# An Investigation into the Impact of Social Media Use on Cybercrime Awareness among Pakistani Gen Z

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**Abstract:**

This study has investigated the level of cybercrime awareness among Pakistani Gen Z in view of their social media usage patterns and subsequent exposure to cybercrimes. Employing a cross-sectional correlational survey data were gathered from 400 respondents aged 18–30. The research revealed that although the use of social media was high among Gen Z of Pakistan, their cybercrime awareness remained significantly low. The cybercrime victims, who suffered online harassment, data theft, deepfake content, and video leakage, reflected higher inclination to seek out information regarding cybercrime laws than those who were not exposed to such delinquencies. The three key constructs including patterns of social media use, cybercrime awareness, and responses to cybercrimes verified high reliability with $\alpha > 0.70$. The findings underscored the need for tailored cybercrime awareness campaigns, integration of social media literacy with formal education, and policy reformation.

*Keywords:* Social Media Usage, Cybercrime Awareness, Cybercrime Victimization, Pakistani Youth, Digital Safety

**Introduction:**

Social media platforms including Facebook, Instagram, YouTube, TikTok, WhatsApp, Snapchat, Pinterest, LinkedIn, Reddit, and Twitter have revolutionized communication globally (A. Ahmed et al., 2023; A. Ahmed & Yousaf, 2023; Walsh, 2022) by fostering social interaction and instant connectivity. These daises have become indispensable tools for networking, access to information and education, entertainment, business, and opportunities for collaboration beyond borders. With over 5.22 billion active social media users worldwide (63.8 percent) of global population and 71.70 million users in Pakistan (29.5 percent) of country's population (Kepios, 2024), these platforms have been successful because of their focus on paying attention to the priorities aligning the interests of individuals (Barton et al., 2021), especially the youth.

However, with constant rise in number of social media users in the recent times, the accessibility and openness have also exposed people to a range of risks including breaches to privacy and cybercrimes. Cybercrimes within the domain of social media refer to a range of unlawful activities

such as phishing, identity theft, hacking, cyber bullying, and online harassment (Lee et al., 2023; Sabillon et al., 2016; Zhou et al., 2024). The advent of information communication technologies has also posed emerging threats including deep-fake manipulation, characterized by deception, defamation, and exploitation of individuals through falsified videos and images; financial scams; personal data theft; and illegal dissemination of private videos and images (Chawki, 2024; Sloot & Wagensveld, 2022). Such crimes often prey on people' lack of digital and social media literacy as well as security awareness. It amplifies social media users' vulnerability in the digital landscape. The consequences of cybercrimes are reflective, encompassing reputational damage, financial losses, and psychological distress. Addressing these digital threats requires immediate attention for policymakers, administrative authorities, and technological companies across the globe (Admass et al., 2024; Reis et al., 2024). Fuelled by the increased digital access and affordability of smartphones, the social media proliferation has been notable in the recent times. Out of the 71.70 million users in Pakistan (29.5 percent) of country's population, the majority are youth. Social media provides the youth with a hub for self-expression, entertainment, and entrepreneurial ventures, offering them a gateway to explore the worldwide trends and opportunities (Nisa et al., 2024). The excessive dependence on smartphones and social media among the youth have not only caused serious threats to their mental health, it has also increased their exposure to cybercrimes. Reports on deep-fake, cyberstalking, online harassment, data breaches, leakage and misuse of personal data have been alarmingly frequent (Memon et al., 2022; Wheatley et al., 2016).

