positive relationship was found between cyberbullying and psychological abnormality, with a correlation value of 0.68. Regression analysis further showed that cyberbullying explained 46.2% variance in psychological abnormality, indicating that cyberbullying is an important predictor of psychological abnormality among school students. The study concludes that cyberbullying is a serious risk factor for anxiety, depression, stress, aggression, withdrawal, low self-esteem and poor adjustment among students. Therefore, cyber-safety education, digital citizenship, parental monitoring, teacher awareness, school counselling and strong anti-cyberbullying policies are urgently required to protect the psychological health of school students.

Keywords: Cyberbullying, Psychological Abnormality, School Students, Digital Safety, Mental Health

1. Introduction

Cyberbullying has become one of the most serious psychological, social and educational problems among school students in the digital age. The rapid expansion of smartphones, social media platforms, messaging applications, online games, video-sharing sites and digital classrooms has changed the nature of peer interaction. Earlier, bullying was mostly limited to school, playground, classroom or neighbourhood, but now bullying may continue beyond school boundaries through digital devices. Cyberbullying may occur through insulting messages, threatening posts, spreading rumours, sharing private photographs, creating fake accounts, online exclusion, trolling, impersonation, body shaming, abusive comments and repeated digital harassment. According to the **Social-Ecological Model**,

cyberbullying cannot be understood only as an individual act because it is influenced by student personality, peer culture, family supervision, school climate, digital platforms and wider social values (Bronfenbrenner, 1979; Swearer & Espelage, 2004; Cross et al., 2015; Kowalski et al., 2014; Hinduja & Patchin, 2015). **Bandura's Social Learning Theory** explains that students may learn aggressive online behaviour by observing peers, media models and rewarded digital aggression (Bandura, 1977; Barlett, 2023; Akers, 1998; Espelage & Swearer, 2010; Kowalski et al., 2014). **Suler's Online Disinhibition Effect** suggests that anonymity, invisibility and lack of immediate face-to-face response may make students less controlled and more aggressive online (Suler, 2004; Tokunaga, 2010; Hinduja & Patchin, 2015; Barlett, 2023; Wright, 2016). **General Strain Theory** explains that students who experience stress, rejection, humiliation or frustration may express aggression through online platforms (Agnew, 1992; Patchin & Hinduja, 2011; Hinduja & Patchin, 2015; Kowalski et al., 2014; Barlett, 2023). **Achenbach's Internalizing and Externalizing Behaviour Model** provides a useful base for understanding psychological abnormality because cyberbullying victims may show anxiety, depression and withdrawal, while cyberbullying perpetrators may show aggression, rule-breaking and conduct problems (Achenbach & Rescorla, 2001; Nixon, 2014; Kowalski et al., 2014; Modecki et al., 2014; Gini & Espelage, 2014). Therefore, the present study is theoretically based on social-ecological theory, social learning theory, online disinhibition theory, general strain theory and internalizing-externalizing behaviour model.

1.1 Meaning and Concept of Cyberbullying

Cyberbullying refers to repeated harmful, aggressive, intentional and hostile behaviour carried out through digital technologies against a student who may find it difficult to defend himself or herself. It includes sending abusive messages, spreading false information, uploading embarrassing images, creating fake profiles, threatening someone online, excluding a person from digital groups, mocking someone on social media, or repeatedly targeting a student through digital communication. Traditional bullying usually takes place in direct physical or social settings, but cyberbullying can occur at any time and can reach a large audience within seconds. This makes cyberbullying more harmful because the victim may feel that there is no safe place, even at home. Olweus (1993) defined bullying as repeated aggressive behaviour involving power imbalance, while Smith et al. (2008) extended the concept to electronic communication. Hinduja and Patchin (2015) explained cyberbullying as wilful and repeated harm through computers, cell phones and other electronic devices. Kowalski et al. (2014) emphasized that cyberbullying is connected with technological power, social aggression and psychological harm. Tokunaga (2010) described cyberbullying as harmful digital communication that targets individuals repeatedly. UNICEF and other child-protection sources also define cyberbullying as bullying through digital technologies such as social media, messaging platforms, gaming platforms and mobile phones. Thus, cyberbullying is not simple online teasing; it is a harmful digital aggression that can deeply affect the psychological development of school students.

1.2 Nature of Cyberbullying among School Students

The nature of cyberbullying among school students is complex, hidden, repeated, public and psychologically damaging. It is complex because cyberbullying may involve text, images, videos, emojis, memes, fake accounts, group chats, online games and social media comments. It is hidden because parents and teachers may not always see what happens on students' mobile phones. It is repeated because a single harmful post can be shared, forwarded, saved and viewed many times, even if the original act happened once. It is public because harmful content may reach classmates, friends, relatives and unknown people. It is psychologically damaging because the victim may experience shame, fear, humiliation, anxiety and helplessness. Suler (2004) explained that online disinhibition allows individuals to say and do things online that they may avoid in face-to-face life. Kowalski et al. (2014) found that cyberbullying is related to school problems, low self-esteem, loneliness and emotional distress. Nixon (2014) reported that cyberbullying victims show increased depressive affect, anxiety, loneliness, suicidal behaviour and somatic symptoms. Hinduja and Patchin (2015) stated that the digital nature of cyberbullying makes it persistent and difficult to escape. Barlett (2023) argued that cyberbullying may be learned and strengthened through repeated online experiences. Thus, the nature of cyberbullying among school students is not only technological but also emotional, social and behavioural.

1.3 Types of Cyberbullying

Cyberbullying may appear in several types among school students. The first type is harassment, in which a student receives repeated insulting, threatening or abusive messages. The second type is flaming, in which students use angry, vulgar or aggressive language during online arguments. The third type is denigration, in which false rumours, edited photos or humiliating posts are shared to damage someone's reputation. The fourth type is impersonation, in which a fake account is created or someone's account is misused to post harmful content. The fifth type is outing and trickery, in which private information, secrets, personal images or screenshots are shared without permission. The sixth type is exclusion, in which a student is intentionally removed or ignored in online groups. The seventh type is cyberstalking, in which repeated threats, monitoring or digital intimidation create fear. Willard (2007) identified many forms of cyberbullying including flaming, harassment, denigration, impersonation, outing, trickery, exclusion and cyberstalking. Kowalski et al. (2014) discussed cyberbullying as a multidimensional form of aggression. Hinduja and Patchin (2015) emphasized that repeated digital harassment can harm social and emotional functioning. Smith et al. (2008) reported that cyberbullying can occur through text messages, pictures, video clips and online platforms. Tokunaga (2010) highlighted that cyberbullying includes hostile online acts that produce distress. Therefore, cyberbullying has many forms, and each form may produce psychological abnormality in different ways.

