



Moderating role of Government Policy into the Relationship between Digital Distrust, Negative Emotions, Information Overload and Cyber Violence: Evidence from Pakistan

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ABSTRACT

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Cyber violence is emerging and critical for adolescents in Pakistan. The federal investigation agency in Pakistan is reporting thousands of cyber violence Crimes every year. The cases of cyber violence have a deep psychological impact on the victims. Therefore, the core objective of this study was to investigate the Impact of emerging determinants of cyber violence like negative emotions, information overload, and government policy on Cyber Violence behaviours among Adolescents. The study is based on primary data collected on the Likert scale and Partial Least Square (PLS) method was used for data analysis. The study concludes that adolescents in Pakistan are increasingly demonstrating cyber violence and in turn affecting their psychological state of affairs. This study enhances the literature on the significant role of government policy decrease cyber violence. Concerning cyber violence against adolescents, this study has significant practical implications critically important for the government and other stakeholders to reduce the cases of cyber violence in Pakistan. The future directions of this study direct the new gaps in the literature for future research.

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1. Introduction

In the current digital era, the crimes of cyber violence are increasing due to advancement in and misuse of technology (Zahoor & Razi, 2020; Zahoor, Safdar, Rafiq, & Rana, 2022). The focus of the government is to bring the technology and facilitate the people, but very less attention is paid to avoiding cybercrime (Ullah, Amir, Khan, Asmat, & Habib, 2015; Usman, 2017). The federal investigation agency of Pakistan has been reporting substantial increase in cyber violence every year (Shad, 2019; Syed, Khaver, & Yasin, 2019). Indeed, Some people are using social media platforms for depraved purposes and they are discriminating against the people on social media (Abbasi, Aamir, & Mahmood, 2021). The cases of cyber violence have a deep psychological impact on the victims. Indeed, in advanced countries, the regulations protecting people from illegal conduct on social media and cases of cyber violence is clearly evident (Anjum, 2020; J. Awan & Memon, 2016). However, very less intention is paid to crubbing cyber violence-related crimes in developing and underdeveloped countries (Bukht, Raza, Awan, & Ahmad, 2020). Therefore, the Crime control agencies have the responsibility to control cybercrime violence that is not accepted widely by the people (Khalil, Usman, & Manzoor, 2020; M. S. Malik & Islam, 2019).

In modern times, the nature of cyber violence is changed and the people involved in these activities are more inclined to achieve their purpose (Momein & Brohi, 2010; Munir & Gondal, 2017). In this regard, digital distrust is one of the rooted fundamental factors that are influencing cyber violence (Shad, 2019; Syed et al., 2019; Ullah et al., 2015). The misuse of the internet and the breach of people's privacy is normal in cyber violence activities (Syed et al., 2019). Every year, there is a 10% increase in the cases reported against cyber violence (Bakhsh, Mahmood, & Awan, 2016). In this regard, the government in the developing countries has more responsibility to react against such kinds of crimes of law (Ullah et al., 2015). Therefore, the breach of the privacy of adolescents is one of the fundamental problems that are resulting in negative emotions and a high level of anxiety (Zahoor et al., 2022). Cyber violence is one of the reasons for the psychological problems of adolescents concluded by (Abbasi et al., 2021). Furthermore, the people involved in cyber violence activities are misusing the information of adolescents available on the internet to get illegal benefits highlighted by (Anjum, 2020).

The anxiety and stress level of adolescents is increased when they are a victim of cyber violence and breach of personal information demonstrated by (J. H. Awan, Memon, & Burfat, 2019). A lot of literature discusses the negative impacts of cyber violence on adolescents (Rehman, 2020, 2021; Riaz & Riaz, 2015; Shad, 2019; Syed et al., 2019; Ullah et al., 2015; Usman, 2017; Zahoor & Razi, 2020; Zahoor et al., 2022). However, the gap in the literature was identified and highlighted by Fan to test the relationship of government policy in cyber violence. Indeed, this area of research was neglected by earlier studies. Therefore, the important theoretical framework of this study is framed on the guidelines from the earlier studies regarding the research gap. The purpose of this study is to determine the influence of government policies to control cyber violence. Furthermore, the study provides a significant theoretical framework in the body of literature describing the relationship between different variables. In the same way, the practical implications of this study would enhance the capacity and information of the government in regulating the policies related to cyber violence and crime control. Therefore, this study is remarkable both theoretically and practically.

2. Literature Review and Hypotheses Development

Digitalization has changed the traditional practice of living because in the modern era people are using technology for routine work (Anjum, 2020; J. Awan & Memon, 2016; J. H. Awan et al., 2019). However, the fair use of technology is still a problem not only in advanced countries but also the Developing countries (Haq & Atta, 2019; Kamran, Arafen, & Shaikh, 2019; Khalil et al., 2020; M. S. Malik & Islam, 2019; Z. U. A. Malik et al., 2022). The people involved in the unfair use of technology are violating the laws, and they are involved in cyber violence against women and children (Syed et al., 2019; Ullah et al., 2015; Usman, 2017; Zahoor & Razi, 2020; Zahoor et al., 2022). The information shared on social media platforms and other digital platforms are not secure because a lot of people have access to the information (Anjum, 2020; Bakhsh et al., 2016; Haq & Atta, 2019). Due to breaches in the privacy of information, people are facing challenges. In Pakistan, a lot of children are a victim of cyber violence (Abbasi et al., 2021; J. Awan & Memon, 2016; Bakhsh et al., 2016; Kamran et al., 2019).

