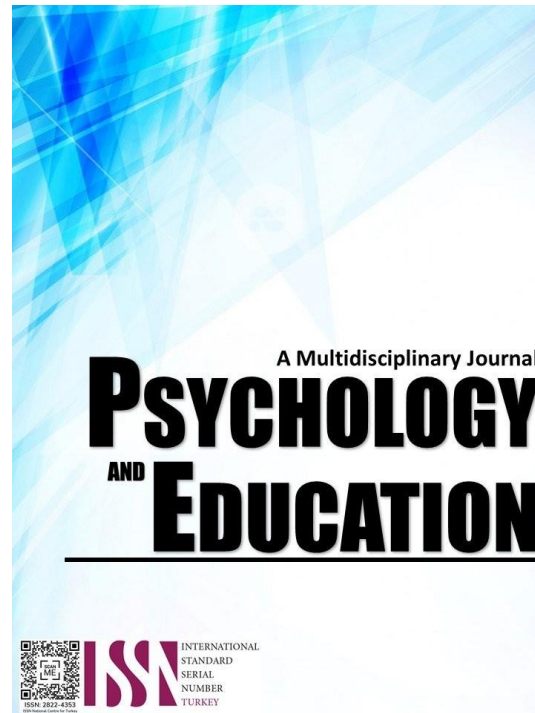


# DIGITAL ORIENTATION AND CYBER-VICTIMIZATION OF COLLEGE STUDENTS AS MEDIATED BY THEIR ATTITUDE TOWARD CRIME



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## Digital Orientation and Cyber-Victimization of College Students as Mediated by their Attitude Toward Crime

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### Abstract

This study in Kidapawan City explored how attitudes toward crime mediate the relationship between college students' digital orientation and cyber-victimization. It adapted a descriptive-correlation methodology, surveying 400 respondents from various local colleges and universities through face-to-face survey. The findings reveal that study participants exhibited a high level of digital orientation and generally held a high attitude toward crime while reporting a low level of cyber victimization. The analysis unveiled significant correlations among the variables but with varying strengths. Notably, digital orientation had both direct and indirect effects on cyber victimization. While the immediate impact was not statistically significant when mediated by attitudes toward crime, the mediation analysis showed that the partial mediation regression coefficient significantly decreased but remained significant in the final stage. This indicates that while the MV mediates some of the IV, other portions are either direct or mediated by other variables outside the model's scope.

**Keywords:** *criminal justice education, digital orientation, cyber-victimization, attitude toward crime, non-experimental, quantitative research, Philippines*

### Introduction

All nations are concerned about the increasing number of crimes committed by children aged 15 and older. Since most educational activities can be completed online with little interaction, such cases worsen. Teens have reported becoming targets of cyberbullying, including name-calling on social networking sites like Instagram and text-messaging threats (Espinoza, 2022). Additionally, studies reveal that nearly 43% of kids have experienced online bullying. One in four kids has experienced it more than once. This demonstrates that cyberbullying is pervasive in our society and that its disastrous repercussions are felt by an increasing number of young adults (Subramaniam et al., 2022). On the other hand, dealing with the effects of youth cyber victimization would be highly challenging if the issue materializes. Adolescents who have experienced cyber-victimization are more likely to have suicidal thoughts and attempt suicide, according to research that integrated the interpersonal theory of suicide into the relationships between cyber-victimization and suicidality in young people (Meng et al., 2023).

### Research Objectives

The main objective of this study is to identify how attitudes toward crime mediate the relationship between college students' digital orientation and cyber-victimization in Kidapawan City. Specifically, it aimed to answer the following objectives:

1. To ascertain the level of Digital Orientation among College Students in Kidapawan City regarding:
  - 1.1 digital curiosity,
  - 1.2 digital alertness;
  - 1.3 digital openness; and
  - 1.4 digital innovation.
2. To assess the level of cyber victimization of youngsters in Kidapawan City in terms of:
  - 2.1 impersonation,
  - 2.2 visual cyber victimization;
  - 2.3 written verbal victimization; and
  - 2.4 online exclusion.
3. To evaluate the level of Attitude among College students in Kidapawan City in terms of:
  - 3.1 hereditary and individual causes;
  - 3.2 social and environmental causes;
  - 3.3 coercive prevention;
  - 3.4 social intervention prevention; and
  - 3.5 assistance vs. punishment.
4. To determine the significant relationship between Digital Orientation and Attitude, Attitude and cyber victimization, and Digital Orientation and cyber victimization.
5. To determine the mediating effect of attitude on the relationship between Digital orientation and cyber victimization.