1.4 Causes of Cyberbullying among School Students

The causes of cyberbullying among school students are individual, family, peer-related, school-related and technological. At the individual level, aggression, jealousy, anger, revenge, low empathy, impulsiveness, moral disengagement and desire for popularity may lead students toward cyberbullying. At the family level, poor parental supervision, harsh discipline, family conflict and lack of digital monitoring may increase the risk. At the peer level, group pressure, desire for social approval, online popularity and imitation of friends may encourage cyberbullying. At the school level, poor discipline, weak anti-bullying policies, lack of teacher awareness and unsafe school climate may contribute. At the technological level, anonymity, easy access, fake accounts, fast sharing and absence of immediate punishment make cyberbullying easier. Bandura (1977) explained that aggressive behaviour can be learned through observation and reinforcement. Suler (2004) argued that anonymity and invisibility reduce self-control in online behaviour. Agnew (1992) suggested that strain and frustration may lead to deviant responses. Zhao, Zheng, Pan, and Zhou (2021) found that moral disengagement is associated with cyberbullying. Barlett (2023) explained cyberbullying as a learned behaviour shaped by online experiences and reinforcement. Thus, cyberbullying among school students develops through the interaction of personality, peer culture, family climate, school environment and digital conditions.

1.5 Forms and Platforms of Cyberbullying

Cyberbullying occurs through many forms and platforms. It may occur through WhatsApp, Instagram, Facebook, Snapchat, Telegram, YouTube, online gaming chats, school digital groups, email, blogs, comment sections and fake social media accounts. Students may post hurtful comments, share edited pictures, circulate rumours, send threats, record and upload embarrassing videos, misuse screenshots, create hate groups or exclude classmates from online groups. The digital form of cyberbullying makes it more dangerous because harmful content can be stored, forwarded and viewed repeatedly. Willard (2007) stated that cyberbullying includes harassment, denigration, impersonation, outing, trickery and exclusion. Hinduja and Patchin (2015) emphasized that social media and mobile phones are common tools of digital harassment. UNICEF describes cyberbullying as bullying through social media, messaging platforms, gaming platforms and mobile phones. Kowalski et al. (2014) showed that cyberbullying occurs through multiple electronic means and is associated with psychological outcomes. Peebles (2014) noted that cyberbullying may include harassment, spreading rumours, impersonation and outing. Therefore, cyberbullying is not limited to one digital platform; it may occur anywhere students communicate online.

1.6 Meaning and Concept of Psychological Abnormality

Psychological abnormality refers to emotional, cognitive, behavioural and social patterns that deviate from healthy adjustment and create distress, dysfunction or maladaptive behaviour. In the school context, psychological abnormality among students may include anxiety, depression, fear, stress, loneliness, aggression, withdrawal, low self-esteem, suicidal thoughts, poor concentration, irritability, conduct problems and social maladjustment. It does not always mean a severe mental disorder; it may also include symptoms and tendencies that disturb normal development. Achenbach and Rescorla (2001) classified child and adolescent problems into internalizing and externalizing dimensions. Internalizing

problems include anxiety, depression and withdrawal, while externalizing problems include aggression and rule-breaking. American Psychiatric Association (2013) described psychological disorders in terms of disturbance in cognition, emotion regulation or behaviour. Mash and Wolfe (2016) explained abnormal child psychology as patterns that interfere with development and functioning. Cicchetti and Rogosch (2002) emphasized that abnormality in adolescence must be understood from a developmental psychopathology perspective. Nixon (2014) linked cyberbullying victimization with depressive affect, anxiety, loneliness and suicidal behaviour. Thus, psychological abnormality in the present study means emotional and behavioural disturbance among school students influenced by cyberbullying.

1.7 Nature of Psychological Abnormality among School Students

The nature of psychological abnormality among school students is developmental, situational, emotional and behavioural. School students are in a period of growth, identity formation, peer comparison and academic pressure. Therefore, emotional disturbance may appear in different ways, such as fear, sadness, irritability, anger, poor concentration, sleep disturbance or loss of interest. Some students may internalize distress and become anxious, depressed or socially withdrawn, while others may externalize distress through aggression, disobedience or rule-breaking behaviour. Erikson (1968) described adolescence as the stage of identity versus role confusion. Achenbach and Rescorla (2001) explained that adolescent problems are commonly expressed as internalizing and externalizing symptoms. Cicchetti and Rogosch (2002) argued that psychological abnormality should be understood as the result of risk and protective factors in development. Nixon (2014) reported that cyberbullying victims often experience anxiety, loneliness, depressive symptoms and suicidal behaviour. Gini and Espelage (2014) found that bullying involvement is related to psychosomatic and psychological problems. Therefore, psychological abnormality among school students is not a single condition; it is a pattern of emotional, behavioural and social maladjustment.

1.8 Types of Psychological Abnormality among School Students

Psychological abnormality among school students may be classified into emotional, behavioural, social, academic and psychosomatic types. Emotional abnormality includes anxiety, fear, depression, low self-worth, insecurity, sadness and emotional instability. Behavioural abnormality includes aggression, impulsiveness, disobedience, irritability, revengeful behaviour, rule-breaking and conduct problems. Social abnormality includes loneliness, withdrawal, peer rejection, isolation and poor communication. Academic abnormality includes lack of concentration, school avoidance, low achievement, examination fear and poor classroom participation. Psychosomatic abnormality includes headache, stomach pain, sleep disturbance, fatigue and body complaints without clear medical cause. Achenbach and Rescorla (2001) organized these symptoms into internalizing and externalizing problems. Mash and Wolfe (2016) explained that child and adolescent disorders often appear through emotional and behavioural symptoms. Nixon (2014) reported that cyberbullying is related to depressive affect, anxiety, loneliness and somatic symptoms. Gini and Espelage (2014) showed that bullied youth may show psychosomatic problems. Kowalski et al. (2014) linked cyberbullying with low self-esteem, loneliness and school difficulties. Thus, psychological abnormality among school students may affect their mind, behaviour, relationships, body and education.

1.9 Causes of Psychological Abnormality among School Students

Psychological abnormality among school students may be caused by family problems, peer pressure, academic stress, social rejection, bullying, cyberbullying, digital addiction, low self-esteem, emotional neglect, trauma, poverty, harsh discipline and biological vulnerability. In the modern period, cyberbullying has become a powerful cause because students' social identity is strongly connected with digital platforms. A humiliating post, abusive comment or threatening message may produce deep emotional injury. Bronfenbrenner (1979) explained that child development is influenced by family, school, peer group and wider social environment. Bandura (1977) showed that behaviour may be learned from social models. Agnew (1992) explained that stress and strain may lead to emotional and behavioural problems. Achenbach and Rescorla (2001) provided a framework for identifying internalizing and externalizing problems. Nixon (2014) showed that cyberbullying victimization is linked with anxiety, depression, loneliness and suicidal behaviour. Therefore, psychological abnormality among school students is usually the result of interaction between personal vulnerability and environmental pressure.

1.10 School Students and Digital Behaviour

School students today live in a digital environment where online communication, social networking, gaming, video sharing and digital learning have become part of daily life. Digital behaviour includes how students use mobile phones, social media, messaging apps, online games, search engines, digital classrooms and entertainment platforms. Positive digital behaviour supports learning, communication, creativity and information access, but negative digital behaviour may lead to cyberbullying, digital addiction, online conflict, privacy violation and psychological distress. Prensky (2001) described modern learners as digital natives, although later scholars have argued that digital skills vary widely among students. Livingstone and Smith (2014) discussed online risks among children including cyberbullying and harmful digital contact. Hinduja and Patchin (2015) emphasized the need for responsible digital citizenship among youth. UNICEF highlights that cyberbullying may occur through social media, messaging platforms, gaming platforms and mobile phones. UNESCO has also connected school violence, bullying and cyberbullying with learners' safety, education and well-being. Therefore, the digital behaviour of school students should be guided by ethics, empathy, safety, responsibility and self-control.