Digital distrust is a reason for cyber violence because adolescents use social media and they share non-required information on social media platforms that are not widely accepted by people (Abbasi et al., 2021; Munir & Gondal, 2017; Mushtaque, Ahsan, Nadeem, & Umer, 2014; Rehman, 2020; Riaz & Riaz, 2015). Adolescents who are victims of digital distrust are facing psychological problems and these negative problems are dangerous for the growth of children (Abbasi et al., 2021; Munir & Gondal, 2017; Mushtaque et al., 2014; Rasool, 2015; Syed et al., 2019; Ullah et al., 2015; Zahoor et al., 2022). Negative emotions are developed as a result of digital distrust, and it is challenging for people to cope with these psychological problems (Mushtaque et al., 2014; Rehman, 2020; Riaz & Riaz, 2015; Shad, 2019; Ullah et al., 2015). Moreover, the laws related to digital violence are strict in Canada because the government intends to control crime. Information overload is also challenging for the students who are facing these problems because they have very little potential to get rid of this information way (Abbasi et al., 2021; Usman, 2017; Zahoor & Razi, 2020; Zahoor et al., 2022).

The victims of cyber violence are not mature and most of the time they attempt suicide to get rid of the blackmailing (Bakhsh et al., 2016; Kamran et al., 2019; Rasool, 2015). On the other hand, the use of vulgar language and negative commentary has increased on social media platforms because most people are using social media with fake profiles to conduct such kinds of activities (Abbasi et al., 2021; J. Awan & Memon, 2016; Hamad, Manan, Shabiralyani, & Iqbal, 2015; Hameed & Naqvi, 2021; Usman, 2017; Zahoor & Razi, 2020; Zahoor et al., 2022). Therefore, the above literature is critical to developing these hypotheses;

- H1: Digital distrust has an impact on negative emotions.
- H2: Digital distrust has an impact on information overload.
- H3: Negative emotions have an impact on cyber violence.
- H4: Information overload has an impact on cyber violence.

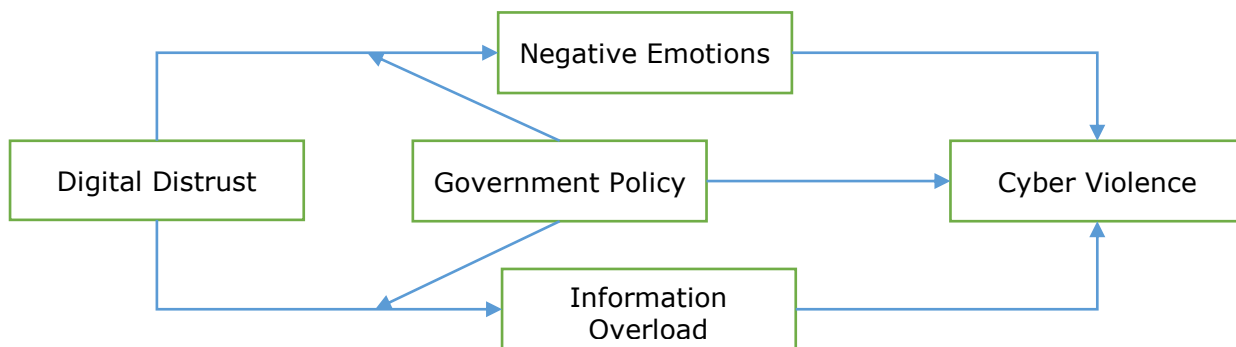
Government policy refers to the strategies by the government for providing guidelines for any conduct (Haq & Atta, 2019; Kamran et al., 2019; Khalil et al., 2020). Government policies are developed particularly to provide discipline to the public as the people are living in a social contract being a community (Mushtaque et al., 2014; Rehman, 2021; Riaz & Riaz, 2015; Shad, 2019). In the digital era, government policies are reformed according to the requirements and people are more interested to get appropriate learning (Murad, Hameed, Akula, & Singh, 2022). Regarding cyber violence, government policies are stricter in advanced and developed European countries as compared to Asian countries (Momein & Brohi, 2010; Munir & Gondal, 2017; Mushtaque et al., 2014). In this regard, the backward countries are required to put great attention because cyber violence is more reported in the backward countries (Rasool, 2015; Zahoor & Razi, 2020; Zahoor et al., 2022). It is widely accepted that crime-controlling institutes are more inclined to pay attention to the violence reports and act against them (Anjum, 2020; Bakhsh et al., 2016; Hamad et al., 2015; Kamran et al., 2019; Khalil et al., 2020).

