

IMPACT OF CYBERBULLYING ON WELL-BEING OF TRANSGENDER COMMUNITY; A CASE STUDY OF SUKKUR & KHAIRPUR DISTRICT

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DOI: <https://doi.org/10.5281/zenodo.19941362>

Received
15 February 2026

Accepted
26 March 2026

Published
10 April 2026

ABSTRACT

Arousal of technology has given birth to the issues of Cyberbullying (CB). It has emerged across the world. Where the vulnerable groups have been suffering, especially transgender individuals become the victims of such emerging issue due to various reasons. Interestingly, there is no study, finding the link between, CB and the impact on Transgender individuals, carried in the Pakistan keeping in the view. This study has been designed to examine the relation of Cyberbullying with Self-Esteem (SE), Depression (DP), Anger (AG), mediating Suicidal ideation (SI), Suicidal Planning (SP), Suicidal Attempt (SA) among the transgender community in the Sukkur & Khairpur Districts of Sindh, Pakistan. Quantitative method has been implemented. The questionnaire was adopted with minor changes and distributed among 200 transgender individuals randomly. PLS Smart Software was employed to analyze the collected data. The findings of the study showed that CB have significant impact on SE but SE is not mediating between CB & SI. Because the values are not significant. Further it demonstrated that CB have a positive impact on Depression & DP is mediating CB & SP. Whereas the study has revealed that CB has the impact on Anger & Anger is mediating btw CB & SA. We suggest keeping view these results. Government lacks the proper legislation to control such social evil causing the problems for Trans community in Pakistan. Once their problem is resolved they could contribute in the economy and development alike other citizens.

Keywords: Mental Health, Well-Being, Cyberbullying, Suicidal Ideation, Planning & Attempt, Transgender, Pakistan

INTRODUCTION:

Cyberbullying refers to a form of bullying that takes place in virtual environments, such as social media platforms, messaging applications, or online forums. It involves harmful behaviors like

humiliation, harassment, threats, and the dissemination of false or sensitive information intended to damage the victim's reputation or emotional well-being. Unlike traditional bullying,

cyberbullying occurs through electronic devices such as smartphones, computers, and tablets, making it accessible at any time of the day. This constant availability makes it more intrusive and inescapable, often intensifying its psychological impact. One of its defining features is the ability to spread rapidly and reach a wide audience within seconds, amplifying the harm done to the victim. Common forms of cyberbullying include online harassment or threatening messages, spreading rumors or false accusations, exposing someone's private information (also known as "outing"), exclusion from online groups or communities, and impersonation or hacking of online accounts. These behaviors can severely affect individuals, especially those from marginalized groups, such as lesbian, gay, bisexual, transgender, queer, intersex, non-binary or otherwise gender non-conforming (LGBTQI+) youth. LGBTQI+ youth are at an increased risk of being bullied, both online and offline, because of their sexual orientation and gender identity. As of early 2024, the number of internet users worldwide has reached approximately 5.35 billion, representing over 66% of the global population. With the rise in internet usage, cyberbullying has become a widespread issue affecting users across all regions of the world (Kemp, 2024).

It means the issue of CB is prevailing across the world because of the easy & extensive use of the internet. And it is affecting the community specially the most vulnerable including woman, teen and transgender individuals. The paper is focusing on the issues & the consequences of cyberbullying that happens with the trans community. In Pakistan, transgender includes Hijras, Khawaja Sira, and others with gender non-conforming identities.

Keeping in view the above literature, we have designed this study to investigate the impact of cyberbullying on transgender individuals, especially in Sukkur Division of Sindh. According to the 2023 census, the transgender population in Sukkur Division stands at 284 (a 35% decline from 2017), with Sukkur District itself accounting for 74 individuals 57 urban and 17 rural. While cyberbullying has been documented globally, there is a distinct lack of localized data on its prevalence

and impact among transgender persons in Sukkur, underscoring the significance and timeliness of this research."

"Official figures from the 2017 Pakistan census place the transgender population between 10,418 and a revised 21,774 individuals. However, trans rights groups and researchers challenge these figures, estimating the true number to range from 100,000 to over 500,000. Globally, transgender individuals are estimated to represent between 0.6% and 1% of the population translating to 47-79 million people worldwide. This discrepancy underscores both the difficulty in accurately counting this marginalized group and the importance of our study in Sukkur Division, where local data remains scarce."