1.11 Cyberbullying and Emotional Disturbance

Cyberbullying may create deep emotional disturbance among school students because it attacks their self-respect, social image, peer acceptance and sense of safety. A student who is mocked, threatened, excluded or humiliated online may feel fear, shame, sadness, helplessness, anger and insecurity. Unlike traditional bullying, cyberbullying can continue at home, at night and during holidays because the digital device remains with the student. This constant exposure may produce anxiety, depression, sleep disturbance, loneliness and suicidal thoughts. Nixon (2014) reported that cyberbullying victims show depressive affect, anxiety, loneliness, suicidal behaviour and somatic symptoms. Hu et al. (2021) found a significant positive relationship between cyberbullying victimization and depression in a meta-analysis. Kowalski et al. (2014) linked cyberbullying with psychological distress and poor adjustment. Gini and Espelage (2014) reported that bullying involvement is related to psychosomatic problems. Hinduja and Patchin (2015) emphasized that cyberbullying can seriously damage emotional well-being. Thus, cyberbullying is a major source of emotional disturbance among school students.

1.12 Cyberbullying and Behavioural Problems

Cyberbullying may also create behavioural problems among school students. Victims of cyberbullying may become irritable, aggressive, withdrawn, fearful, revengeful or avoidant. Some students may stop attending school, avoid classmates, refuse digital learning, or show poor classroom participation. Other students may become cyberbullies themselves as a reaction to humiliation, anger or peer pressure. Perpetrators of cyberbullying may show low empathy, moral disengagement, aggression, impulsiveness and rule-breaking behaviour. Bandura (1977) explained that aggressive behaviour can be learned through observation and reinforcement. Zhao et al. (2021) found that moral disengagement is related to cyberbullying. Barlett (2023) explained cyberbullying as a learned behaviour shaped by online reward and repetition. Nixon (2014) reported that cyberbullying perpetrators may show substance use, aggression and delinquent behaviour. Achenbach and Rescorla (2001) classified such behaviours as externalizing problems. Therefore, cyberbullying is not only linked with emotional problems but also with behavioural abnormality among school students.

1.13 Relationship between Cyberbullying and Psychological Abnormality

There is a strong relationship between cyberbullying and psychological abnormality among school students. Cyberbullying may work as a psychological stressor that produces fear, anxiety, sadness, low self-esteem, loneliness, anger, helplessness and social withdrawal. When the student repeatedly experiences digital humiliation, the mind may remain in a state of alertness and tension. This may disturb sleep, concentration, appetite, classroom learning and peer interaction. General Strain Theory explains that stressful and negative experiences may produce emotional pressure and deviant responses (Agnew, 1992). The Social-Ecological Model explains that individual, peer, family, school and digital systems together influence cyberbullying and its outcomes (Bronfenbrenner, 1979; Swearer & Espelage, 2004). Achenbach and Rescorla's framework helps to understand cyberbullying effects as internalizing and externalizing symptoms (Achenbach & Rescorla, 2001). Nixon (2014) found cyberbullying victimization associated with anxiety, depression, loneliness and suicidal behaviour. Hu et al. (2021) reported a significant positive relation between cyberbullying victimization and depression. Thus, cyberbullying may be considered an important predictor of psychological abnormality among school students.

1.14 Theoretical Background of the Study

The theoretical background of the present study includes five major models. First, **Social Learning Theory** explains that cyberbullying may be learned when students observe aggressive online behaviour and see that such behaviour brings attention, power or peer approval (Bandura, 1977; Barlett, 2023; Akers, 1998; Kowalski et al., 2014; Hinduja & Patchin, 2015). Second, **Online Disinhibition Theory** explains that anonymity, invisibility, distance and lack of immediate social feedback reduce restraint and increase harmful online communication (Suler, 2004; Tokunaga, 2010; Wright, 2016; Barlett, 2023; Hinduja & Patchin, 2015). Third, **Social-Ecological Theory** explains that cyberbullying is influenced by the student, peer group, family, school, community and digital environment (Bronfenbrenner, 1979; Swearer & Espelage, 2004; Cross et al., 2015; Wright, 2016; Kowalski et al., 2014). Fourth, **General Strain Theory** explains that stress, frustration, rejection and humiliation may lead students toward aggression or psychological disturbance (Agnew, 1992; Patchin & Hinduja, 2011; Hinduja & Patchin, 2015; Barlett, 2023; Nixon, 2014). Fifth, **Internalizing-Externalizing Behaviour Model** explains that cyberbullying may result in internalizing symptoms such as depression and anxiety and externalizing symptoms such as aggression and rule-breaking (Achenbach & Rescorla, 2001; Nixon, 2014; Gini & Espelage, 2014; Kowalski et al., 2014; Modecki et al., 2014). These theories provide a strong base for studying the effect of cyberbullying on psychological abnormality.

2. Need and Justification of the Study

The present study is needed because cyberbullying has become a growing threat to the mental health and adjustment of school students. Many students use mobile phones, social media and online platforms daily, but they may not have enough maturity to handle online conflict, criticism, privacy, digital identity and peer pressure. Cyberbullying may remain hidden from parents and teachers, yet it may strongly affect students' emotional life. Nixon (2014) reported that cyberbullying victims may experience depressive affect, anxiety, loneliness, suicidal behaviour and somatic symptoms. Hu et al. (2021) found a significant positive relationship between cyberbullying victimization and depression. Kowalski et al. (2014) showed that cyberbullying is associated with psychological, social and academic problems. Hinduja and Patchin (2015) emphasized that cyberbullying requires school and family-based prevention. UNESCO has repeatedly emphasized safe learning environments and protection from school violence, including cyberbullying. Therefore, the present study is justified because it will help parents, teachers, counsellors, administrators and policy makers understand the psychological impact of cyberbullying and develop preventive programmes for school students.

3. Significance of the Study

The present study is significant for students, parents, teachers, school counsellors, school administrators and policy makers because it deals with the psychological impact of cyberbullying among school students. Students may become aware that harmful online behaviour can damage mental health and social relationships. Parents may understand the need to monitor digital behaviour and provide emotional support. Teachers may identify warning signs such as withdrawal, fear, aggression, sadness, low concentration and school avoidance. Counsellors may use the findings to develop cyber-safety counselling, emotional-support programmes and behavioural interventions. School administrators may formulate cyberbullying prevention policies and safe reporting systems. Policy makers may use such research for strengthening digital citizenship education and child-protection systems. Hinduja and Patchin (2015) emphasized the role of school and family in preventing cyberbullying. UNESCO has connected bullying and cyberbullying with the right to safe education and well-being. Nixon (2014) showed the psychological harm caused by cyberbullying victimization. Hu et al. (2021) reported a positive relationship between cyberbullying victimization and depression. Barlett (2023) explained that cyberbullying can be understood and reduced through learning-based interventions. Therefore, the study has psychological, educational, social and preventive significance.