The government should have reforms in the policies and more control over information sharing should be provided to the crime controlling agencies to control criminal policy (Abbasi et al., 2021; Rehman, 2021; Ullah et al., 2015; Usman, 2017). In Pakistan, a lot of cyber violence victims faced blackmail because they were unable to get assistance from the government for better facilities (Abbasi et al., 2021; Munir & Gondal, 2017; Rasool, 2015; Rehman, 2021; Riaz & Riaz, 2015; Shad, 2019). The criminal justice system in Pakistan has very little grip on crime-controlling departments and experts and is not available in cyber violence controlling agencies (Anjum, 2020; J. Awan & Memon, 2016; Bukht et al., 2020; Haq & Atta, 2019). Effective government policies are established in advanced countries (Murad, Bhatti, Bakar, Ahmad, & Khan, 2022), and due to these policies, effective operations against cyber violence are conducted (Hamad et al., 2015; Hameed & Naqvi, 2021; Haq & Atta, 2019). The appropriate control of cyber violence policies in Thailand has reduced the reported cases of cyber violence (Momein & Brohi, 2010; Munir & Gondal, 2017; Rehman, 2021; Riaz & Riaz, 2015).

The criminal policy against cyber violence provides a safeguard to society for working in the best way (Abbasi et al., 2021; Anjum, 2020; J. Awan & Memon, 2016; J. H. Awan et al., 2019; Bakhsh et al., 2016). The collaboration between society and the government can reduce the chances of more cyber violence as it is done in America (Hameed & Naqvi, 2021; Haq & Atta, 2019; Khalil et al., 2020; Z. U. A. Malik et al., 2022; MANZAR, TANVEER, & JAMAL, 2016; Munir & Gondal, 2017; Mushtaque et al., 2014). The government has the fundamental responsibility to protect citizens against criminal activities (Riaz & Riaz, 2015; Shad, 2019; Syed et al., 2019; Ullah et al., 2015). An effective government policy can control any kind of crime (Hamad et al., 2015; Hameed & Naqvi, 2021; Haq & Atta, 2019). Based on this literature, the developed hypotheses are;

- H5: Government policy has an impact on cyber violence.
- H6: Government policy mediates the relationship between digital distrust and negative emotions.
- H7: Government policy mediates the relationship between digital distrust and information overload.

Figure 1: Theoretical Framework



3. Research Methodology

Social sciences studies are conducted on primary data to test the significance of different hypotheses. In this regard, this study is also conducted on primary data collection because it is a study of cyber violence against adolescents. Furthermore, the survey-based data collection method is appropriate for social sciences study, therefore in this study, the survey-based data collection method is adopted because it saves time and cost. In addition, the Likert scale questionnaire is the best method of data collection in survey-based data collection. Hence, in this study, a survey-based data collection method is adopted to collect the data, and the measurement scale for this study was taken from earlier studies conducted in the same area of research. The scale items for digital distrust were adopted from Fan.

Secondly, the scale items from negative emotions were adopted from Fan. The scale items for information overload were adopted from Fan. Furthermore, the scale items for government policy were adapted from (Hossan & Bartram, 2010). Lastly, the scale items for cyber violence were adopted from Fan. All the scale items were validated from the earlier studies. The data was collected with a random sampling technique and the questionnaires surveyed the respondents in Bahawalpur. The respondents have introduced with purpose any variable of the study. 1500 questionnaires were distributed for data collection and 1401 questionnaires were collected back. The 33 incorrect and incomplete questionnaires were not considered for data analysis of the study. The response rate of the study was appropriate which facilitates the research to collect and analyze the data. The scale items for this study are available in Table 1.

Table 1: Measurement Scale

Variables	Measurement Scale
Cyber Violence	I would vilify others on the Internet I will disclose other people’s privacy on the Internet I would threaten people on the Internet
Information Overload	I think the Internet gives me too much information I don’t think the quality of information on the Internet is very high these days I feel that too much information of low quality prevents me from getting good information
Negative Emotion	I’m getting less information online than I used to Frequent use of the Internet makes me tired Now I hate the information pushed by the Internet
Digital Distrust	The information pushed to me by the Internet makes me question it I worry about other people getting information that’s more useful than mine I have a different view of the same information being pushed online than others
Government Policy	Citizens benefit from government policies. Government helps to reduce crimes. Government has responsibility for citizen protection. Crime-controlling departments are controlling cyber violence.

4. Findings

4.1 Convergent Validity

To determine the reliability and validity of the study, a convergent validity test was conducted. Factor loadings, Cronbach’s alpha, composite reliability (CR), and average variance extracted (AVE) are checked by PLS Algorithm (see Figure 2). According to values in Table 2,

the value of Cronbach's alpha for all variables was greater than the 0.70 thresholds by Fornell and Larcker (1981). The factor loadings values for each measurement were not less than the 0.60 thresholds recommended by (Hair, Money, Samouel, & Page, 2007). Ringle, Da Silva, and Bido (2015) recommend a 0.70 threshold for CR and a 0.50 threshold for AVE. In this study, the threshold for CR and AVE was achieved by this study. Hence, the research has reliability and validity.