### Literature Review

Based on the digital 2019 study from the operational agency, we are social and the social media management tool Hootsuite, specifically

in the Philippines. Regarding time spent online, particularly on social media, the Philippines first appeared globally (Aguilar, 2019). In addition, 72% of Filipinos access the Internet via mobile, with boys and girls using mobile devices at rates of 52% and 57%, respectively (Haq et al., 2021). However, internet users' most frequent forms of abuse are Impersonation, visual cyber victimization, written verbal victimization, and online exclusion (Riaz et al., 2022). However, because of the rapid increase in our modern technology, it is tough to keep our data safe. This has led to an increment in wrongdoings as anybody can access one's individual information without the victim's knowledge (Kharat & Kedare, 2019).

An essential component of contemporary living is digital technology. Users must make the most of digital technology in our increasingly interconnected society while avoiding the drawbacks of technological abuse, misuse, and excess ( Klase et al., 2021). On the other hand, several studies find that due to the school closures and social distancing recommendations in place at the beginning of the pandemic, time spent online increased among adolescents (Chen, 2021). Research demonstrates a lack of understanding of digital twins' openness and that the subject needs to be effectively addressed (Winkelmann & van der Valk, 2022). Many criminological studies examine the features, offending trajectories, and types of offenses young people commit (Freeman, 2018). Both male and female students could maintain a peaceful environment in the classroom. Additionally, there was little difference between male and female pupils regarding their capacity to maintain calmness (Jupriadi et al., 2022). self-disclosure has a negative relationship with the characteristics of cyberbullying (Yesilyurt et al., 2021)

The effects of technology on Generation Z are profound. The highly technological generation Z inhabits a primarily digital world and frequently emphasizes technology more than critical thinking abilities. These kids frequently struggle with physical chores that do not need much creativity or textual interpretation. Most of them frequently employ simplistic search strategies, undervalue the process of evaluating sources, and, as a result, fail to effectively substantiate their beliefs with instances (Spasov, 2021). on the other hand, no matter who they are or their culture or background, bullying is a severe issue for young people today (Feijóo et al., 2021). Teens have reported becoming targets of cyberbullying, including name-calling on social networking sites like Instagram and text-messaging threats (Espinoza, 2022).

In online resilience, the capacity to bounce back from adversity by, for instance, coping with online risks practically and digital literacy serve as potential safeguards for young people against the harmful consequences of negative online experiences (Vissenberg, et al, 2022). Meanwhile, the victimization of cyber-stalking and cyber-harassment (similar to cyberbullying) was linked to various poor mental health outcomes in adults, including depression, anxiety, and suicide ideation, according to a systematic review study (Stevens, 2021). Cyber victimization can cause adolescent loneliness and social disengagement because it is a substantial source of interpersonal stress (Coelho & Romão, 2018; Matthews, 2020).

The majority of people regularly use and carry their smartphones. Mobile applications can thus be incorporated into daily activities. Smartphones can also be used to trigger a user at any time. Facebook, YouTube, and other social media sites have all seen steady growth in usage as they have in people's daily lives. The abundance of knowledge on the Web, which is instantly available through cell phones, offers numerous opportunities to study. Consequently, social media and mobile applications are also employed for non-formal learning (De Troyer et al. 2020). Furthermore, the millennial generation's communication style is also more open than earlier generations. They use social media obsessively, everything they do is heavily influenced by technology, and they place a high value on money. Online sexual harassment is harassment that is discovered through a complicated yet inefficient reporting and management system. According to a new Google Form survey, sexual harassment on social media is a growingly prevalent problem (Quincy & Manduza, 2021).

Life now is impacted by the present Covid-19 pandemic. One of them is the quick evolution of digital media, which affects how people communicate with one another, as well as all aspects of people's daily lives that go digital (Apdillah et al., 2022). On the other hand, the channel gain between a transmitter and a receiver in device-to-device (D2D) communications is challenging to estimate due to channel fluctuations. As a result, an attacker can carry out an impersonation attack between two genuine D2D users. The researchers suggest a reinforcement learning-based strategy as a defense that ensures the impersonator's identification based on channel gains (Tu et al., 2021).