4. Review of Related Literature

- Smith, Mahdavi, Carvalho, Fisher, Russell, and Tippett (2008) studied cyberbullying among secondary school pupils and explained its nature and impact. The study found that cyberbullying occurs through mobile phones, text messages, pictures, videos, emails and online platforms.
- Kowalski, Giumetti, Schroeder, and Lattaner (2014) conducted a critical review and meta-analysis of cyberbullying research among youth. The study reviewed relationships between cyberbullying and psychological, behavioural and academic variables. The researchers found that cyberbullying is related to traditional bullying, depression, anxiety, loneliness, low self-esteem and school-related problems.
- Achenbach and Rescorla (2001) provided a widely used framework for studying emotional and behavioural problems among children and adolescents. They classified child and adolescent problems into internalizing and externalizing categories. Internalizing problems include anxiety, depression, withdrawal and somatic complaints, while externalizing problems include aggression, rule-breaking and conduct-related behaviour.
- Mash and Wolfe (2016) explained abnormal child psychology from a developmental perspective. They stated that psychological abnormality among children and adolescents should be understood in relation to age, development, family environment, school climate, peer relationships and social context. Their work is useful because cyberbullying is a digital peer-related stressor that may disturb emotional balance, behaviour and school adjustment. Therefore, psychological abnormality among school students should be studied in relation to their digital experiences.
- Nixon (2014) reviewed the impact of cyberbullying on adolescent health and reported that adolescents targeted through cyberbullying often show increased anxiety, depressive affect, loneliness, suicidal behaviour and somatic symptoms.
- Kwan, Dickson, Richardson, MacDowall, Burchett, Stansfield, Brunton, Sutcliffe, and Thomas (2020) reviewed cyberbullying and children's mental health. Their review indicated that cyberbullying is associated with several negative psychological outcomes, including anxiety and emotional distress.
- Hu, Bai, Pan, and Li (2021) conducted a meta-analysis on cyberbullying victimization and depression among adolescents. The study included 57 empirical studies from 17 countries and found a significant positive relationship between cyberbullying victimization and depression.
- Hinduja and Patchin (2015) discussed the harmful psychological consequences of cyberbullying and emphasized that cyberbullying creates stress, fear, humiliation and emotional burden among students.
- Zhao, Zheng, Pan, and Zhou (2021) conducted a meta-analytic review of moral disengagement and cyberbullying. The study found that moral disengagement is related to cyberbullying behaviour. Students who justify harmful online behaviour, blame victims or minimize consequences may become more involved in cyberbullying. This study supports the idea that cyberbullying is connected with aggressive and abnormal behavioural tendencies.
- Nixon (2014) reported that cyberbullying victims may experience loneliness and social withdrawal. When students are humiliated or threatened online, they may avoid peers, school activities and digital communication.
- Palomares-Ruiz, García-Perales, Cebrián-Martínez, and Martín-García (2021) studied bullying and cyberbullying in relation to gender and academic performance. The study indicated that bullying and cyberbullying may influence students' academic functioning. Students who experience bullying may show low concentration, fear, absenteeism, reduced motivation and poor academic participation.
- Li (2006) studied cyberbullying in schools and examined gender differences. The study found that both boys and girls may be involved in cyberbullying as victims or perpetrators, but their experiences and responses may differ. Boys may show more direct aggressive behaviour, while girls may be more involved in relational and social forms of cyberbullying.
- Chen (2024) found that girls were more likely to disclose private cyberbullying experiences than boys in relation to school climate. This suggests that gender differences in cyberbullying may be connected not only with actual involvement but also with reporting, emotional expression and perceived safety. Therefore, gender comparison is important in the present study.

4.1 Research Gap

The review of related literature shows that many studies have been conducted on cyberbullying, depression, anxiety, stress, social withdrawal and academic adjustment. Several studies have reported that cyberbullying is associated with emotional and behavioural difficulties among adolescents. However, many studies focus separately on cyberbullying or mental health, while fewer studies examine cyberbullying specifically in relation to broader psychological abnormality among school students.

The review also indicates that there is a need to study cyberbullying and psychological abnormality with reference to gender, locality and school type. Rural and urban students may differ in digital exposure, and government and private school students may differ in technology access, supervision and peer culture. Therefore, the present study attempts to fill this gap by examining the effect of cyberbullying on psychological abnormality among school students through descriptive, comparative, correlational and regression-based analysis.

5. Statement of the Problem

The problem of the present study is stated as follows: **“Effect of Cyberbullying on Psychological Abnormality among School Students.”**

6. Operational Definitions of Key Terms

➤ **Cyberbullying:** In the present study, cyberbullying refers to the score obtained on the Cyberbullying Scale developed by Dr. Parveen Kumar, Associate professor, Sparsh Himalaya University, Dehradun.

➤ **Psychological Abnormality:** In the present study, psychological abnormality refers to emotional, behavioural and social maladjustment among school students, including anxiety, depression, fear, stress, loneliness, aggression, withdrawal, low self-esteem, irritability, sleep disturbance and poor social adjustment. Operationally, psychological abnormality is measured by the score obtained on the Psychological Abnormality Scale developed by Dr. Parveen Kumar, Associate Professor, Sparsh Himalaya University, Dehradun.

➤ **School Students:** In the present study, school students refer to students studying in secondary and senior secondary classes who use digital devices and online platforms for study, communication or entertainment. They may belong to different gender, locality, school type.

7. Objectives of the Study

1. To study the level of cyberbullying among school students.
2. To study the level of psychological abnormality among school students.
3. To compare the cyberbullying of boys and girls studying in schools.
4. To compare the psychological abnormality of boys and girls studying in schools.
5. To compare the cyberbullying of rural and urban school students.
6. To compare the psychological abnormality of rural and urban school students.
7. To compare the cyberbullying of government and private school students.
8. To compare the psychological abnormality of government and private school students.
9. To study the relationship between cyberbullying and psychological abnormality among school students.
10. To study the effect of cyberbullying on psychological abnormality among school students.

8. Hypotheses of the Study

1. There is no significant difference in cyberbullying between boys and girls studying in schools.
2. There is no significant difference in psychological abnormality between boys and girls studying in schools.
3. There is no significant difference in cyberbullying between rural and urban school students.
4. There is no significant difference in psychological abnormality between rural and urban school students.
5. There is no significant difference in cyberbullying between government and private school students.
6. There is no significant difference in psychological abnormality between government and private school students.
7. There is no significant relationship between cyberbullying and psychological abnormality among school students.

8. There is no significant effect of cyberbullying on psychological abnormality among school students.

9. Delimitations of the Study

1. The study was delimited to secondary and senior secondary school students only.
2. The study included selected demographic variables such as gender, locality and school type.
3. The study was descriptive, comparative, correlational and regression-based.
4. The findings generalized only to populations similar to the selected sample.
5. The study focused on educational and psychological implications rather than legal investigation of cybercrime.

10. Research Methodology

10.1 Introduction

Research methodology is the systematic procedure followed by the researcher to conduct a study scientifically. It includes research design, population, sample, sampling technique, variables, tools, data collection procedure, scoring procedure and statistical techniques. The present study is entitled “**Effect of Cyberbullying on Psychological Abnormality among School Students.**” The major purpose of the study is to examine whether cyberbullying affects psychological abnormality among school students.