Figure 2: PLS Algorithm Measurement Model

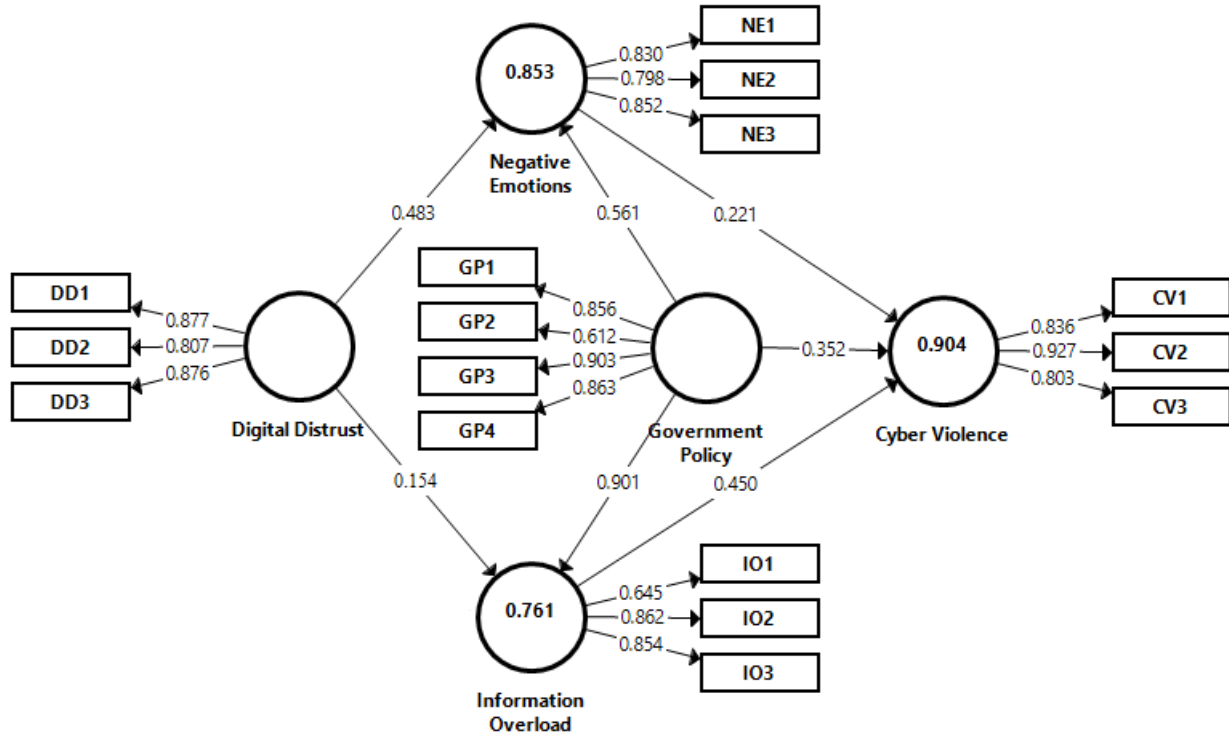


Table 2: Factor Loadings, Cronbach's Alpha, CR and AVE

Variables	Items	Factor Loadings	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted
Cyber Violence	CV1	0.836	0.818	0.831	0.892	0.734
	CV2	0.927				
	CV3	0.803				
Digital Distrust	DD1	0.877	0.819	0.835	0.890	0.729
	DD2	0.807				
	DD3	0.876				
Government Policy	GP1	0.856	0.826	0.860	0.887	0.667
	GP2	0.612				
	GP3	0.903				
	GP4	0.863				
Information Overload	IO1	0.645	0.705	0.755	0.834	0.629
	IO2	0.862				
	IO3	0.854				
Negative Emotions	NE1	0.830	0.781	0.838	0.866	0.684
	NE2	0.798				
	NE3	0.852				

4.2 Discriminant Validity

A discriminant validity test in any study is used to check the discriminant between the measurement scale of the study. Gold recommended that the Heteritrait-Monotrait (HTMT) value of discriminant validity should not be greater than 0.90. In this study, HTMT method values were determined by PLS Algorithm calculations, and all the values were less than 0.90. Hence, the measurement scale of the study has clear discriminant validity in the study.

Table 3: Discriminant Validity

	Cyber Violence	Digital Distrust	Government Policy	Information Overload	Negative Emotions
Cyber Violence					
Digital Distrust	0.722				
Government Policy	0.802	0.623			
Information Overload	0.718	0.565	0.735		
Negative Emotions	0.906	0.801	0.723	0.719	

4.3 The PLS-SEMs Findings

The direct relationship in this study was tested by PLS Bootstrapping calculations. For it, t values and p values were identified to test the significance of the study hypotheses (see Figure 3). According to Table 4, digital distrust has impact of negative emotions ($\beta = 0.483$, $t = 18.575$, and $p = 0.000$) and hypothesis one is significant. Furthermore, hypothesis 2 is significant as digital distrust has significant impact on information overload ($\beta = 0.154$, $t = 4.400$, and $p = 0.000$). Thirdly, hypothesis three is significant as negative emotions has impact of cyber violence ($\beta = 0.221$, $t = 5.984$, and $p = 0.000$). Also, the study finds information overload has impact on cyber violence and hypothesis four is significant ($\beta = 0.450$, $t = 12.102$, and $p = 0.000$). In addition, according to the findings ($\beta = 0.352$, $t = 6.316$, and $p = 0.000$) government policy has impact on cyber violence and hypothesis five is significant. Hence, all the direct impacts of this study are significant.