Many people have recently been interested in studying the potential of distant learning (the "pros" and "cons" of this system), as progress does not stand still, and new theories and adaptations are continuously being developed to improve modern human existence in all spheres, including education. Schools need to prepare to educate students online (Munavvar, 2022). On the other hand, authentication is employed to enclose the patient's privacy to apply security in the communication between patients and service providers. Several research types have advocated anonymity for contextual privacy in medical systems that are still susceptible to Man-in-the-Middle and impersonation attacks. It can aid in developing an advanced system by utilizing potent technology employed in medical institutions. Attackers, however, can also employ these potent weapons for their financial benefit to tow havoc (Maikol et al., 2021)

The unheard-of reliance on digital technology comes with a price; although overall productivity is rising, so is digital tiredness. It is believed that without reflectiveness, mindfulness produces a transient mental state (short-term alertness or awareness) without having a sustained impact on mindful behavior. However, reflectiveness enables staff to assess their interactions with digital technology properly (Klase et al., 2022). In addition, cloud computing is today's most critical technology for the I.T. sector. Among the most

significant dangers that Clouds encounter are impersonation assaults (Kholidy, 2021).

The performance of the royal lifestyle, the mobilization of passion within strategic sociality and transformation, and blogging for self-renewal are examples of passions. The cycle of passion also shows how old passions can be repurposed into fresh, ardent endeavors (McFarlane et al., 2022). In addition, the convergence of technology and the physical and digital world substantially alters individuals, another difficulty we currently confront. This modification has so far had a favorable effect (Widana & Darma, 2021). Moreover, Due to the global pandemic and other relevant events that have increased violent behavior or raised awareness of previously existing levels of violence, even in what appear to be non-violent civilizations, studies on attitudes related to violence have become more and more critical in recent years (Simane-Vigante, 2021).

In other words, self-learning is the desired trait to encourage innovation since motivated or self-directed personnel are likelier to take the moment and offer a solution. However, the drive for innovation has turned workplace learning into the norm (Rasidi, 2021). However, Responses to a particular phenomenon have been quantified in light of the sociocultural context. This demonstrates that people who are single (81%) experience more significant favorable effects than those who are married. Likewise, Females are more sympathetic than men in terms of gender, and as most of the participants formerly resided in rural areas, both positive and negative consequences are more significant than for residents of West Bengal's urban areas. This psychological scale primarily emphasizes how we view rape victims and the different aspects of rape that constantly come to mind but that we find difficult to articulate (Chatterjee & Choudhury, 2022). "Thought content and process conducive to the beginning and continuation of habitual law-breaking conduct" describes criminal thinking.

Information and Communication Technologies have become essential support for the booming service trade in the digital era (Yi et al. 2022). Additionally, this illustrated the value of goal-directed mindfulness in digital contexts. The preliminary results show that digital mindfulness affects how users interact with a digitally enabled world by encouraging users to contemplate goals, pay attention to context specifics, adjust expectations based on prior experience, and improve foresight after reflection (Klase et al., 2021). Furthermore, the aforementioned suggests that self-compassion can influence a person's attitude toward criminal activity and that changes in social functioning, self-esteem, self-control, emotional regulation, and aggression can all impact criminal behaviors. An intervention based on self-compassion can reduce criminal behaviors among different categories of offenders, according to empirical crumbs of evidence (Morley, 2018).

Antisocial personality disorder (ASPD) patients frequently exhibit physical violence associated with criminal behavior, psychopathy, impulsivity, and substance abuse disorders (SUDs). On a psychological level, aggression manifestation is crucial, but being able to restrain aggression appropriately is a positive personality trait (Azevedo et al., 2020). Furthermore, the analysis highlights how, despite having access to the Internet, those who are at risk of social exclusion are more likely to lack the digital experience necessary to fully take advantage of the opportunities the Internet can offer, demonstrating the mutually reinforcing nature of digital and social exclusion (Ragnedda et al., 2022).

Males who are limited to adolescence exhibit comparable levels of antisocial conduct, but mainly during the adolescent stage of development. They are assumed to be frequent and typical, whereas abstainers from offending are uncommon. The developmental taxonomy of antisocial behavior has a 25-year history, which this review reviews, concluding that it is still relevant to study today and influences juvenile justice and early-year preventative policies (Moffitt, 2018). Meanwhile, Adolescents who have experienced cyber-victimization, on the other hand, are more prone to exhibit suicidal ideation and attempt suicide. According to recent studies, adolescent suicidality and cyber-victimization are strongly correlated (Meng et al., 2022).