1. Census 2017

- The Pakistan Bureau of Statistics (PBS) reported **10,418** transgender individuals (0.005% of the 207 million PK population). Sindh accounted for 2,527 of them (24%) with 74% living in urban areas (tribune.com.pk).
- Ending urban/rural distribution: 55% urban, 45% rural.

2. PBS Final Census (2017)

- Later updates revised the total to **21,774** transgender persons:
 - Punjab: 12,435 (57%)
 - Sindh: 5,954 (27%).

3. Community Estimates

- Activists critique the PBS figures as significant undercounts. Estimates range from **100,000 to 500,000** transgender individuals in Pakistan (thenews.com.pk).

Global Estimates

There are no universal census figures for "all transgender persons." However, population studies suggest transgender identities appear in approximately 0.6% to 1% of adults worldwide. Based on a global population of ~7.9 billion, that approximates to 47 million to 79 million transgender individuals. The estimation of transgender populations globally, particularly in Asian regions like Pakistan, remains a

methodological and political challenge. According to UNDP (2017) and Winter et al. (2016), inconsistent definitions, lack of legal recognition, and social stigma reduce visibility and limit the accuracy of available data. Although precise global statistics on transgender populations are elusive due to non-standardized data practices, existing estimates from the WHO and the Williams Institute suggest that transgender individuals make up approximately 0.1% to 0.5% of the population worldwide (WHO, 2022; Flores et al., 2016).

In Asia, transgender individuals and their legal status are mixed, making it tough to get accurate numbers of the population. Old and visible transgender communities can be found in countries like India, Thailand, and Indonesia, though it is still difficult to ascertain their size, both because of the lack of standard methods of data capture and because of the enduring stigma these communities face (UNDP & APTN, 2017; Winter et al., 2016). Transgenders, also known as "Khawaja Siras" and "Hijras," endure ingrained discrimination and marginalization in Pakistan which has led to their invisibility and underreporting in the administrative details (Haque, 2022). Recent activities, however, by the activists, CSOs and legal reforms have endeavored to increase visibility and rights of the transgender community albeit multiple existing challenges (UNDP Pakistan, 2020). Such regional variations and structural challenges underscore the significance of research specific to the local population, as presented in this study about transgender population of Sukkur and Khairpur Districts, Sindh, Pakistan. In this age of digital technology and the internet, no one can deny that internet interactions are an everyday part of life. Statista (2024) That among the almost 8 billion

humans in the world today, more than 5.35 billion approximately 66 % of the global population now have access to the internet. Internet use differs according to age, but people spend on average about 6 hours 30 minutes on the internet per day, with 16–24 Yrs spending nearly 2 hours 30 minutes more than older adults (Global Web Index, 2024). In technologically developed countries like the U.S., internet use is higher still with almost 95% of people using this technology (U.S. Census, 2024).

Although connectivity and information dissemination have increased through such internet growth, along-with online risks particularly involving cyberbullying. Marginalized populations transgender people, in particular are disproportionately subjected to online harassment because of their visibility or appearances and societal exclusion. This is particularly the case in countries such as Pakistan where social stigma, digital illiteracy and weak legal safeguards exacerbate trans people's vulnerability in cyberspace (Razzak, 2015). The current research creates local connections to this world-wide concern and studies cyberbullying on transgender personnels in district Sukkur and Khairpur of Sindh.

Objectives:

- To find out the effects of Cyber-bullying on Self-esteem, Anger and Depression.
- To examine the impact of Self-Esteem on Suicidal Ideation, Anger on Suicidal Planning and Depression on Suicidal Attempts.
- To investigate the mediation of Depression between CB and Suicidal Attempts, Anger between CB and Suicidal Planning, Self-Esteem between CB and Suicidal Ideation

Research Model:

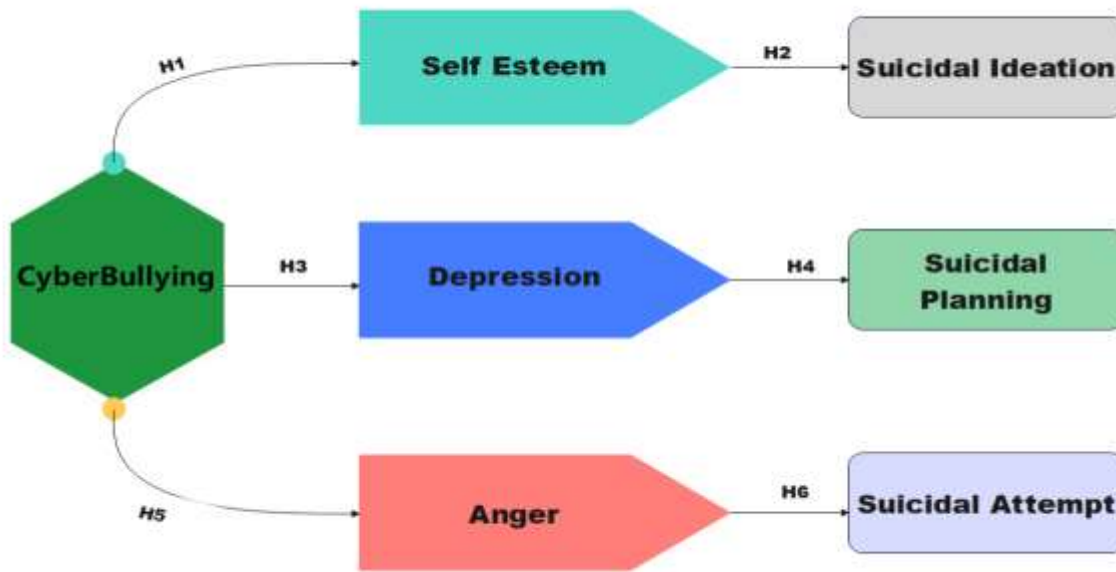


Figure 01: Describes the model & relationship among variables

Literature Review

Many academic studies have examined the intricate interrelationships among such psychological factors such as cyberbullying, self-esteem, anger, depression, and suicidal behavior, including ideation, planning, and attempts. Although a few studies have looked at the isolated effects of cyberbullying on mental health outcomes (e.g., depression, anxiety), there are fewer in number that have examined the confluence of these all of these factors including within populations such as transgender people which are the point of this investigation.

Cyberbullying

Cyberbullying is the commonly ongoing problem of the digital era, where harassment, threats, and exclusion are apprehended in digital worlds. Transgender people are known to experience elevated levels of cyberbullying victimization compared to their cisgender peers (James et al., 2016; Birkett et al., 2009). Cyberbullying on the Internet is particularly destructive because the

bully is often anonymous and the abuse can be archived online, which can be more harmful than traditional bullying as it does not have temporal or spatial limitations. Consistent with Grossman and D'Augelli (2007), one study found that experience with online victimization in transgender adolescents increases their sense of marginalized Anger, distress, and social isolation.

Self-Esteem

Being the victim of cyberbullying has a deep impact on self-esteem. For transgender people, who are already discriminated against in society, the negative impact of online abuse on self-worth is frequently reported. Grossman and D'Augelli (2007) found that transgender youth who experienced cyberbullying had significantly lower self-esteem than those who were not. Low self-esteem can be a port of entry into a host of negative emotional outcomes for students as well as a function of prolonged exposure to victimization.

Anger

This sense of violation and its accompanying sense of voicelessness may even evoke anger in victims of cyberbullying, something very commonly experienced by trans people. Katz-Wise et al. (2017) that frequent cyber victimization exposure could become accumulation of anger, and would be internalized by depressed mood or externalized as aggressive behavior or withdrawn behavior. Anger, in the presence of low social support, aggravates mental health and affects adaptations.

Depression

Depression is among the most commonly reported negative outcomes of bullying online. According to Katz-Wise et al. (2017) and Reisner et al. (2016) report that transgender young people who were subjected to cyberbullying were more likely to report having symptoms of depression than those who were not targeted. Depression is not just an emotional response, but is an expression of chronic stress, identity-related discrimination, and social exclusion. Also, the association between cyberbullying and depression is bidirectional and feed-forward: prolonged cyberbullying can exacerbate pre-existing depressive symptoms.

Suicidal Ideation, Planning, and Attempts

Fuchs Katz-Wise et al. (2017) demonstrated a disturbing pattern: transgender youth who faced cyberbullying were over twice as likely to endorse suicidality or to harm themselves over time. These results are consistent with those of Klomek et al. (2007) and van der Wal et al. (2003), who found a high degree of correspondence between the frequency of bullying and the likelihood of thinking or attempting suicide. Highly logical is Agnew's social psychological strain theory (2006) that also account for the fact that the social strain, like the cyberbullying psychosocial phenomena could drive vulnerable individuals from deviant or destructive coping strategies. Depression serves as a mediator between victimization and suicidal behavior, indicating the need for early mental health intervention. The synergy between cyberbullying, low self-esteem, anger and depression creates a psychological tunnel which

results in suicidal planning and attempts, particularly in serious situations.