Figure 3: PLS Bootstrapping Structural Model

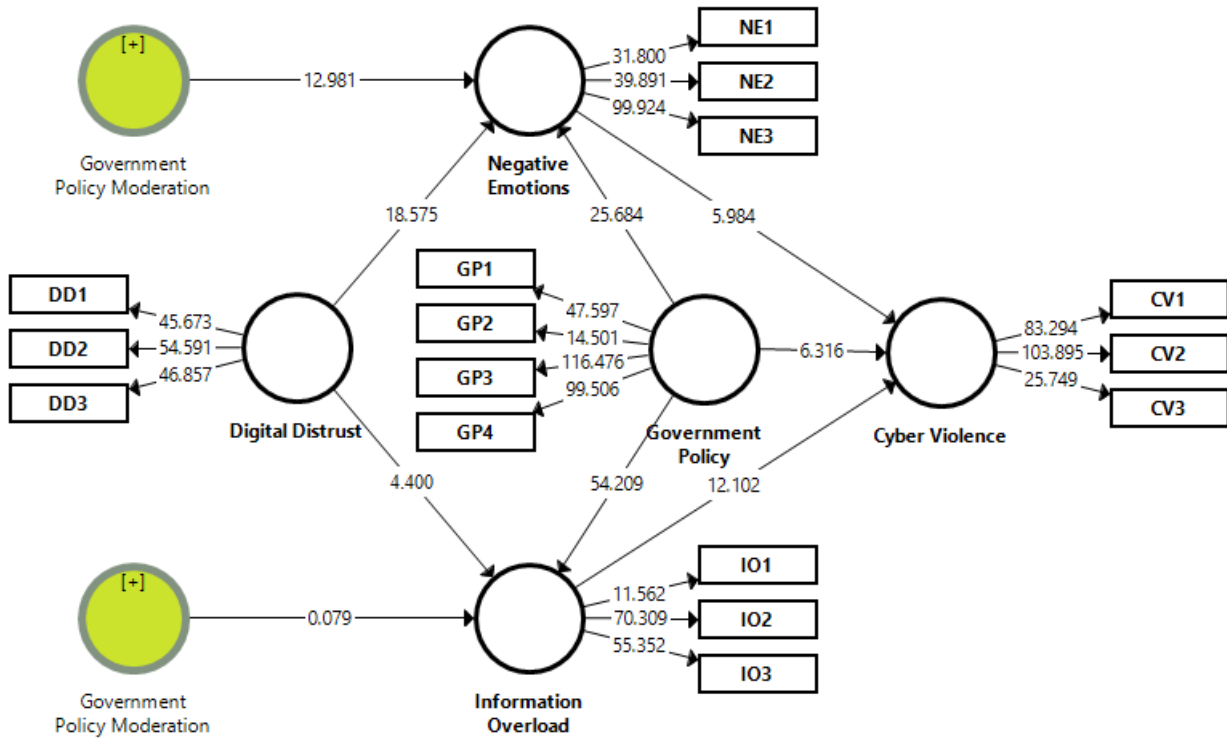


Table 4: Direct Impacts

Direct Relationship	Original Sample	Standard Deviation	t Statistics	P Values	Remarks
Digital Distrust -> Negative Emotions	0.483	0.026	18.575	0.000	Significant
Digital Distrust -> Information Overload	0.154	0.035	4.400	0.000	Significant
Negative Emotions -> Cyber Violence	0.221	0.037	5.984	0.000	Significant
Information Overload -> Cyber Violence	0.450	0.037	12.102	0.000	Significant
Government Policy -> Cyber Violence	0.352	0.056	6.316	0.000	Significant

4.4 Moderating Effect

In this research, PLS Bootstrapping calculations were used to test the moderating impacts. According to findings available in Table 5, there is a moderating role of government policy in the relationship between digital distrust and negative emotions ($\beta = 0.237$, $t = 12.981$, and $p = 0.000$) and this relationship is significant. In the same way, the findings also explain government policy strengthens the positive relationship between digital distrust and negative emotions (see Figure 4). Furthermore, the findings ($\beta = 0.001$, $t = 0.079$, and $p = 0.937$) highlight that there is no significant moderating role of government policy in the relationship between digital distrust and information overload. Hence, only one moderating impact is significant in this study.