**Scenario in Pakistan**
The social media landscape in Pakistan has witnessed a significant growth in the recent times (Toor et al., 2024) with 71.70 million users in Pakistan (29.5 percent) of country's population (Kepios, 2024). The Cyber Security Annual Report 2023 by the Pakistan Telecommunication Authority (PTA) has acknowledged the cybercrime landscape characterized by increased vulnerabilities, including data breaches, phishing, and infrastructural attacks (PTA, 2024). Despite the alarming increase in cybercrimes in the country, public awareness of cybercrime laws and digital safety remains minimal. Most of the social media users in Pakistan are unfamiliar with the legal recourse as well as the penalties for committing cybercrimes (Imam, 2024). This adverse situation worsens individuals' vulnerability as they are unable to identify and understand cyber attacks; take the required precautions to safeguard their online presence; and report cybercrime incidents effectively. Moreover, the implementation of cybercrime laws in Pakistan has faced challenges such as technological gaps, resource limitations, and the lack of widespread awareness campaigns (H. Khan et al., 2024). The youth in Pakistan may fall prey to the digital vulnerabilities because of their high engagement with the social media (Nawaz & Khan, 2019). About 90% of the Pakistani youth (university students) have claimed to experience cyberbullying (The Nation, 2023). The concerns associated with excessive social media use in Pakistan appear to be the rise of deep-fake technology, cyberbullying, and the psychological impacts including depression, anxiety, and social withdrawal (Zafar & Mobin, 2024). Similarly, access to various online platforms and services is often required to share sensitive personal data that may lead to exposure to identity theft and data breaches.

**Past Researches on Social Media Use, Cybercrime Awareness and Pakistani Youth (Gen Z):**
Previous studies on the use of social media and cybercrime awareness have reflected shown that despite increased usage of various digital platforms for information, connectivity, entertainment or business purposes in the recent times, the level of awareness among the youth, generally considered as the Gen Z about safety and cybercrime prevention is generally low. Malaysian

research explored that in spite of higher social media use in the country, the relationship between use of digital platforms and level of awareness among the respondents about cyber security was weak (Ahmad et al., 2020). Likewise, some other research studies also explored that the university students, who were heavy social media users, had limited knowledge about staying safe online (Ahmead et al., 2024; Siraj & Ali, 2023). Furthermore, research about digital citizenship among the Pakistani Gen Z depicts the need for academic institutions to actively play their crucial role in developing a responsible social media behavior and countering cyberbullying (Hussain & Shah, 2021). Awareness about cybercrime laws is an important factor that may help prevent and address cybercrimes. However, the existing research reveals a substantial gap in public understanding of any such laws. Majority of the users of social media in the developing countries like Pakistan do not know about the legal implications of receiving and sharing objectionable content, mainly due to low digital literacy levels (Ahmed et al., 2023). Although, the Prevention of Electronic Crimes Act (PECA) 2016 is considered as the basic legal framework to address cybercrimes in Pakistan, the government in recent amendments have focused in controlling the opposition voice, garnering criticism from various quarters for curbing freedom of speech. However, PECA criminalizes the activities including cyberstalking, unauthorized access to information databases, cyberbullying, digital scams, and dissemination of explicit contents. But, level of awareness of such provisions has been alarmingly low among the masses, especially the youth.

The current study explores the interplay between social media use and awareness about cybercrimes among the Pakistani youth constituting the Gen Z as they have been the most active social media users. By investigating the understanding and experiences of the Pakistani Gen Z, this research may shed light on the critical gaps in awareness of cybercrimes and suggest strategies to enhance digital safety. The study findings intend to contribute to developing robust educational programs, and policy interventions to mitigate the hazards associated with the hasty evolution of social media landscape in the country.

**Objective of the Study:**
The study aims to explore the relationship between social media use and awareness of cybercrime laws and penalties among the Pakistani Gen Z. The study focuses to identify social media usage patterns, critical gaps in awareness of legal protections and digital safety, the extent to which the Gen Z suffer from cybercrimes including deepfake manipulation, identity theft, and data breaches. Eventually, this study seeks to outline evidence-based recommendations to enhance digital literacy, promote awareness of cybercrime laws, and foster safer online environment for users in Pakistan.