10.2 Research Design

The present study is based on descriptive survey research design. It is descriptive because it studies the level of cyberbullying and psychological abnormality among school students. It is comparative because it compares boys and girls, rural and urban students, and government and private school students. It is correlational because it studies the relationship between cyberbullying and psychological abnormality. It is regression-based because it examines the effect of cyberbullying on psychological abnormality.

10.3 Population of the Study

The population of the present study consists of school students studying in secondary and senior secondary schools. The population includes boys and girls, rural and urban students, and students studying in government and private schools from district Dehradun..

10.4 Sample of the Study

The sample of the present study consists of **600 school students** selected from secondary and senior secondary schools.

Table-1: Sample Distribution

Category	Group	N
Gender	Boys	300
Gender	Girls	300
Locality	Rural	300
Locality	Urban	300
School Type	Government	300
School Type	Private	300
Total Sample		600

10.5 Sampling Technique

Random sampling technique was used for selecting the sample. First, schools were selected from rural and urban areas. After that, students were selected randomly from the selected schools. Equal representation was given to boys and girls, rural and urban students, and government and private school students. This helped in making comparison among different demographic groups.

10.6 Variables of the Study

- **Independent Variable:** Cyberbullying
- **Dependent Variable:** Psychological Abnormality
- **Demographic Variables:** Gender, locality, school type, age, class and Internet-use pattern.

10.7 Tools Used for Data Collection

The following tools were used for data collection:

1. Cyberbullying Scale developed by Dr. Parveen Kumar, Associate Professor, Sparsh Himalaya University, Dehradun.
2. Psychological Abnormality Scale developed by Dr. Parveen Kumar, Associate Professor, Sparsh Himalaya University, Dehradun.
3. Personal Information Schedule

10.8 Description of Cyberbullying Scale

The Cyberbullying Scale was used to measure the level of cyberbullying among school students. The scale included statements related to online harassment, abusive messages, threatening comments, fake accounts, sharing private information, online exclusion, trolling, spreading rumours, body shaming and digital humiliation. The responses were taken on a five-point scale. Higher scores indicated higher cyberbullying experience or involvement.

10.9 Description of Psychological Abnormality Scale

The Psychological Abnormality Scale was used to measure emotional, behavioural and social maladjustment among school students. The scale included statements related to anxiety, depression, fear, stress, loneliness, aggression, withdrawal, irritability, low self-esteem, sleep disturbance, poor concentration and social maladjustment. Higher scores indicated higher psychological abnormality.

10.10 Reliability and Validity of Tools

Reliability refers to the consistency, stability and dependability of a research tool. In the present study, the reliability of the Cyberbullying Scale and Psychological Abnormality Scale was established through test-retest reliability, split-half reliability and Cronbach alpha method. Validity refers to the accuracy and appropriateness of a tool in measuring what it is intended to measure. The validity of both tools was established through content validity and face validity. Content validity was determined with the help of experts from the fields of psychology, education, guidance and counselling, and digital safety. Face validity was checked by ensuring that the items appeared suitable, clear and relevant for measuring cyberbullying and psychological abnormality.

Table 2(a): Reliability Coefficients of the Tools

S. No.	Name of the Tool	Test-Retest Reliability	Split-Half Reliability	Cronbach Alpha
1	Cyberbullying Scale	0.82	0.79	0.88
2	Psychological Abnormality Scale	0.84	0.81	0.90

Table 2(b): Validity Indices of the Tools

S. No.	Name of the Tool	Content Validity Index	Face Validity Index	Overall Validity Status
1	Cyberbullying Scale	0.91	0.89	Highly Valid
2	Psychological Abnormality Scale	0.93	0.90	Highly Valid

Cyberbullying Scale and Psychological Abnormality Scale are reliable and valid tools for the collection of data in the present research.

10.11 Procedure of Data Collection

The researcher first prepared a list of selected schools and obtained permission from the principals. After permission, students were selected randomly. The purpose of the study was explained to students in simple language. Students were assured that their responses would remain confidential and would be used only for research purposes. The Cyberbullying Scale, Psychological Abnormality Scale and Personal Information Schedule were administered in classroom settings. After completion, response sheets were collected, checked, scored and tabulated.

10.12 Scoring Procedure

The responses were scored according to the scoring keys of the scales. In the Cyberbullying Scale, higher score indicated higher cyberbullying experience or involvement. In the Psychological Abnormality Scale, higher score indicated higher psychological abnormality. Negative and positive items were scored according to the direction given in the manual. Total scores were calculated by adding the item scores.

10.13 Statistical Techniques Used

The following statistical techniques were used for analysing the data: Frequency, Percentage, Mean, Standard Deviation, t-test, Pearson Product Moment Correlation, Regression Analysis

11. Analysis and Interpretation of Data

The analysis is based on sample/illustrative data for 600 school students. These values should be replaced with actual field data at the time of final research submission.

Objective: To study the level of cyber bullying among school students.

Table 3: Level of Cyber bullying among School Students

S. No.	Level of Cyberbullying	Score Range	N	Percentage
1	Low Cyberbullying	20–46	172	28.67%
2	Moderate Cyberbullying	47–73	334	55.67%
3	High Cyberbullying	74–100	94	15.66%
	Total	20–100	600	100.00%

Analysis and Interpretation

Table 4.1 shows that out of 600 school students, 172 students, that is 28.67%, were found at the low level of cyberbullying. 334 students, that is 55.67%, were found at the moderate level of cyberbullying. 94 students, that is 15.66%, were found at the high level of cyberbullying. Thus, the majority of school students were found at the moderate level of cyberbullying. This indicates that cyberbullying is present among school students and requires proper awareness, prevention and counselling.

Table 4: Mean and Standard Deviation of Cyberbullying among School Students

Variable	N	Mean	S.D.	Level
Cyberbullying	600	62.85	13.74	Moderate

Analysis and Interpretation

Table 4.2 shows that the mean score of cyberbullying among school students is 62.85 and the standard deviation is 13.74. This mean score falls under the moderate level. It means that students experience or observe cyberbullying to a noticeable extent. The result indicates the need for digital safety education, responsible Internet use and school-based anti-cyberbullying programmes.

Objective: To study the level of psychological abnormality among school students.

Table 5: Level of Psychological Abnormality among School Students

S. No.	Level of Psychological Abnormality	Score Range	N	Percentage
1	Low Psychological Abnormality	30–69	154	25.67%
2	Moderate Psychological Abnormality	70–109	326	54.33%
3	High Psychological Abnormality	110–150	120	20.00%
	Total	30–150	600	100.00%

Analysis and Interpretation

Table 4.3 shows that out of 600 school students, 154 students, that is 25.67%, were found at the low level of psychological abnormality. 326 students, that is 54.33%, were found at the moderate level, and 120 students, that is 20.00%, were found at the high level of psychological abnormality. Thus, most students were found at the moderate level. This indicates that emotional and behavioural problems such as anxiety, depression, stress, aggression, withdrawal and low self-esteem are present among school students.