Most actuarial instruments used in criminology were developed utilizing information from male offenders. However, the forms and severity of crimes women commit have not been the subject of numerous studies. In addition, the Correctional Service of Canada reports that convicted women are more likely to have a history of physical and sexual abuse, have a greater prevalence of substance misuse, and have mental health issues (Giguère et al., 2021). Moreover, one argument is that young people who are suicidal are more likely to be exposed to feelings of burdensomeness and thwarted belongingness, such as social isolation and low self-esteem (Calati, 2019; Cha, 2018). These "vulnerabilities" may indicate simple targets to bully or engage in cyberaggression, which could increase the frequency of cyber-victimization incidents among teenagers (Chu, 2019).

Base on the moderated mediation path analysis, participants' best friends' perceived approval of their deviance predicted an increase in their positive attitudes toward deviance, which predicted a rise in future delinquency. Furthermore, through influencing and forming the youth's perceptions of their best friends' responses to deviance, best friends may indirectly contribute to the future criminality of male kids (Walters, 2022). Meanwhile, Males are unquestionably more criminally inclined than females and constitute a more significant threat to society (Giguère et al., 2021). The contexts of their life significantly shape people's experiences of digital exclusion. The online and offline facets of life are, in fact, frequently inseparable. As a result, this essay focuses on the nuanced relationship between digital exclusion and poverty. It explores how a variety of temporal, spatial, and material aspects of experiences with poverty affect people's abilities to access the Internet (Holmes & Burgess, 2022).

## Methodology

This study utilized descriptive-correlation methodology in quantitative non-experimental research. It was used to address the relationship that correlating variables could vary inversely as one declines and the other grows independently. Correlation design determines the strength and type of correlation between two or more variables (Creswell, 2003). To assess the degree and relationship of Digital Orientation and Cyber-Victimization of Children in Kidapawan City as Mediated by Attitude Towards Crime, this method includes administering survey questionnaires and conducting interviews. Lastly, the general overview provides helpful hints as to what variables are worth quantitative testing. Each category's degree of answers was determined.

## Participants

Sloven's formula was used in identifying the total number of respondents. This study has come up with a total number of 400 respondents from different colleges and university. The following are the numbers of respondents per school, Population Size of 3,460 with 118 respondent sample size from Central Mindanao Colleges, Population Size of 1 676 with 57 respondent sample size from Colegio de Kidapawan, Population Size of 436 with 15 respondent sample size from Kidapawan Doctors College, Inc., Population Size of 1,807 with 62 respondent sample size from North Valley College, Population Size of 987 with 34 respondent sample size from Notre Dame of Kidapawan City, and Population Size of 3, 316 with 114 respondent sample size from University of Southern Mindanao, Kidapawan City Campus.

## Instruments

The questionnaire used in this study consists of three variables adapted from their sources, one for each variable. The Independent Variable was based on the study of Digital Orientation Scale: Development and Validation (Dantsoho et al., 2020), while the dependent variable was adapted from the study of Validation of the cyber victimization Questionnaire (CYVIC) for adolescents (Álvarez-García et al., 2017), and the mediating variable was taken from the study of A brief criminal attitude scale. (Taylor, 1968). The preliminary draft was forwarded to the research adviser for checking and possible suggested enhancements. Then, it was forwarded to the validating panel to check its reliability and validity.

A downloadable research questionnaire was utilized to gather data. The questionnaires were broken down into three sections as follows: the independent variable, digital orientation, which has 33 items and includes indicators of digital curiosities, alertness, openness, and innovation; the dependent variable, cyber victimization, which has 19 items, including indicators of Impersonation, verbal, cyber victimization, written verbal victimization, and online exclusion; and the third section, The mediating variable is Attitude Toward Crime which has 59 items that include Hereditary and individual causes, Social and environmental causes, Coercive Prevention, Social Intervention Prevention, and Assistance vs. Punishments.