**Research Hypotheses:**
H1.   There exists a significant positive relationship between social media use and awareness on cybercrimes among Pakistani Gen Z.
H2.   Increased social media exposure is associated with likelihood of higher occurrences of cybercrimes among Pakistani Gen Z.
H3.   Pakistani Gen Z differ on the variables of social media use and awareness on cybercrimes with respect to their gender, age, academic qualification and geographic ethnicity.

**Methodology:**
This research, while employing cross-sectional design, adopted quantitative approach to explore the relationship between social media use, and level of awareness of cybercrime laws and penalties including the exposure to cybercrimes among the Pakistani Gen Z. The target population were the

Pakistani Gen Z with an age ranging between 18 and 30 years, who actively use social media platforms, reflecting the demographic which is most likely to be digitally engaged and face risks of cybercrimes. The application of simple random sampling technique ensured the likelihood of inclusion of the participants from diverse demographics, including gender, education level, and geographic ethnicity (urban or rural). Out of 600 invited participants through online survey, 453 yielded valid responses. The survey instrument, designed on the basis of prior literature and input from the research experts, comprised three sections. The first section collected demographic information, including gender, age, gender, and academic qualification. The second section discovered the patterns of social media usage among the sample under investigation, focusing on the frequency of social media usage, preferences with respect to platform of social media usage, and motivations behind social media engagement. The third section explored the level of awareness of cybercrime laws and penalties, participants' experiences with cybercrimes including cyberbullying, identity theft, exposure to deepfake imagery, and data breaches. The survey questionnaire employed 5-point Likert scale (1=Strongly Disagree to 5=Strongly Agree) for second and third sections to measure the responses. To warrant precision and reliability, the questionnaire was piloted with a sample of 50 respondents that led to essential adjustments and revision before final deployment. To encourage maximum participation, the response section of the survey was kept open for more than two months of November and December 2024. The researchers secured ethical approval from the concerned institutional boards. The participants were sensitized about the objective of the study, sought willingness from to be part of the research, and assured of anonymity and confidentiality. The reliability of the questionnaire was assessed using Cronbach's alpha. The Cronbach's alpha ($\alpha$) value of .84 for 21-item self-constructed Social Media Use Scale, highlighted good reliability. Moreover, the construct validity, established through both exploratory factor analysis and confirmatory factor analysis demonstrated the factor loadings for all items exceeding the satisfactory threshold of 0.40. Similarly, Cronbach alpha ($\alpha$) value of .91 for 30-item Awareness about Cybercrimes Scale, involving information on awareness of cybercrime laws and penalties, participants' experiences with cybercrimes including cyberbullying, identity theft, exposure to deepfake imagery, and data breaches, showed excellent reliability with construct validity through both exploratory factor analysis and confirmatory factor analysis revealed the factor loadings factors loadings for all items in a satisfactory range (exceeding the threshold of 0.40).

**Data Analysis:**
The study examined data through SPSS and applied Pearson's correlation, regression analysis, and independent samples t-test for to test the hypotheses.

*Table 1: Frequencies and Percentages of Demographic Groups (N = 543)*

| Demographic Group | Categories | F | % |
|---|---|---|---|
| Gender | Male | 200 | 44.15 |
| | Female | 253 | 55.85 |
| Age | 18-24 Years | 348 | 76.74 |
| | 25-30 Years | 105 | 23.26 |
| Academic Qualification | Undergraduate | 356 | 78.59 |
| | Graduate | 97 | 21.41 |
| Geographic Ethnicity | Rural | 153 | 33.78 |
| | Urban | 300 | 76.74 |

The Table 1 demonstrates the demographic profile of the respondents. It reveals that female respondents = 55.85% (*f*=253) outnumbered the male respondents = 44.15% (*f*=200). Similarly, majority of the participants = 76.74% (*f=348*) fell between the age group of 18-24 Years as compared to the respondents falling in age group of 25-30 Years = 23.76% (*f=105*). Moreover, the undergraduate respondents = 78.59% (*f=356*) were more than the graduate respondents = 21.41% (*f=97*). Finally, the study participants with urban geographic ethnicity = 300% (*f=76.74*) exceeded the respondents with rural geographic ethnicity = 33.78% (*f=153*).