Figure 4: Government Policy Moderation on Negative Emotions

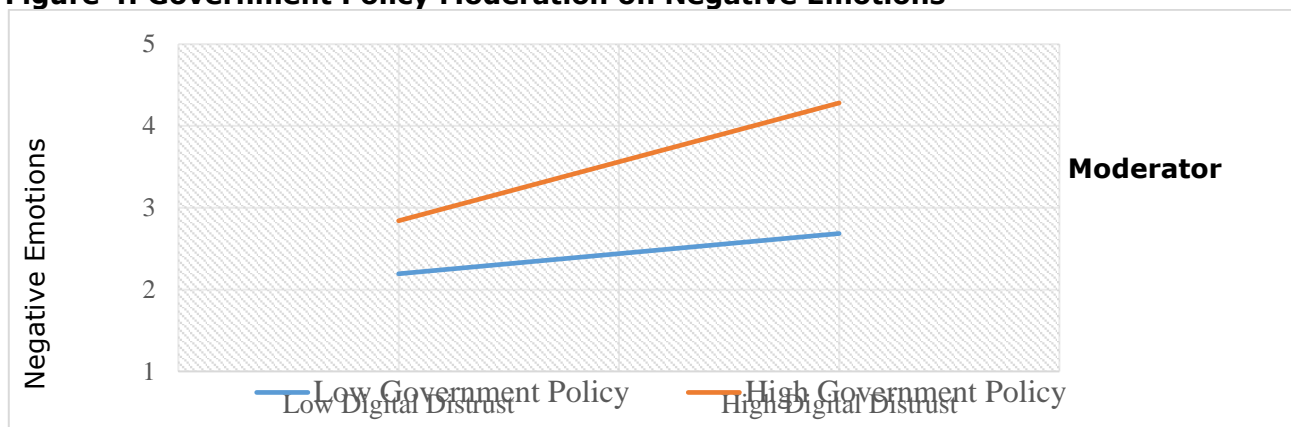


Table 5: Moderating Impacts

Moderating Relationship	Original Sample	Standard Deviation	t Statistics	P Values	Remarks
Government Policy Moderation - > Negative Emotions	0.237	0.018	12.981	0.000	Significant
Government Policy Moderation - > Information Overload	0.001	0.017	0.079	0.937	Insignificant

4.5 Predictive Relevance - Q²

Hair et al. (2007) recommend PLS Blindfolding to identify the predictive relevance of the study. Therefore, in this study, the same calculator was used to test the predictive relevance of the study framework (see Table 6). However, the value of Q² must not be below 0 for predictive relevance (Henseler & Fassott, 2010). Q² value of cyber violence is 0.654, information overload 0.464, and negative emotions 0.551 in this study. Therefore, there is strong predictive relevance in the study model.

Table 6: Predictive Relevance - Q²

Variables	SSO	SSE	Q ² (=1-SSE/SSO)
Cyber Violence	990	342.165	0.654
Information Overload	990	530.231	0.464
Negative Emotions	990	444.302	0.551

5. Discussion and Conclusions

Cyber violence is one of the reasons for psychological problems of adolescents concluded by (Kamran et al., 2019). The purpose of this study is to determine the influence of government policies to control cyber violence. H1 is significant and digital distrust has an impact on negative emotions. The results of this study are in line with the results of earlier studies describing the relationship between digital distrust and negative emotions (J. Awan & Memon, 2016; J. H. Awan et al., 2019; Bakhsh et al., 2016; M. S. Malik & Islam, 2019; Momein & Brohi, 2010). Indeed, digital distrust is a reason for anxiety for people (M. S. Malik & Islam, 2019). The information breach on the social media platform is alarming and not appropriate for the people (Zahoor & Razi, 2020). Furthermore, H2 is the significant digital distrust that has an impact on information overload. The results of this study are relevant to

the result of existing studies in the body of literature describing the relationship between information overload (Syed et al., 2019; Ullah et al., 2015).

At the same time, it is also demonstrated that the people involved in digital distrust, are disturbing the whole structure of society because they are not sincere with people (Hameed & Naqvi, 2021). The immoral people are creating digital distrust in society (Zahoor et al., 2022). Also, negative emotions have an impact on cyber violence, and H3 is significant. People with negative emotions are more dangerous to cyber violence because they don't have emotional intelligence (Abbasi et al., 2021). Furthermore, the results of this study validate the results of earlier studies related to negative emotions. In addition, information overload has an impact on cyber violence and H4 is significant. In the digital era, information of people is not safe to hand because they are uploading it on different digital media platforms without any privacy issues (Hamad et al., 2015; Haq & Atta, 2019). As result, this information becomes violent and people are facing information sharing-related challenges. Public personal information is used by the blackmailers for cyber violence (Mushtaque et al., 2014).

Moreover, government policy has an impact on cyber violence and H5 is significant. Government policy has a critical role to monitor and control cyber violence (J. Awan & Memon, 2016). State-backed institutions must protect people from cyber violence by developing strategies and implementing laws related to cyber violence (Hamad et al., 2015). The children of backward countries are a victim of cyber violence because of a lack of government regulations (Hamad et al., 2015; Momein & Brohi, 2010). Importantly, H6 is significant and government policy mediates the relationship between digital distrust and negative emotions. The appropriate government policy can enhance the effectiveness of the implementation of laws against cyber violence (J. Awan & Memon, 2016). On the other hand, the government in the advance and developed countries is more effective in working against cyber violence as compared to the governments of backward countries (Munir & Gondal, 2017). However, the government has a significant role to control cyber violence (Ullah et al., 2015).

Lastly, H7 is significant and government policy mediates the relationship between digital distrust and information overload. In addition, the government policy provides more regulations against cyber violence to control this factor against children (J. H. Awan et al., 2019; Bukht et al., 2020; Hamad et al., 2015; Hameed & Naqvi, 2021; Mirza & Akram, 2022; Rehman, 2021; Ullah et al., 2015). By and large, the government of the backward countries should enhance the laws and regulations related to cyber violence following the implemented cyber laws in the advanced countries. In this way, more focus on cyber violence would provide a sense of relief to the adolescent of Pakistan and other backward countries. Crime control would provide mental stability and relief from stress to the people. Therefore, more focus on government policy is appropriate to decrease the factor of cyber violence.