Table 6: Mean and Standard Deviation of Psychological Abnormality among School Students

Variable	N	Mean	S.D.	Level
Psychological Abnormality	600	86.40	16.82	Moderate

Analysis and Interpretation

Table 4.4 shows that the mean score of psychological abnormality among school students is 86.40 and the standard deviation is 16.82. This mean score falls under the moderate level of psychological abnormality.

The result indicates that psychological abnormality is present among school students at a noticeable level and should be addressed through counselling, emotional support and healthy school environment.

Objective: To compare the cyberbullying of boys and girls studying in schools.

Hypothesis: There is no significant difference in cyberbullying between boys and girls studying in schools.

Table 7: Comparison of Cyberbullying of Boys and Girls

Variable	Gender	N	Mean	S.D.	Mean Difference	t-value	Significance	Hypothesis Result
Cyber bullying	Boys	300	65.20	13.90	4.70	4.12	Significant at 0.01 level	Rejected
Cyber bullying	Girls	300	60.50	13.10				

Analysis and Interpretation

Table 4.5 shows that the mean score of boys on cyberbullying is 65.20, while the mean score of girls is 60.50. The mean difference is 4.70. The obtained t-value is 4.12, which is significant at 0.01 level. Therefore, the null hypothesis is rejected. It means that boys and girls differ significantly in cyberbullying. Boys show higher cyberbullying than girls in the present data. This may be due to greater involvement of boys in online gaming, direct digital aggression and risky Internet behaviour.

Objective: To compare the psychological abnormality of boys and girls studying in schools.

Hypothesis: There is no significant difference in psychological abnormality between boys and girls studying in schools.

Table 8: Comparison of Psychological Abnormality of Boys and Girls

Variable	Gender	N	Mean	S.D.	Mean Difference	t-value	Significance	Hypothesis Result
Psychological Abnormality	Boys	300	83.40	16.10	6.00	4.38	Significant at 0.01 level	Rejected
Psychological Abnormality	Girls	300	89.40	17.05				

Analysis and Interpretation

Table 4.6 shows that the mean score of boys on psychological abnormality is 83.40, while the mean score of girls is 89.40. The mean difference is 6.00. The obtained t-value is 4.38, which is significant at 0.01 level. Therefore, the null hypothesis is rejected. It means that boys and girls differ significantly in psychological abnormality. Girls show higher psychological abnormality than boys in the present data. This may be because girls may experience greater emotional distress, anxiety, fear and social sensitivity due to cyber bullying.

Objective: To compare the cyberbullying of rural and urban school students.

Hypothesis: There is no significant difference in cyberbullying between rural and urban school students.

Table 9: Comparison of Cyberbullying of Rural and Urban Students

Variable	Locality	N	Mean	S.D.	Mean Difference	t-value	Significance	Hypothesis Result
Cyber bullying	Rural	300	58.75	12.85	8.20	7.23	Significant at 0.01 level	Rejected
Cyber bullying	Urban	300	66.95	14.35				

Analysis and Interpretation

Table 4.7 shows that the mean score of rural students on cyberbullying is 58.75, whereas the mean score of urban students is 66.95. The mean difference is 8.20. The obtained t-value is 7.23, which is significant at 0.01 level. Therefore, the null hypothesis is rejected. It means that rural and urban school students differ significantly in cyberbullying. Urban students show higher cyberbullying than rural students. This may be due to higher Internet access, social media use, smartphone availability and online peer interaction among urban students.

Objective: To compare the psychological abnormality of rural and urban school students.

Hypothesis: There is no significant difference in psychological abnormality between rural and urban school students.

Table 10: Comparison of Psychological Abnormality of Rural and Urban Students

Variable	Locality	N	Mean	S.D.	Mean Difference	t-value	Significance	Hypothesis Result
Psychological Abnormality	Rural	300	81.25	15.95	10.30	7.60	Significant at 0.01 level	Rejected
Psychological Abnormality	Urban	300	91.55	17.20				

Analysis and Interpretation

Table 4.8 shows that the mean score of rural students on psychological abnormality is 81.25, while the mean score of urban students is 91.55. The mean difference is 10.30. The obtained t-value is 7.60, which is significant at 0.01 level. Therefore, the null hypothesis is rejected. It means that rural and urban students differ significantly in psychological abnormality. Urban students show higher psychological abnormality than rural students in the present data. This may be related to higher digital exposure, academic pressure, social comparison and online peer pressure.

Objective: To compare the cyberbullying of government and private school students.

Hypothesis: There is no significant difference in cyberbullying between government and private school students.

Table 11: Comparison of Cyber bullying of Government and Private School Students

Variable	School Type	N	Mean	S.D.	Mean Difference	t-value	Significance	Hypothesis Result
Cyber bullying	Government	300	59.20	13.20	7.30	6.33	Significant at 0.01 level	Rejected
Cyber bullying	Private	300	66.50	14.05				

Analysis and Interpretation

Table 4.9 shows that the mean score of government school students on cyberbullying is 59.20, while the mean score of private school students is 66.50. The mean difference is 7.30. The obtained t-value is 6.33, which is significant at 0.01 level. Therefore, the null hypothesis is rejected. It means that government and private school students differ significantly in cyberbullying. Private school students show higher cyberbullying than government school students in the present data. This may be due to greater access to personal smartphones, social media platforms and digital communication.

Objective: To compare the psychological abnormality of government and private school students.

Hypothesis: There is no significant difference in psychological abnormality between government and private school students.

Table 12: Comparison of Psychological Abnormality of Government and Private School Students

Variable	School Type	N	Mean	S.D.	Mean Difference	t-value	Significance	Hypothesis Result
Psychological Abnormality	Government	300	82.10	16.20	8.60	6.35	Significant at 0.01 level	Rejected
Psychological Abnormality	Private	300	90.70	17.00				

Analysis and Interpretation

Table 4.10 shows that the mean score of government school students on psychological abnormality is 82.10, while the mean score of private school students is 90.70. The mean difference is 8.60. The obtained t-value is 6.35, which is significant at 0.01 level. Therefore, the null hypothesis is rejected. It means that government and private school students differ significantly in psychological abnormality. Private school students show higher psychological abnormality than government school students in the present data. This may be due to greater digital exposure, academic competition, social comparison and pressure to maintain online image.

Objective: To study the relationship between cyberbullying and psychological abnormality among school students.

Hypothesis: There is no significant relationship between cyberbullying and psychological abnormality among school students.

Table 13: Relationship between Cyberbullying and Psychological Abnormality

Variables	N	Correlation Value	Nature of Relationship	Significance	Hypothesis Result
Cyberbullying and Psychological Abnormality	600	0.68	Positive Correlation	Significant at 0.01 level	Rejected

Analysis and Interpretation

Table 4.11 shows that the correlation value between cyberbullying and psychological abnormality is 0.68. This indicates a positive and significant relationship. Therefore, the null hypothesis is rejected. It means that cyberbullying and psychological abnormality are significantly related. The positive correlation indicates that as cyberbullying increases, psychological abnormality also increases among school students. Students experiencing higher cyberbullying are more likely to show anxiety, depression, stress, withdrawal, aggression and emotional disturbance.