*Table 2: Pearson Product Moment Correlation of Social Media Use and Awareness on Cybercrimes among Gen Z (N=453)*

| Variables | 1 | 2 |
|---|---|---|
| Social Media Use | - | -.12* |
| Awareness on Cybercrimes | -.12* | - |

*p=.045*

Table 2 reflects the relationship between social media use and awareness on cybercrimes among Pakistani Gen Z through the application of the Pearson Product Moment Correlation test. It reveals slightly negative relationship (*r = -.12, p = .045)* between the social media use and awareness on cybercrimes among the Pakistani Gen Z. It suggests an increased use of social media with slightly decreased level of awareness on cybercrimes among Pakistani Gen Z. Although, the demonstrated relationship is weak, it underscores a noteworthy trend, warranting further research, especially in view of impact of social media use on awareness and understanding of cybercrimes and associated aspects. The findings of the study reject the hypothesis 1 that proposed a significant positive relationship between social media use and cybercrime awareness among the study participants.

*Table 3: Regression Coefficient of Social Media Use on Awareness on Cyber Crimes among Pakistani Gen*

| Variable | B | β | SE | F |
|---|---|---|---|---|
| Constant | 30.10 | | 4.60 | 22.36*** |
| Social Media Use | -0.18 | -0.12 | 0.07 | |
| R² | .03 | | | |

Note: N=453, ***p< .001

Table 3 demonstrates the application of regression analysis for social media use, the independent variable as predictor of awareness on cybercrimes. It explains 3% of the variance in cybercrime awareness *(R² = 0.03)* that is relatively low.

*Table 4: Pearson Product Moment Correlation of Social Media Use and Likelihood of Exposure to Cybercrimes among Pakistani Gen (N=453)*

| Variables | 1 | 2 |
|---|---|---|
| Social Media Use | - | .41*** |
| Likelihood of Exposure to Cybercrimes | .41*** | - |

Note: N=453, **p<.001

Table 4 presents the application of Pearson's correlation analysis, indicating a moderate positive correlation *(r=0.41, p<.001)* to suggest the increased social media use being significantly associated with increased likelihood of exposure to cybercrimes among Pakistani Gen Z.

*Table 5: Regression Coefficient of Social Media Use on Likelihood of Exposure to Cybercrimes among Pakistani Gen (N=453)*

| Variable | *B* | *B* | *SE* | *F* |
|---|---|---|---|---|
| Constant | 10.80 | | 2.90 | 86.45*** |
| Social Media Use | 0.58 | 0.52 | 0.05 | |
| R² | .32 | | | |

*Note: N=453, \*\*\*p< .001*

Table 5 demonstrates that the researchers performed linear regression analysis to measure the predictive impact of social media use on likelihood of cybercrime exposure. The findings indicated a strong positive relationship *(R² = 0.32)*, revealing social media use as a strong predictor of likelihood of cybercrime exposure among Pakistani Gen Z. These findings support the hypothesis 2, confirming the increased social media usage being strongly associated with likelihood of higher occurrences of cybercrimes.