The study's variables were rated using a 5-level Likert Scaling system as follows: rating 5 has a range of 4.20 to 5.00, and the descriptive level was very high, indicating that the measures of digital orientation, cyber victimization, and attitude toward crime are always manifested or observed. Rating 4 implies that measures of digital orientation, cyber victimization, and attitude toward crime are frequently manifested or noticed and have a descriptive level of high with a range mean of 3.40 to 4.19. Rating 3 indicates that measures of digital orientation, cyber victimization, and attitude toward crime are occasionally manifested or noticed, with a descriptive level of moderate and a range mean of 2.60 to 3.39. Considering the descriptive level is low, and rating 2 has a range mean of 1.80-2.59, it indicates that measures of digital orientation, cyber victimization, and attitude toward crime are not frequently displayed or noticed. The descriptive level is relatively low, and rating 1 has a range mean of 1.00-1.79, indicating that measures of digital orientation, cyber victimization, and attitude toward crime are rarely displayed or observed.

The questionnaires were subjected to pilot testing with 30 samples using Cronbach alpha to determine their reliability. Excellent internal consistency is demonstrated by the high Cronbach's alpha coefficients of Digital Orientation (0.973), Cyber victimization (0.943), and Attitude Towards Crime (0.953). This implies that the scales in question are probably valid and trustworthy instruments for gauging the concepts within them. However, in the validation sheet for the research questionnaires, the average rating for all entities is 4.29, indicating that the entities were generally given favorable reviews for all items.

## Procedure

The following procedures were used to collect the necessary data for this research investigation. The researcher drafted a letter addressed to the school president of various colleges and universities in Kidapawan City, with the adviser's recommendation and the Dean of the Professional Schools of the University of Mindanao's approval, requesting permission to carry out the study on the Digital Orientation and Cyber-Victimization of College Students as Mediated by Attitude Towards Crime. After receiving approval, the researcher administered the research instrument; during that time, the respondents were informed of the study's premise (Informed Consent Form) and, if they accepted, would be handed a questionnaire, which the researcher would help them complete. The study was conducted from June 2023 to July 2023.

After administering the research instruments, the questionnaires were obtained, collected, tabulated, and subjected to statistical analysis and interpretation. The study utilized the Mean, Pearson Product Moment Correlation, Mediation Test Technique, Regressions, and Medgraph employing the Sobel z-test. The levels of digital orientation, cyber victimization, and attitude of young people in Kidapawan

City were measured using the mean. The associations between Digital Orientation and Attitude, Attitude and cyber victimization, and Digital Orientation and cyber victimization were examined by Pearson Product Moment Correlation.

Regression was used as the primary data source for the mediation test to examine the relationships between digital orientation, attitude, and cyber victimization. It also identified which domains within the digital orientation have the most significant impact on cyber victimization and which independent variable indicator best predicts the dependent variable's reliability. To ascertain the role of attitude in moderating the association between young people's digital orientation and cyber victimization in Kidapawan City, a Medgraph with the Sobel z-test was used.

Additionally, the Sobel test was used in Mediation analysis using Medgraph to determine the Significance of the mediation impact. Complete mediation was accomplished if the effect of the IV on the DV stopped being statistically significant at the end of the analysis. This indicates that the mediating variable was a mediator of all effects. Only partial mediation was obtained if the regression coefficient was significantly decreased but remained significant in the final stage. This indicates that while the MV mediates some of the IV, other portions are either direct or mediated by other variables outside the model's scope. Finally, the mediation test technique examined the mediating role of attitude in the link between digital orientation and cyber victimization.

As part of the procedure, the researcher must ensure that the materials, tools, procedures, or methods used to gather the data or produce the results are accurately reflected in the study record. Furthermore, the researcher had written truthfully and ethically. In all scientific articles, maintain objectivity. He had appropriately acknowledged and cited all sources.

### Ethical Considerations

The researcher, in the conduct of the study, observed complete ethical standards set by the University of Mindanao Professional Studies. This thesis proposal was reviewed by the research ethics committee of the University of Mindanao, conforming to the following norms: Voluntary Participation, Privacy, and confidentiality, recruitment Risk Benefits, plagiarism, fabrication, falsification, conflict of interest, deceit, permission from the organization or location and authorship. Furthermore, the researcher proceeded to pilot testing and/or data collection after he received the UMERC Certification. Additionally, after completing the study proposal, the researcher received certification that confirms the research paper complied with the UMERC–2023-226 University's Ethical standards.