Related Work on Cyber-Harassment and Sexual Minority Youth

Studies have consistently demonstrated that cyberbullying is a significant risk factor for the physical and psychological well-being of adolescents and young adults, with an association to problems such as worsening academic performance, substance use, and suicide (Flanagan, 2014; Pham & Adesman, 2015). A review of 25 empirical studies by Aboujaoude et al. (2015) found out that around 20-14% of children and young people had suffered some kind of cyberbullying. These results highlight the imperative role of schools, mental health professionals, and policy makers in taking a joint-action to protecting today's youth from digital risks.

While a robust literature on (i.e., traditional) bullying among LGBTQ youth has been established, the number of studies focused directly on the issue of cyberbullying in sexual and gender minority groups is still low. The evidence that is available, however, is troubling. LGBTQ students receive a disproportionate degree of harassment, violence, and victimization in school relative to their cisgender and heterosexual peers (Black et al., 2012; Espelage et al., 2015; Kosciw et al., 2016). This type of victimization has been linked to a number of negative outcomes, including lower academic achievement, increased depressive symptoms, lower self-esteem, and more experiences of suicidal ideation and attempts (Kosciw et al., 2016; Montoro et al., 2016).

One national study conducted by the Centers for Disease Control and Prevention (Kann et al., 2016) revealed that LGBT high school students experienced bullying and violence at significantly greater levels. For instance, compared to 18.5% of heterosexual students, 34.5% reported being bullied at school and 17.8% reported being forced to engage in sexual contact (5.4% of heterosexual students).

Regarding cyberbullying, in particular, sexual minorities are considered one of the most susceptible target groups (Aboujaoude et al., 2015;

Zych et al., 2015). Collier et al. (2013), in a systematic review of 39 empirical studies, found that identity-based victimization is strongly linked with increased rates of depression, suicidality, and substance use among gender-expansive youth. However, to date, there remains a lack of comprehensive systematic reviews focusing exclusively on the effects of cyberbullying within LGBTQ populations. This gap highlights the critical need for further research—particularly in underrepresented regions like Pakistan on how cyberbullying impacts the psychological well-being of transgender individuals.

Research Gap

Despite the growing body of international literature on these interrelated issues, there remains a noticeable gap in localized research particularly in Pakistan, and more specifically in Sindh province. Although a few studies have been conducted nationally and provincially, no known empirical studies exist that examine the impact of cyberbullying on the psychological well-being of transgender individuals in the Sukkur Division. This study aims to fill that critical gap by exploring the relationships among cyberbullying, self-esteem, anger, depression, and suicidal behaviors in this underserved population.

Theoretical Framework

This model depicts the proposed connection of cyberbullying (independent variable) to a set of psychological well-beings (dependent variables) of transgender people. It also includes mediators such as self-esteem, anger, depression, and suicidal behaviors.

This study draws upon two interrelated theoretical foundations:

1. Agnew's General Strain Theory (GST-1992)

Agnew's General Strain Theory postulates that individuals who experience strain or stress particularly from negative social interactions such as abuse, discrimination, or bullying are more likely to develop negative emotional responses such as anger, depression, or frustration, which may eventually lead to deviant or self-harming

behavior. In the context of this study, cyberbullying is conceptualized as a form of strain that can disrupt emotional stability, potentially resulting in low self-esteem, aggressive reactions, or suicidal ideation and attempts.

GST helps explain how repeated online harassment (strain) may increase negative affect (anger, depression), reduce self-worth (self-esteem), and provoke suicidal thoughts or behaviors in transgender individuals.

2. Minority Stress Theory (Meyer, 2003)

Minority Stress Theory emphasizes that individuals from marginalized groups such as transgender people experience chronic stress due to their stigmatized identity. These stressors include social rejection, discrimination, internalized transphobia, and victimization (including cyberbullying). These cumulative stressors compromise mental well-being, contributing to depression, low self-esteem, and suicidal behavior.

This theory contextualizes how cyberbullying functions not just as individual aggression but as a form of systemic stress experienced by transgender individuals due to their gender identity, worsening their mental health outcomes.