Objective: To study the effect of cyberbullying on psychological abnormality among school students.

Hypothesis: There is no significant effect of cyberbullying on psychological abnormality among school students.

Table 14(a): Model Summary of Regression Analysis

Model	R	R Square	Adjusted R Square	Standard Error of Estimate
1	0.68	0.462	0.461	12.34

Analysis and Interpretation

Table 4.12 shows the model summary of regression analysis. The R value is 0.68 and R Square value is 0.462. This means that cyberbullying explains 46.2% variance in psychological abnormality among school students. Thus, cyberbullying is an important predictor of psychological abnormality.

Table 14(b): ANOVA Table for Regression Analysis

Model	Source of Variance	Sum of Squares	df	Mean Square	F-value	Significance
1	Regression	78265.40	1	78265.40	514.20	Significant at 0.01 level
	Residual	91025.60	598	152.22		
	Total	169291.00	599			

Analysis and Interpretation

Table 4.13 shows that the F-value is 514.20, which is significant at 0.01 level. It means that the regression model is statistically significant. Therefore, cyberbullying significantly predicts psychological abnormality among school students.

Table 14(c): Regression Coefficient Showing Effect of Cyberbullying on Psychological Abnormality

Predictor Variable	Dependent Variable	Unstandardized Beta	Standard Error	Standardized Beta	t-value	Significance	Hypothesis Result
Cyberbullying	Psychological Abnormality	0.83	0.037	0.68	22.67	Significant at 0.01 level	Rejected

Analysis and Interpretation

Table 4.14 shows the regression coefficient of cyberbullying on psychological abnormality. The unstandardized beta value is 0.83 and the standardized beta value is 0.68. The obtained t-value is 22.67, which is significant at 0.01 level. Therefore, the null hypothesis is rejected. It means that cyberbullying has a significant positive effect on psychological abnormality among school students.

Regression equation: **Psychological Abnormality = 34.25 + 0.83 × Cyber bullying**. This equation indicates that for every one-unit increase in cyberbullying score, psychological abnormality score increases by 0.83 points.

12. Testing of Hypotheses**Table 15: Summary of Hypotheses Testing**

Hypothesis No.	Hypothesis	Statistical Technique	Result	Decision
1	There is no significant difference in cyberbullying between boys and girls studying in schools.	t-test	Significant difference found. Boys scored higher.	Rejected
2	There is no significant difference in psychological abnormality between boys and girls studying in schools.	t-test	Significant difference found. Girls scored higher.	Rejected
3	There is no significant difference in cyberbullying between rural and urban school students.	t-test	Significant difference found. Urban students scored higher.	Rejected
4	There is no significant difference in psychological abnormality between rural and urban school students.	t-test	Significant difference found. Urban students scored higher.	Rejected
5	There is no significant difference in cyberbullying between government and private school students.	t-test	Significant difference found. Private school students scored higher.	Rejected
6	There is no significant difference in psychological abnormality between government and private school students.	t-test	Significant difference found. Private school students scored higher.	Rejected
7	There is no significant relationship between cyberbullying and psychological abnormality among school students.	Correlation	Significant positive relationship found.	Rejected
8	There is no significant effect of cyberbullying on psychological abnormality among school students.	Regression Analysis	Significant positive effect found.	Rejected

13. Major Findings from Data Analysis

- The majority of school students were found at the moderate level of cyberbullying.
- The majority of school students were found at the moderate level of psychological abnormality.
- Boys showed significantly higher cyberbullying than girls.
- Girls showed significantly higher psychological abnormality than boys.
- Urban students showed significantly higher cyberbullying than rural students.
- Urban students showed significantly higher psychological abnormality than rural students.
- Private school students showed significantly higher cyberbullying than government school students.
- Private school students showed significantly higher psychological abnormality than government school students.
- A significant positive relationship was found between cyberbullying and psychological abnormality.
- Cyberbullying had a significant positive effect on psychological abnormality.
- Cyberbullying explained 46.2% variance in psychological abnormality.
- As cyberbullying increased, psychological abnormality also increased among school students.

14. Findings, Conclusions and Educational Implications**❖ Major Findings of the Study**

- The majority of school students were found at the moderate level of cyberbullying.
- Out of 600 students, 172 students, that is 28.67%, were found at the low level of cyberbullying.
- Out of 600 students, 334 students, that is 55.67%, were found at the moderate level of cyberbullying.
- Out of 600 students, 94 students, that is 15.66%, were found at the high level of cyberbullying.

5. The majority of school students were found at the moderate level of psychological abnormality.
6. Out of 600 students, 154 students, that is 25.67%, were found at the low level of psychological abnormality.
7. Out of 600 students, 326 students, that is 54.33%, were found at the moderate level of psychological abnormality.
8. Out of 600 students, 120 students, that is 20.00%, were found at the high level of psychological abnormality.
9. Boys showed significantly higher cyberbullying than girls.
10. Girls showed significantly higher psychological abnormality than boys.
11. Urban students showed significantly higher cyberbullying than rural students.
12. Urban students showed significantly higher psychological abnormality than rural students.
13. Private school students showed significantly higher cyberbullying than government school students.
14. Private school students showed significantly higher psychological abnormality than government school students.
15. A significant positive relationship was found between cyberbullying and psychological abnormality.
16. The correlation value between cyberbullying and psychological abnormality was 0.68.
17. Cyberbullying had a significant positive effect on psychological abnormality.
18. Cyberbullying explained 46.2% variance in psychological abnormality.
19. The regression equation was: Psychological Abnormality = $34.25 + 0.83 \times \text{Cyberbullying}$.
20. The overall result shows that cyberbullying is an important predictor of psychological abnormality among school students.

❖ **Conclusions of the Study**

On the basis of the findings, it may be concluded that cyberbullying is present among school students at a noticeable level. Most students were found at the moderate level of cyberbullying. This indicates that students are exposed to online teasing, abusive messages, threatening comments, digital exclusion, fake accounts, trolling, rumours and other forms of online harassment. Cyberbullying should therefore be treated as an important school mental-health and digital-safety issue. It may also be concluded that psychological abnormality is present among school students at the moderate level. This means that many students experience emotional and behavioural problems such as anxiety, depression, fear, stress, aggression, withdrawal, loneliness, irritability and poor concentration. Such problems may interfere with academic learning, peer relationships and personality development.

The study concludes that boys show higher cyberbullying than girls, while girls show higher psychological abnormality than boys. This suggests that boys may be more involved in direct digital aggression, while girls may experience greater emotional disturbance due to cyberbullying. However, both boys and girls need cyber-safety awareness, emotional support and counselling. The study further concludes that urban and private school students show higher cyberbullying and psychological abnormality than rural and government school students. This may be due to greater access to smartphones, Internet use, social media exposure, academic competition and online peer interaction among urban and private school students. The most important conclusion of the study is that cyberbullying and psychological abnormality are significantly and positively related. It means that as cyberbullying increases, psychological abnormality also increases. Regression analysis also confirmed that cyberbullying has a significant positive effect on psychological abnormality. Therefore, cyberbullying may be considered an important risk factor for psychological abnormality among school students.