6. Implications

The existing studies in the literature discuss different dimensions of cyber violence (Abbasi et al., 2021; Anjum, 2020; Bakhsh et al., 2016; Momein & Brohi, 2010; Munir & Gondal, 2017; Mushtaque et al., 2014; Riaz & Riaz, 2015; Usman, 2017). However, no significant study discussed the role of government policy in cyber violence against adolescents. Therefore, this study enhances the literature and provides significant information related to the role of government policy in cyber violence. To begin with, this study enhances the literature on the significant role of government policy decrease cyber violence. This developed relationship based on this study framework enriches the literature by providing new insight into the study. In addition, the study highlights the importance of moderating the role of government policy in the relationship between digital distrust and negative emotions. In earlier studies, the moderating role of government policies was not discussed addressing the relationship between digital distrust and information overload.

Therefore, this significant relationship would provide a deep understanding of these relationships for future studies. Additionally, this study has validated the results of previous studies related to the relationship between negative emotions and information overload (Haq & Atta, 2019; Momein & Brohi, 2010; Munir & Gondal, 2017; Usman, 2017). These implications would provide new insight into the literature by enhancing the information and experience of researchers. Therefore, the significant theoretical framework of this study is a justified

contribution to the body of knowledge and literature. In this regard, the theoretical implications of this study are realistic and appropriate to describe the relationship between different variables.

Cyber violence against adolescents, this study has significant practical implications critically important for the government and other stakeholders to reduce the cases of cyber violence in Pakistan. In this regard, this study demonstrates that government policies can be an effective stance against cyber violence activities. The government needs to establish rules and regulations against cyber violence against adolescents and improve their living standards. It is a fact that government is the most powerful machinery in any state; therefore the core responsibility of government is to work against the criminal minded with state administration and institutions to reduce the outcomes of cyber violence. The people involved in cyber violence fear of law because with effective government machinery, the culprits go behind bars. The government of Pakistan should enhance the living standard of adolescents under the light of this study and design the framework with the collaboration of other stakeholders to adopt new measurements. Therefore, the government can establish separate departments and courts to work against cyber violence with an effective strategy. As result, not only the cyber violence would be in control, but more productive measures would be taken to reduce such kinds of crimes. In addition, the government should collaborate with non-government organizations to spread awareness related to the outcomes of cyber violence against adolescents which would be an effective strategy to reduce the cases of cyber violence against adolescents in Pakistan. These implications for significant for literature and practices to reduce the cyber violence in Pakistan and worldwide.

7. Limitations and Future Directions

No doubt, this study has significant theoretical and practical implications, however, there are other factors analyzed in the literature that matters a lot in cyber violence. To begin with, this study is limited to adolescents in Pakistan. Therefore, the general respondents need to be considered in future studies to validate the results of this study. Furthermore, the government policy moderating relationship is tested in this study; however, future research needs to understand the moderating role of cyber laws in the relationship between digital distrust and cyber violence. Similarly, this study is conducted on the primary data; however, future research should need to be developed on secondary data to validate the findings of this study and significant contribution to the literature.

References

- Abbasi, M. U. R., Aamir, R., & Mahmood, N. (2021). Contemporary Challenges of Digital World and Cyber Crime and Management Solutions in the light of Cyber Crime Bill 2016 of Pakistan and Islamic Management Perspective. *Indian Journal of Economics and Business*, 20(3), 1-18.
- Anjum, U. (2020). Cyber crime in Pakistan; detection and punishment mechanism. *Časopis o društvenom i tehnološkom razvoju*, 2(2).
- Awan, J., & Memon, S. (2016). *Threats of cyber security and challenges for Pakistan*. Paper presented at the International Conference on Cyber Warfare and Security.
- Awan, J. H., Memon, S., & Burfat, F. M. (2019). Role of Cyber Law and Mitigation Strategies in Perspective of Pakistan to Cope Cyber Threats. *International Journal of Cyber Warfare and Terrorism (IJCWT)*, 9(2), 29-38. doi:10.4018/IJCWT.2019040103
- Bakhsh, M., Mahmood, A., & Awan, I. I. (2016). A comparative analysis of cybercrime and cyberlaws in Islamic Republic of Pakistan, Kingdom of Saudi Arabia, and the United Arab Emirates. *Imam Journal of Applied Sciences*, 1(1), 9.
- Bukht, T. F. N., Raza, M. A., Awan, J. H., & Ahmad, R. (2020). Analyzing cyber-attacks targeted on the Banks of Pakistan and their Solutions. *IJCSNS International Journal of Computer Science and Network Security*, 20(2).
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of marketing research*, 18(1), 39-50. doi:10.1177/002224378101800104
- Hair, J. F., Money, A. H., Samouel, P., & Page, M. (2007). Research methods for business. *Education+ Training*, 49(4), 336-337. doi:10.1108/et.2007.49.4.336.2
- Hamad, N., Manan, A., Shabiralyani, G., & Iqbal, N. (2015). A Quantitative Approach to Cybercrimes Impact on Society in Pakistan Case Study: Business Community of Southern Punjab. *Journal of Information Engineering and Applications*, 5(5), 50-56.