### Results and Discussion

This section presents the results and findings of the study after a thorough analysis of data gathered by the researcher.

#### Digital Orientation

Table 1 shows the level of digital orientation. It shows that the overall response is reflected in an overall mean rating of 3.87, in which the descriptive level was high. The results revealed that college students are frequently manifested in Digital Orientation in terms of digital openness and digital curiosity. Digital innovative passion, digital alertness. The data reveals that, among the indicators, digital openness has the highest mean at 3.98, signifying a frequent manifestation. On the other hand, digital vigilance has the lowest mean at 3.79, indicating that it is still commonly or frequently displayed.

The results supported by Pirola, Cimini, and Pinto (2020) state that via investments in people's skills and experience, as well as via the use of a network that can support data gathering, analysis, and sharing, organizations need to take advantage of all the opportunities that data availability offers for knowledge generation and decision-making assistance in all forms. Universities switched from on-campus blended learning to an emergency remote online method during the COVID-19 lockdown in the spring of 2020. Students with strong digital skills and self-control could maintain attention and engagement throughout the lockdown. (Limniou et al., 2021). In addition, higher levels of digital literacy positively impacted everything from student academic achievement to high-output learning outcomes (Yustika & Iswati, 2020).

Table 1. *Level of digital orientation*

<i>Indicators</i>	<i>Mean</i>	<i>SD</i>	<i>Descriptive Level</i>
Digital Curiosity	3.90	.655	High
Digital Alertness	3.79	.669	High
Digital Openness	3.98	.673	High
Digital Innovative Passion	3.81	.780	High
Overall	3.87	.609	High

#### Cyber Victimization

Table 2 shows the level of cyber victimization. It shows that the overall response is reflected in an overall mean rating of 2.40, in which the descriptive level was low. The results revealed that college students of Kidapawan City are not frequently displayed in cyber victimization in terms of Written/verbal victimization, Impersonation, online exclusion, and visual cyber victimization. The data suggests that among the indicators, Written/verbal victimization has the highest mean at 2.54, signifying that it is not frequently displayed. Conversely, visual cyber victimization has the lowest mean at 2.16, indicating it is still not often manifested.

Base on the study of Heiman and Olenik-Shemesh (2022), there is a need to comprehend the nature of cyber-victimization better in the future. For academic institutions, limiting inappropriate internet behavior is now a losing battle. In addition, college students were more likely to engage in online trolling but not cyber victimization if they spent more time online overall (Lee & Soonah, 2023).

Table 2. *Level of experienced cyber victimization*

<i>Indicator</i>	<i>Mean</i>	<i>SD</i>	<i>Descriptive Level</i>
Impersonation	2.52	1.290	Low
Visual Cyber Victimization	2.16	1.294	Low
Written/Verbal Victimization	2.54	1.240	Low
Online Exclusion	2.39	1.267	Low
Overall	2.40	1.125	Low

### Attitude Toward Crime

Table 3 shows the level of attitude towards crime. It shows that the overall response is reflected in an overall mean rating of 3.42, in which the descriptive level was high. The results revealed that college students of Kidapawan City are frequently manifested in cyber victimization in terms of social intervention prevention, coercive prevention, assistance vs. punishment, social and environmental causes, and hereditary and individual causes. The data indicates that, among the indicators, social intervention prevention has the highest mean at 3.93, signifying its frequent manifestation. In contrast, hereditary and individual causes have the lowest mean at 2.56, suggesting that they are not often display.

Svensson and Oberwittler support the findings of this study, using information from eight consecutive cross-sectional waves of a nationally representative school survey (2021) to analyze the decreasing crime trend among Swedish teenagers between 1999 and 2017. This demonstrates how modifications in parental supervision, school ties, criminal attitudes, shared hobbies, and binge drinking were connected to the apparent drop in teenage crime. Furthermore, they discovered strong empirical evidence to support their hypothesis, according to which modifications in everyday activities, attitudes toward crime, and social ties were all linked to a drop in teenage crime. The findings showed that left-behind children's antisocial behavior is manifested as the type of limited adolescent antisocial behavior, and the three subtypes of left-behind children's antisocial behavior were rule-breaking, delinquent, and criminal behavior. In addition, children's antisocial behavior could range from general violations to delinquent and criminal behaviors. (Liu et al., 2022). Chinese/East Asian persons were likelier to be hate crime or incident victims than members of other ethnic minority groups (Schumann & Moore, 2023).