Conceptual Framework

This framework illustrates the hypothesized relationship between cyberbullying (independent variable) and various indicators of psychological well-being (dependent variables) among transgender individuals. It also captures mediating and outcome variables such as self-esteem, anger, depression, and suicidal behaviors.

Key Variables:

Independent Variable (IV):

- Cyberbullying

Dependent Variables (DVs):

- Self-Esteem
- Anger
- Depression
- Suicidal Ideation
- Suicidal Planning
- Suicidal Attempt

Research Design

This paper employed a quantitative research design and a structured questionnaire to gather data from transgender people living in two districts of the Sukkur Division, namely Sukkur and Khairpur. The goal of adopting that approach was to collect such data that could be used to examine if and how cyberbullying affects the mental health of transgender people.

A purposive sampling approach will be used for the inclusion of the participants. This non-probability sampling approach was used with the intention of engaging individuals with direct experiences and knowledge of cyberbullying in order to increase the credibility and

meaningfulness of the responses. We purposely chose Sukkur and Khairpur as the study settings to explore the transgender community in a specific geographic and sociocultural setting. These areas represent diverse urban and semi-urban populations and provide an appropriate setting to explore the digital vulnerabilities, coping mechanisms, and psychological consequences faced by the transgender community in response to online harassment. By focusing on these districts, the study seeks to contribute a localized and contextually grounded understanding of how cyberbullying affects transgender individuals an area that remains under-researched in Pakistan, especially in Sindh province.

VARIABLES & HYPOTHESIS:

Table 02 demonstrates the Hypothesis and Mediating Effects of different Variables.

Variables	Hypothesis	Mediating Effect
Dependants Cyberbullying	H1: There is relation between CB and Self-Esteem	Self-Esteem mediates between CB & SI
Self-Esteem & Suicidal Ideation	H2: There is relation between Self-Esteem & Suicidal Ideation	
Cyberbullying Depression	H3: There is relation btw Cyberbullying & Depression	Depression mediates between CB and Suicidal planning
Depression & Suicidal Planning	H4: There is relation between Depression & Suicidal Planning	
Cyberbullying & Anger	H5: There is relation between Cyberbullying & Anger	Anger mediates between CB and Suicidal Attempt
Anger & Suicidal Attempt	H6: There is relation between Anger and Suicidal Attempt.	

Measurement of Variables

In this study, the variables Suicidal Ideation, Suicidal Planning, and Suicidal Attempt are conceptualized as distinct components along the continuum of suicidal behavior, each representing a different level of psychological severity and risk. These constructs are measured separately to capture the nuanced nature of suicidal tendencies among transgender individuals.

Suicidal Ideation refers to thoughts about ending one's life, and it is classified into two categories: passive and active ideation. Passive suicidal

ideation occurs when an individual wishes to die or believes that life is not worth living, without forming any specific plan. On the other hand, active suicidal ideation is characterized by thoughts of suicide accompanied by an intention and a plan to complete it. This difference is essential in evaluating the degree of risk and the necessity of intervention.

Planning for suicide refers to planning and specifying how, when, and where one will attempt to kill oneself. It encompasses preparatory acts, like acquiring a method (eg, pills, a sharp object),

selecting a time and location, or arranging one's affairs in advance of a suicide attempt. Suicidal planning indicates a high-risk phase and is generally associated with an increase in the immediacy and severity of the person's plan to commit suicide. It also creates the possibility for intervention with timely social or mental health supports.

Suicidal Attempt is operationalized as any self-injurious behavior with the intention of causing death, which does not result in a fatal outcome. Suicide attempts may vary in method and intensity but are consistently recognized as a major predictor of future suicide and are associated with physical injury, emotional trauma, and psychological deterioration. Individuals who attempt suicide typically require urgent clinical evaluation and continued psychosocial support. Each of these variables is assessed using standardized questionnaire items, adapted from validated scales in existing literature, and tailored to the local context to ensure relevance and sensitivity when addressing the transgender population in the Sukkur and Khairpur districts.

Descriptive Analysis

To collect primary data for this study, a total of 400 questionnaires were distributed: 300 were distributed physically and 100 were shared through social media platforms. Of the total responses received, 310 questionnaires were returned. Upon review, 43 responses were excluded due to incomplete data, and 67 more were removed due to irrelevant or inconsistent information. After this screening process, 200 fully completed and relevant questionnaires were retained for analysis.