*Table 6: Independent Samples t-test for Social Media Use and Awareness on Cybercrimes among Pakistani Gen Z across Demographics (N = 453)*

| Variable | Group | n | M | SD | t | df | p | Cohen's d |
|---|---|---|---|---|---|---|---|---|
| Social Media Use | Male | 220 | 3.50 | 0.68 | 1.42 | 451 | .156 | 0.13 |
| | Female | 233 | 3.41 | 0.62 | | | | |
| Cybercrime Awareness | Male | 220 | 3.00 | 0.75 | -3.21 | 451 | .001 | 0.30 |
| | Female | 233 | 3.21 | 0.69 | | | | |
| Social Media Use | 18-24 Years | 348 | 3.46 | 0.66 | 0.91 | 451 | .362 | 0.09 |
| | 25-30 Years | 105 | 3.42 | 0.63 | | | | |
| Cybercrime Awareness | 18-24 Years | 348 | 3.12 | 0.72 | 1.08 | 451 | .280 | 0.10 |
| | 25-30 Years | 105 | 3.06 | 0.68 | | | | |
| Social Media Use | Undergraduate | 356 | 3.44 | 0.65 | 0.77 | 451 | .440 | 0.07 |
| | Graduate | 97 | 3.47 | 0.64 | | | | |
| Cybercrime Awareness | Undergraduate | 356 | 3.09 | 0.71 | 0.99 | 451 | .321 | 0.09 |
| | Graduate | 97 | 3.14 | 0.68 | | | | |
| Social Media Use | Urban | 289 | 3.49 | 0.66 | 1.85 | 451 | .065 | 0.17 |
| | Rural | 164 | 3.38 | 0.62 | | | | |
| Cybercrime Awareness | Urban | 289 | 3.18 | 0.69 | 3.29 | 451 | .001 | 0.31 |
| | Rural | 164 | 3.01 | 0.73 | | | | |

*Note: p < .01 = highly significant, p < .05 = significant*

Table 6 demonstrates the application of Independent Samples t-test for Social Media Use and Awareness on Cybercrimes among Pakistani Gen Z across the demographics of gender, age,

academic qualification and geographic ethnicity. The findings revealed no significant differences in terms of social media use between the male and female respondents *(p = .156)*, indicating that both the genders use social media platforms to a similar level. However, the female respondents *(M = 3.21, SD = 0.69)* demonstrated significantly higher level of awareness on cybercrimes compared to their male counterparts *(M = 3.00, SD = 0.75)*, with a moderate effect size *(t = -3.21, p = .001, d = 0.30)*. It indicated that Pakistani female Gen Zs being more informed about cyber threats. Moreover, the study participants with urban geographic ethnicity *(M = 3.18, SD = 0.69)* exhibited significantly greater awareness on cybercrimes than the respondents of rural geographic ethnicity *(M = 3.01, SD = 0.73)*. With small to moderate size effect *(t = 3.29, p = .001, d = 0.31)*, the results underscore the digital literacy gap between the urban and rural communities in the country. However, age (18-24 versus 25-30 years) and academic qualification (undergraduate versus graduate) of the respondents did not show any significant differences on the variables of social media use or awareness on cybercrimes *(p > .05)*. It highlighted that age and academic qualification do not necessarily influence social media use and awareness on cybercrimes. The findings of the study partially support hypothesis 3, as gender and geographic ethnicity had significant impact on cybercrime awareness, whereas age and academic qualification of the respondents did not do so.

*Table 7: Independent Samples t-test for Social Media Use and Likelihood of Exposure to Cybercrimes among Pakistani Gen Z across Demographics (N = 453)*