Table 3. *The extent of attitude toward crime*

<i>Indicator</i>	<i>Mean</i>	<i>SD</i>	<i>Descriptive Level</i>
Hereditary and Individual Causes	2.56	.970	Low
Social and Environmental Causes	3.48	.769	High
Coercive Prevention	3.62	.711	High
Social Intervention Prevention	3.93	.766	High
Assistance vs. Punishment	3.51	.697	High
Overall	3.42	.583	High

### Correlation analysis of the variables

Table 4 indicates the pairs of variables being correlated. This column provides the correlation coefficient, which measures the strength and direction of the linear relationship between the variables. The coefficient can range from -1 to 1. A positive value indicates a positive correlation (as one variable increases, the other tends to grow). In contrast, a negative value indicates a negative correlation (as one variable increases, the other tends to decrease).

There is a statistically significant but relatively weak positive correlation (0.264) between digital orientation and cyber victimization. However, the correlation is not strong enough to reject the null hypothesis that no significant correlation exists between these variables. Also, there is a statistically significant and moderate positive correlation (0.467) between digital orientation and attitude toward crime. The correlation is strong enough to reject the null hypothesis, indicating a meaningful relationship between these variables.

A statistically significant and moderate positive correlation (0.524) exists between attitude toward crime and cyber victimization. The correlation is strong enough to reject the null hypothesis, indicating a meaningful relationship between these variables.

These results suggest significant correlations between the variables being studied, but the strength of the correlations varies. The study of following supports these results: According to the study of (Palermi et al., 2022), students in the consistently high self-esteem profile were less likely to experience victimization and cyber victimization than those in the self-derogation profile. On the other hand, (Strand & Svensson, 2023) reported that individuals who are already vulnerable due to social isolation and state-sanctioned discrimination are more susceptible to hate crimes in digital spaces. Online environments can exacerbate existing vulnerabilities and increase the risk of hate crimes for specific individuals. Lastly, the study of Milani et al (2022) found that regardless of the type of crime, regular Internet and social media users tend to experience victimization more frequently. These findings indicate that internet

usage can impact individuals' experiences with various types of victimization, and these patterns hold across different criteria.

Table 4. Correlation analysis of the variables

Pair	Variables	Correlation Coefficient	p-value	Decision on Ho
IV and DV	Digital Orientation and Cyber Victimization	0.264	<0.000	Rejected
IV and MV	Digital Orientation and Attitude Towards Crime	0.467	<0.000	Rejected
MV and DV	Attitude Towards Crime and Cyber Victimization	0.524	<0.000	Rejected

Regression analysis shows the influence of digital orientation on perceived cyber victimization as mediated by their perceived attitude toward crime.

Table 5 shows the regression analysis. In this context, each step likely means the inclusion of additional variables into the study. Additionally, in The Path, this column indicates the approach or relationship tested in each analysis step. Furthermore, B: This column provides each path's unstandardized regression coefficient (also known as the regression weight). It represents the change in the dependent variable (perceived cyber victimization) for a one-unit change in the independent variable (digital orientation) while controlling for other variables in the model. S.E.: This column shows the standard error associated with each regression coefficient. It gives an estimate of the variability of the coefficient. Lastly,  $\beta$ : This column provides each path's standardized regression coefficient (beta). The standardized coefficient indicates the change in the dependent variable (in standard deviation units) for a one-standard deviation change in the independent variable.

In the first step, the direct effect of digital orientation on perceived cyber victimization (without considering the mediator) is positive and statistically significant ( $p < 0.01$ ). A one-unit increase in digital orientation is associated with a 0.488 increase in perceived cyber victimization. In the second step, the effect of digital orientation on perceived attitude towards crime is positive and statistically significant ( $p < 0.01$ ). A one-unit increase in digital orientation is associated with a 0.447 increase in perceived attitude towards crime.

In the third step, the effect of perceived attitude towards crime on perceived cyber victimization is positive and statistically significant ( $p < 0.01$ ). A one-unit increase in perceived attitude towards crime is associated with a 0.989 increase in perceived cyber victimization. In the fourth step, which seems to involve the inclusion of the mediator, the effect of digital orientation on perceived cyber victimization (with the mediator included) is positive but not statistically significant (ns), indicated by the term "ns" (not significant).