- Hameed, I., & Naqvi, S. A. A. (2021). *An Analysis of the factors affecting Cybercrime against individuals in Pakistan*. Paper presented at the 2021 15th International Conference on Open Source Systems and Technologies (ICOSST).
- Haq, U., & Atta, Q. (2019). Cyber Security and Analysis of Cyber-Crime Laws to Restrict Cyber Crime in Pakistan. *International Journal of Computer Network & Information Security*, 11(1), 62-69. doi:10.5815/ijcnis.2019.01.06
- Henseler, J., & Fassott, G. (2010). Testing moderating effects in PLS path models: An illustration of available procedures. In *Handbook of partial least squares* (pp. 713-735): Springer.
- Hossan, C., & Bartram, T. (2010). The battle against corruption and inefficiency with the help of eGovernment in Bangladesh. *Electronic Government, an International Journal*, 7(1), 89-100.
- Kamran, A., Arafeen, Q. U., & Shaikh, A. A. (2019). Existing Cyber Laws and Their Role in Legal Aspects of Cybercrime in Pakistan. *International Journal of Cyber-Security and Digital Forensics*, 8(3), 241-250.
- Khalil, K., Usman, A., & Manzoor, S. R. (2020). Effect of Cyber Security Costs on Performance of E-banking in Pakistan. *Journal of Managerial Sciences*, 14, 85-99.
- Malik, M. S., & Islam, U. (2019). Cybercrime: an emerging threat to the banking sector of Pakistan. *Journal of Financial Crime*, 26(1), 50-60. doi:10.1108/JFC-11-2017-0118
- Malik, Z. U. A., Xing, H. M., Malik, S., Shahzad, T., Zheng, M., & Fatima, H. (2022). Cyber Security Situation in Pakistan: A Critical Analysis. *PalArch's Journal of Archaeology of Egypt/Egyptology*, 19(1), 23-32.
- MANZAR, U., TANVEER, S., & JAMAL, S. (2016). The incidence of cybercrime in pakistan.
- Mirza, M. N., & Akram, M. S. (2022). 3-Cs of Cyberspace and Pakistan: Cyber Crime, Cyber Terrorism and Cyber Warfare. *Strategic Studies*, 42(1), 62-80. doi:10.53532/ss.042.01.00134
- Momein, F. A., & Brohi, M. N. (2010). Cyber crime and internet growth in Pakistan. *Asian Journal of Information Technology*, 9(1), 1-4.
- Munir, A., & Gondal, M. T. (2017). Cyber Media and Vulnerability: A discourse on cyber laws and a probe on victimization of cybercrimes in Pakistan. *Global Media Journal: Pakistan Edition*, 10(2).
- Murad, M., Bhatti, A., Bakar, A., Ahmad, R., & Khan, A. J. (2022). Exploring the Relationship between Effective Management & Social Equity: A CSR Perspective. *Journal of South Asian Studies*, 10(1), 103-111. doi:10.33687/jsas.010.01.4180
- Murad, M., Hameed, W., Akula, S. C., & Singh, P. (2022). Pharmaceutical interventions: A solution to stop smoking. *Pharmacy Practice*, 20(2), 1-10. doi:10.18549/PharmPract.2022.2.2663
- Mushtaque, K., Ahsan, K., Nadeem, A., & Umer, A. (2014). Critical Analysis for Data Privacy Protection in Context of Cyber Laws in Pakistan. *Journal of Basic and Applied Scientific Research*, 4(10), 1-4.
- Rasool, S. (2015). Cyber security threat in Pakistan: Causes, Challenges and Way forward. *International Scientific Online Journal*, 12, 21-34.
- Rehman, T. U. (2020). International cooperation and legal response to cybercrime in Pakistan. In *Encyclopedia of Criminal Activities and the Deep Web* (pp. 424-434): IGI Global.
- Rehman, T. U. (2021). Psychosocial Aspects of Cybercrime Victimization in Pakistan. In *Handbook of Research on Applied Social Psychology in Multiculturalism* (pp. 192-211): IGI Global.
- Riaz, A., & Riaz, A. (2015). *Causes and consequences of cybercrimes: An exploratory study of Pakistan*. Paper presented at the 2015 First International Conference on Anti-Cybercrime (ICACC).
- Ringle, C., Da Silva, D., & Bido, D. (2015). Structural equation modeling with the SmartPLS. *Bido, D., da Silva, D., & Ringle, C.(2014). Structural Equation Modeling with the Smartpls. Brazilian Journal Of Marketing*, 13(2).
- Shad, M. R. (2019). Cyber threat landscape and readiness challenge of Pakistan. *Strategic Studies*, 39(1), 1-19.
- Syed, R., Khaver, A. A., & Yasin, M. (2019). Cyber Security: Where Does Pakistan Stand?
- Ullah, S., Amir, M., Khan, M., Asmat, H., & Habib, K. (2015). *Pakistan and cyber crimes: Problems and preventions*. Paper presented at the 2015 First International Conference on Anti-Cybercrime (ICACC).
- Usman, M. (2017). cyber crime: Pakistani perspective. *Islamabad Law Review*, 1(03), 18-40.

- Zahoor, R., & Razi, N. (2020). Cyber-Crimes and Cyber Laws of Pakistan: An Overview. *Progressive Research Journal of Arts & Humanities (PRJAH), 2(2), 133-143.*
doi:10.51872/prjah.vol2.Iss2.43
- Zahoor, R., Safdar, M. A., Rafiq, W., & Rana, F. A. (2022). Cyber War in a Cyber-Led World and Legislative Measurements taken by Pakistan. *Competitive Social Science Research Journal, 3(2), 151-158.*