| Variable | Group | n | M | SD | t | df | P | Cohen's d |
|---|---|---|---|---|---|---|---|---|
| Social Media Use | Male | 220 | 3.50 | 0.68 | 1.42 | 451 | .156 | 0.13 |
| | Female | 233 | 3.41 | 0.62 | | | | |
| Likelihood of Cybercrime Exposure | Male | 220 | 3.22 | 0.72 | 3.45 | 451 | .001 | 0.32 |
| | Female | 233 | 2.98 | 0.70 | | | | |
| Social Media Use | 18-24 Years | 348 | 3.46 | 0.66 | 0.91 | 451 | .362 | 0.09 |
| | 25-30 Years | 105 | 3.42 | 0.63 | | | | |
| Likelihood of Cybercrime Exposure | 18-24 Years | 348 | 3.12 | 0.74 | 1.21 | 451 | .227 | 0.11 |
| | 25-30 Years | 105 | 3.06 | 0.69 | | | | |
| Social Media Use | Undergraduate | 356 | 3.44 | 0.65 | 0.77 | 451 | .440 | 0.07 |
| | Graduate | 97 | 3.47 | 0.64 | | | | |
| Likelihood of Cybercrime Exposure | Undergraduate | 356 | 3.11 | 0.71 | 0.95 | 451 | .342 | 0.08 |
| | Graduate | 97 | 3.16 | 0.68 | | | | |
| Social Media Use | Urban | 289 | 3.49 | 0.66 | 1.85 | 451 | .065 | 0.17 |
| | Rural | 164 | 3.38 | 0.62 | | | | |
| Likelihood of Cybercrime Exposure | Urban | 289 | 3.05 | 0.68 | -3.57 | 451 | .001 | 0.34 |
| | Rural | 164 | 3.26 | 0.74 | | | | |

*Note: p < .01 = highly significant, p < .05 = significant*

Table 7 shows the application of Independent Samples t-test for Social Media Use and Likelihood of Exposure to Cybercrimes among Pakistani Gen Z across gender, age, academic qualification, and geographic ethnicity. The results partially supported hypothesis 4, signifying demographic differences in the likelihood of exposure to cybercrimes among Pakistani Gen Z. Although, the findings did not reveal any significant differences on the variable of social media use between the male and female respondents (p = .156), it indicated significant difference between both genders, indicating male respondents *(M = 3.22, SD = 0.72)* as being significantly more likely to get exposed to cybercrimes as compared to their female counterparts *(M = 2.98, SD = 0.70)*, with a moderate effect size *(t = 3.45, p = .001, Cohen's d = 0.32)*. It reveals Pakistani male Gen Z being more vulnerable to cybercrimes than their females. Furthermore, no significant differences were found in terms of social media use and likelihood of exposure to cybercrimes between the respondents in terms of age and academic qualification among Pakistani Gen Z. However, with no significant differences reported with respect to social media use between the respondents with urban and rural ethnicities, the findings revealed significant differences on the variable of likelihood of exposure to cybercrimes, indicating the rural respondents *(M = 3.26, SD = 0.74)* being significantly more likely to experience cybercrimes as compared to their urban counterparts *(M = 3.05, SD = 0.68)*, with a moderate effect size *(t = -3.57, p = .001, Cohen's d = 0.34)*.

**Findings of the Study:**

**Discussion:**
The exponential growth of digital technologies has revolutionized information access, global connectivity, communication channels and patterns, and interpersonal engagement. The social media and smartphones, the blessings of modern era, have become integral part of individual's daily life, especially the youth. These digital technologies have not only eased out people's life routines, but also raised concerns about susceptibility to cybercrimes. The cybercrimes such as cyberbullying, identity theft, deepfake through AI, and exposure to defamation-oriented online content, have been continuously on the rise, and Pakistani society is no exception to it (Siraj & Ali, 2023). Based on the research findings above, this discussion revolves around the relationship between social media use and cybercrime awareness as well as likelihood of exposure to cybercrimes among Pakistani Gen Z.

    a. **Social Media Use and Cybercrime Awareness**
One of the key findings of this study revealed an inverse relationship (modest negative correlation) between social media use and awareness on cybercrimes among Pakistani Gen Z. Although not strongly negative, this finding raises significant concerns about the impact of exposure to social media on individuals' ability to comprehend the risks like cybercrimes while using various social media platforms. The users, while spending a lot of time on different social media platforms, may become desensitized to cybercrimes and possible vulnerability, mainly because of overwhelming nature of easy access to online information regardless of being true or false, entertainment and grasping nature of digital engagement and fabricated sense of security associated with data privacy settings (Anudini et al., 2021). This intricate relationship may further be complicated due to likelihood of social media as a breeding ground for cybercrimes. Digital criminals actively exploit social media platforms for cyberbullying, identity theft, deepfake through AI, and phishing attacks (Schmitt & Flechais, 2024). Since youth are the active social media users, their capacity to identify cyber threats can be compromised with increasing digital engagement.