The study revealed that digital orientation directly influences perceived cyber victimization (Path C) and indirectly influences perceived attitude towards crime (Paths A and b). However, including the mediator (perceived attitude towards crime) in Step 4 weakens the direct effect of digital orientation on perceived cyber victimization (Path c'), which is not statistically significant.

Various media behaviors, perceptions of cyber victimization, and assessments of cyber victimization further explain the variation in prevalence rates between minority and majority groups (Schultze-Krumbholz et al., 2022). Some research showed no statistically significant difference, according to the year 2022 report, which discusses the disparities between male and female approaches to digital orientation (Peng, Yu, 2022).

Table 5. Regression analysis on the influence of digital orientation on perceived cyber victimization as mediated by their perceived attitude toward crime.

Step	Path	B	S.E.	$\beta$
Step 1	C	0.488	0.089	0.264***
Step 2	A	0.447	0.042	0.467***
Step 3	B	0.989	0.093	0.512**
Step 4	c'	0.046	0.089	0.025 <sup>ns</sup>

Note: \*\* $p < 0.01$

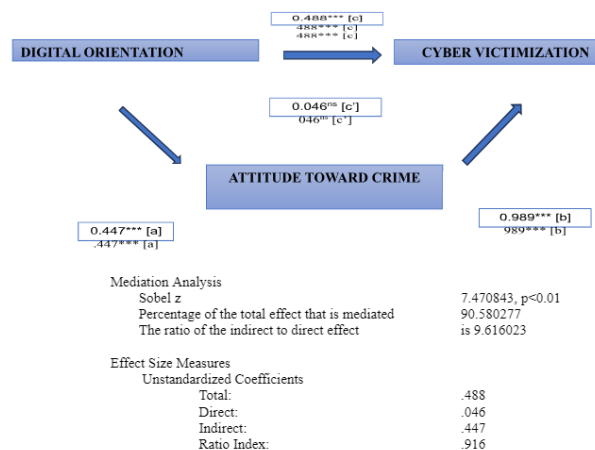


Figure 1. Medgraph showing the variables of the study

## Conclusion

The data shows that participants exhibit a high level of digital orientation in various dimensions, indicating that the measures of digital orientation are always manifested or observed. It is recommended that the different institutions in Kidapawan City should establish a collaborative cybersecurity task force comprising representatives from schools, law enforcement, businesses, and community organizations and organize regular meetings to share information, discuss emerging threats, and coordinate efforts to enhance overall cybersecurity resilience in Kidapawan City. Furthermore, the study reveals that participants reported low levels of cyber victimization, indicating that measures of cyber victimization are not frequently displayed or noticed. It recommends offering digital literacy workshops at community centers and libraries, covering topics such as safe internet use, recognizing scams, protecting personal information, and providing access to cybersecurity resources and materials in community libraries, ensuring residents have information readily available.

The research highlights that individuals generally hold high attitudes toward crime, indicating that the measures of attitude toward crime are always manifested or observed. It further recommends that the different Institutions in Kidapawan City Integrate cybersecurity education into school curricula, teaching students about online risks, responsible use of technology, and digital citizenship. Provide ongoing training for teachers on cybersecurity best practices, enabling them to guide and educate students effectively. Conduct workshops and seminars for students, covering topics such as online privacy, recognizing cyber threats, and ethical online behavior. Additionally, the correlation analysis shows significant relationships among digital orientation, Cyber victimization, and attitude toward crime; these three factors are interrelated meaningfully. This further recommends organizing community outreach programs led by law enforcement to educate residents about cyber threats and prevention strategies. Partner with educational institutions to facilitate joint cybersecurity awareness programs, ensuring a cohesive approach across the community. Establish a local cybersecurity task force comprising law enforcement, government officials, and cybersecurity experts to address local cyber threats promptly.

In the regression analysis, digital orientation has a direct and significant positive impact on both perceived cyber victimization and perceived attitude towards crime. Considering the mediator (perceived attitude towards crime), digital orientation shows a positive but statistically nonsignificant direct effect on perceived cyber victimization. It recommends further research and tailored strategies and enhances the need for targeted educational programs and awareness campaigns. These should consider specific psychological factors in at-risk individuals, incorporating counseling, therapeutic interventions, and skill development to mitigate risks and reinforce prosocial behaviors.

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