❖ **Discussion of Results**

The finding that most students have a moderate level of cyberbullying is meaningful because digital communication has become common among school students. Students use smartphones, messaging applications, social media, online games and digital learning platforms regularly. This increased digital involvement creates opportunities for communication and learning, but it also increases the risk of cyberbullying. Online abuse, digital exclusion, fake accounts and humiliating posts may disturb the emotional life of school students. The finding that most students have moderate psychological abnormality indicates that emotional and behavioural problems are present among school students. Cyberbullying may lead to anxiety, depression, fear, shame, anger, social withdrawal, low self-esteem and poor academic concentration. These problems may become serious if students do not receive support from parents, teachers and counsellors. The finding that boys show higher cyberbullying than girls may be related to greater involvement of boys in online gaming, aggressive humour, digital risk-taking and

direct online conflict. Boys may be more involved in cyberbullying behaviour as perpetrators or active participants. On the other hand, girls showed higher psychological abnormality, which may indicate greater emotional sensitivity to online humiliation, social rejection, body shaming and relational cyber bullying.

The higher cyber bullying and psychological abnormality among urban students may be explained by higher digital exposure. Urban students may have more access to smartphones, high-speed Internet, social media platforms and online peer groups. Similarly, private school students may have greater device access and stronger online networks, which may increase both cyberbullying exposure and psychological pressure. The positive correlation between cyberbullying and psychological abnormality is the central finding of the study. It indicates that cyberbullying is closely associated with emotional and behavioural disturbance among school students. The regression result shows that cyberbullying explains 46.2% variance in psychological abnormality. This means that cyberbullying is a strong predictor of psychological abnormality, although other factors such as family environment, school climate, peer support, personality and Internet-use pattern may also play important roles.

❖ **Educational Implications of the Study**

1. Schools should recognize cyberbullying as a serious educational and psychological problem.
2. Cyber-safety education should be included in school programmes.
3. Students should be taught responsible digital behaviour and digital citizenship.
4. Schools should develop clear anti-cyberbullying policies.
5. Teachers should be trained to identify signs of cyberbullying victimization.
6. School counsellors should screen students for anxiety, depression, withdrawal and aggression related to cyberbullying.
7. Parents should be included in cyberbullying awareness programmes.
8. Students should be encouraged to report cyberbullying without fear.
9. Schools should develop safe and confidential reporting systems.
10. Digital ethics should be included in value education.
11. Students should be taught empathy, respect and responsible online communication.
12. Schools should monitor misuse of digital groups created for academic purposes.
13. Cyberbullying victims should be provided emotional support and counselling.
14. Cyberbullying perpetrators should receive corrective counselling and behaviour guidance.
15. Schools should organize workshops on social media safety and online privacy.

❖ **Suggestions for Parents**

1. Parents should monitor the digital behaviour of their children.
2. Parents should talk openly with children about online safety.
3. Parents should not ignore signs of fear, sadness, withdrawal or sudden mood change.
4. Parents should teach children not to share private information online.
5. Parents should guide children not to respond aggressively to online harassment.
6. Parents should preserve evidence of cyberbullying such as screenshots and messages.
7. Parents should contact teachers or counsellors if cyberbullying affects the child.
8. Parents should avoid blaming the child for being cyberbullied.
9. Parents should set healthy screen-time rules.
10. Parents should encourage children to develop offline friendships and activities.

❖ **Suggestions for Teachers**

1. Teachers should create awareness about cyberbullying in classrooms.
2. Teachers should observe behavioural changes among students.
3. Teachers should identify students who become withdrawn, fearful or aggressive.
4. Teachers should not treat cyberbullying as a minor issue.
5. Teachers should encourage students to report online harassment.
6. Teachers should teach digital discipline and online ethics.
7. Teachers should avoid public humiliation of students in digital groups.
8. Teachers should guide students about respectful online communication.
9. Teachers should refer serious cases to school counsellors.
10. Teachers should cooperate with parents in cyberbullying cases.

❖ Suggestions for School Counsellors

1. School counsellors should conduct counselling sessions for cyberbullying victims.
2. Counsellors should assess anxiety, depression, stress and withdrawal among victims.
3. Counsellors should provide group guidance on digital safety.
4. Counsellors should help students develop coping skills.
5. Counsellors should work with cyberbullying perpetrators to reduce aggressive behaviour.
6. Counsellors should involve parents when needed.
7. Counsellors should maintain confidentiality of students.
8. Counsellors should conduct awareness programmes on online self-protection.
9. Counsellors should provide referral services for severe psychological cases.
10. Counsellors should support students in rebuilding confidence and social adjustment.

❖ Suggestions for School Administrators

1. Schools should frame anti-cyberbullying rules.
2. Schools should establish cyberbullying reporting committees.
3. Schools should appoint trained counsellors.
4. Schools should organize digital citizenship programmes.
5. Schools should conduct parent-teacher meetings on cyber safety.
6. Schools should monitor official class WhatsApp or online groups.
7. Schools should provide safe complaint mechanisms.
8. Schools should take quick action in cyberbullying cases.
9. Schools should provide mental-health support to victims.
10. Schools should collaborate with cyber-safety experts when necessary.

❖ Suggestions for School Students

1. Students should use digital platforms responsibly.
2. Students should not send abusive messages or humiliating comments.
3. Students should not share private photos or personal information of others.
4. Students should not create fake accounts to insult others.
5. Students should report cyberbullying to parents, teachers or counsellors.
6. Students should save evidence of cyberbullying.
7. Students should block and report abusive users.
8. Students should avoid forwarding rumours or offensive content.
9. Students should support classmates who are victims of cyberbullying.
10. Students should understand that online behaviour has real emotional effects.

❖ Suggestions for Policy Makers

1. Cyberbullying prevention should be included in school safety policies.
2. Digital citizenship education should be made compulsory.
3. Teacher training programmes should include cyberbullying awareness.
4. School counsellors should be appointed in all schools.
5. Cyber-safety curriculum should be developed for school students.
6. Parent awareness programmes should be promoted.
7. Mental-health support systems should be strengthened in schools.
8. Cyberbullying reporting and referral systems should be standardized.
9. Collaboration between schools, families and cybercrime units should be encouraged.
10. Research on cyberbullying and student mental health should be promoted.

15. Final Conclusion

The present study concludes that cyberbullying has a significant effect on psychological abnormality among school students. Most students were found at the moderate level of cyberbullying and psychological abnormality. Significant differences were found on the basis of gender, locality and school type. Boys showed higher cyberbullying, while girls showed higher psychological abnormality. Urban and private school students showed higher cyberbullying and psychological abnormality than rural and government school students. The correlation result showed a significant positive relationship between cyberbullying and psychological abnormality. Regression analysis further confirmed that cyberbullying significantly predicts psychological abnormality among school students. Therefore, cyberbullying is a serious risk factor for anxiety, depression, stress, aggression, withdrawal, low self-esteem and poor adjustment among students. The study highlights the need for cyber-safety education, digital citizenship, parental monitoring, teacher awareness, school counselling and strong anti-cyberbullying policies. Students should be taught to use digital platforms responsibly and respectfully. Schools, parents,

counsellors and policy makers must work together to prevent cyberbullying and protect the psychological health of school students.

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