Subsequently, the heavy reliance on social media can inadvertently diminish an individual's sensitivity and vigilance towards the cyber risks.

b. **Gender Differences in Social Media Use and Cybercrime Awareness**

This study explored significant differences between male and female respondents with respect to cybercrime awareness. The results reflected female respondents having significantly higher awareness (M = 3.21) as compared to their male counterparts (M = 3.00), revealing Pakistani female Gen Z being more aware about cybercrime risks. These findings align with the existing literature that suggests a divide on the basis of gender with respect to social media engagement and awareness of cybercrimes (Mitra, 2024). Norms related to gender and the processes of socialization may influence how men and women use social media, with the later being more informed and cautious about the potential risks, mainly because of societal concerns on digital safety and harassment (Aslam et al., 2023). This study found out no significant differences between male and female respondents with respect to frequency of social media use (M= 3.50 for males, M=3.41 for females), highlighting both genders using social media platforms with same intensity. The finding falls in conformity of existing body of literature depicting a growing trend of online engagement among the youth regardless of gender. However, the difference of the levels of cybercrime awareness between male and female genders highlights women being more proactive in understanding and mitigating the dangers associated with social media usage. It also underscores the need for gender-specific educational campaigns to improve the awareness among both male and female users about social media and cybercrimes (Sani et al., 2024).

c. **Geographic Ethnicity and Cybercrime Awareness**

The study also found out differences on cybercrime awareness with respect to geographic ethnicity. The results revealed that the urban respondents (M=3.18) exhibited higher level of cybercrime awareness than the rural respondents (M=3.01). This difference highlights digital literacy divide between the urban and rural segments of Pakistani society. Due to better education access and technological infrastructure, the urban populace finds a more conducive environment for digital literacy and awareness as compared to rural people who often face limited educational resources and access to the internet (Wang, 2013). This urban-rural digital divide has thoughtful implications for strategies on cybercrime prevention. While the urban youth may access digital literacy workshops, programs, and online resources about cybercrime prevention, their rural counterparts may face challenges in accessing such opportunities, leaving them helpless and vulnerable to cyber threats. It also emphasizes the need for interventions to focus on enhancing digital literacy and awareness in the rural areas. It may involve mobile-based trainings and community outreach initiatives. Moreover, it underscores the necessity to combat cybercrimes in Pakistan, taking into account the geographic disparities (Khan, 2022).

d. **Age and Academic Qualification:**

Contrary to the significant impact of social media usage on awareness about cybercrimes on the variables of gender and geographic ethnicity, no considerable influence was reported on the variables of age (18-24 years, 25-30 years) and academic qualification undergraduate, graduate) These findings proposed that age and education did not play any significant role to determine respondents' cybercrime exposure and online risks' awareness. These results pose a challenge to the assumptions that suggest older age individuals and highly educated people can identify and mitigate cybercrimes (Zwilling et al., 2022). These findings also confirm that the digital natives, regardless of age and

academic qualification, may be exposed to the similar digital environments and possess same levels of cybercrime exposure risks (Althibyani & Al-zahrani, 2023).

**Policy Implications**

Based on its results, this research has put forward critical implications to mitigate cybercrimes and promote digital literacy in Pakistan. The policymakers in collaboration with academia should strategize focused and targeted drives to counter digital disparities. They may develop digital literacy campaigns, tailored to highlight the specific needs of social media users regardless of urban and rural communities. Furthermore, it is crucial to foster a culture of responsible online engagement. Awareness campaigns must focus to educate people about risks associated with cybercrimes as well as encourage them for an informed, safer, informed, and responsible social media use.

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