Gender Identity Distribution

Among the 200 respondents, the majority identified as Transgender Women (64.1%), followed by Transgender Men (35.9%). Additionally, 1 individual (0.5%) identified as Gender Non-conforming, and 1 individual (0.5%) as non-binary. This demographic breakdown highlights the diversity of gender identities within the transgender population in Sukkur and Khairpur districts.

Sexual Orientation

The analysis of sexual orientation revealed that 43 individuals (21.5%) identified as Heterosexual, 70 (35%) as homosexual, and 83 (41.5%) as Bisexual. A smaller portion, 4 respondents (2%), identified as Asexual. This indicates a broad spectrum of sexual orientations within the transgender community, reflecting complex personal identities that go beyond binary classifications.

Ethnic Background

The ethnic distribution of respondents shows that 77 individuals (38.5%) were Sindhi, followed by 54 (27%) Urdu-speaking, 34 (17%) Punjabi, and 26 (13%) Siraiki. Smaller groups included 6 Pashto-speaking individuals (3%) and 3 individuals (1.5%) from other linguistic backgrounds. This diverse ethnic representation enhances the regional validity of the study and provides a more comprehensive view of cyberbullying experiences across different cultural identities.

Educational Background

A large proportion of the sample, which was contributed by 115 participants (57.5%) for primary education and 28 people (14%) for matriculation. In addition, 11 individuals (5.5%) had a secondary education and 7 subjects (3.5%) had a bachelor level of education. Significantly, 39 respondents (19.5%) reported no formal schooling, signaling considerable levels of educational exclusion for transgender people in these regions.

Employment Status

In terms of employment, 103 people (51.5%) described themselves as self-employed, showing high dependency on informal or entrepreneurial types of income. On the other hand, there were 71 candidates (35.5%) participants who were unemployed, highlighting the economic challenges in the lives of many transgender persons. Only 17 trans people (8.5%) subjects had full-time working and 9 individuals (4.5%) had part-time work. Such work employment behavior reflects a larger social-structural struggle, indicating a lack of demand for gender-affirming

work opportunities and skills training that is inclusive of transgender people.

Statistical Analysis (Partial Least Squares – PLS) Detailed Description of Path Analysis: Direct Effects

This section focuses on the results of the path analysis method using Partial Least Squares Structural Equation Modeling (PLS-SEM) and the direct effects interaction of the psychological variables Cyberbullying, Self-Esteem, Depression, Anger, Suicidal Ideation, Suicidal Planning, and Suicidal Attempt under the study. Thus, the findings in a table show the degree to which elements have significant, positive and negative associations between themselves.

Cyberbullying → Self-Esteem

The result indicates that cyberbullying has a positive and significant association with self-esteem. The value of path coefficient is 0.41 with respect to T-statistic = 5.94, and P-value = 0.00. This shows the effect to highly significant. This implies that in this sample of students, a higher frequency of cyberbullying perpetration is also related to higher levels of self-esteem. That this may seem counterintuitive is likely the result of a psychological defense mechanism, wherein certain people develop a sense of resilience or opposition to the victimization process. Cyberbullying (CB) is associated with Self-Esteem (SE), which is sensitive to both adaptive and reactive psychological reactions.

Self-Esteem → Suicidal Ideation

The path from self-esteem to suicidal ideation is positive but statistically insignificant. The coefficient is 0.03, the T-statistic is low, and the P-value is 0.67, indicating no meaningful relationship. This suggests that within the sample, variations in self-esteem do not significantly predict suicidal ideation. This path is unsupported, highlighting that self-esteem may not directly influence suicidal thoughts in the presence of more dominant psychological stressors such as depression or anger.

Cyberbullying → Depression

A strong and statistically significant relationship exists between cyberbullying and depression. The coefficient is 0.53, with a T-statistic of 10.33 and a P-value of 0.00, confirming a high level of significance. This finding supports the premise that cyberbullying contributes substantially to increased depressive symptoms among transgender individuals. As cyberbullying experiences intensify, the likelihood and severity of depressive episodes increase significantly, consistent with previous literature on psychological trauma.

Depression → Suicidal Planning

The relationship between depression and suicidal planning is also significant and positive, with a path coefficient of 0.50, a T-statistic of 7.59, and a P-value of 0.00. This indicates that individuals who report higher levels of depression are more likely to engage in suicidal planning. Depression serves as a critical antecedent to suicidal planning, underlining the urgency of early psychological intervention in at-risk individuals.

Cyberbullying → Anger

This path shows one of the strongest relationships in the model. The coefficient is 0.84, the T-statistic is 23.93, and the P-value is 0.00, reflecting a highly significant and powerful positive effect. The data indicate that individuals experiencing cyberbullying report markedly elevated levels of anger. Cyberbullying has a profound impact on emotional regulation, specifically by heightening anger responses among victims.

Anger → Suicidal Attempt

The analysis reveals a positive and statistically significant relationship between anger and suicidal attempts, with a coefficient of 0.10 and a P-value of 0.02. Although the strength of this relationship is relatively modest, it remains statistically meaningful. Increased anger is linked to a higher likelihood of engaging in suicidal behavior. While the effect is weaker than other variables such as depression, it nonetheless plays a critical role in predicting suicide risk.

Table 03 demonstrates that the path analysis of different variables.

Path Analysis (Direct Effects)					
Variables	Co-efficient	Standard deviation (STDEV)	T statistics (O/STDEV)	P values	Remarks
Anger -> SA	0.10	0.04	2.41	0.02	Supported
CB0 -> Anger	0.84	0.04	23.93	0.00	Supported
CB -> DP	0.53	0.05	10.33	0.00	Supported
CB -> SE	0.41	0.07	5.94	0.00	Supported
DP -> SP	0.50	0.07	7.59	0.00	Supported
SE -> SI	0.03	0.06	0.43	0.67	Unsupported

Conclusion

This study has shed light on the complex and interrelated effects of cyberbullying on the psychological well-being of transgender individuals in Sukkur and Khairpur districts, focusing particularly on the variables of self-esteem, depression, anger, suicidal ideation, suicidal planning, and suicidal attempt. The findings strongly confirm that cyberbullying serves as a major psychological stressor, significantly contributing to elevated levels of depression and anger, both of which are closely associated with suicidal behaviors.

Even though the association between self-esteem and suicidal thoughts is not statistically significant, its general and psychological relevance cannot be ignored, particularly in the case of a vulnerable group as transsexual women. Depression is identified as a main mediator especially affecting suicidal planning whereas anger became the most important variable associated with attempted suicide. Such findings further highlight the pressing need for mental health interventions focusing not only on depressive symptoms but also on anger management and emotional regulation strategies.

Such high rates of cyberbullying and associated psychiatric morbidity highlight the need for both systemwide responses, including efforts to promote digital safety and mental health outreach and support for trans population, which are mostly at risk. Transgender people, who are already subjected to systemic discrimination and

social stigma, experience unique forms of vulnerability online that require specific, inclusive policy consideration.

Limitations of the Study:

Although this research provided a valuable insight into the psychological consequences of cyberbullying among transgender respondents from Sukkur and Khairpur, there were many limitations which need to be taken into consideration while interpreting these findings and designing future studies. There are a few limitations of this study, first, the study was limited to the only two districts of Sindh province. Although these contexts yield valuable information, they might not adequately represent the different experiences of transgender individuals in other parts of Pakistan, especially in villages and slums. A more diverse sample of respondents across provinces, socio-economic classes, age and education groups would provide a more national view on the subject.

Second, the research treated the phenomena quantitatively through structured survey instruments that may miss the long, emotional depth, personal narratives, and cultural complexity embedded in transgender life-worlds with cyberbullying. Qualitative approaches, such as in-depth interviewing or focus groups, could be useful elements of future research to achieve a more nuanced and more detailed understanding of the impact of online harassment on individual mental health and identity. Moreover, our research is cross-sectional and therefore, we are

not able to compare mental health outcomes over time. A longitudinal approach would allow for a more robust analysis of the sustained psychological impact of cyberbullying and of the efficacy of coping strategies or support interventions over time.

Finally, using self-report data is a limitation with the potential of social desirability bias or under-reporting, particularly of sensitive variables such as suicidal ideation and attempts. Future investigations need to include clinical evaluations or mental health screenings or third-party reports, when appropriate ethically, to improve the credibility of the results. Overall, this study is an important initial effort to begin to comprehend the cyberbullying experiences facing transgender youth in underserved districts; however, its limitations highlight the necessity for more expansive, inclusive, methodologically varied research to inform policy and support mechanisms that are more responsive to the needs of marginalized populations.

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