

Impact of Myanmar's Nationwide Internet Censorship/Firewall on Burmese Students and Teens

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Abstract

This paper explores the impacts of nationwide internet censorship, specifically firewalls, on students and teens in Myanmar (Burma). It investigates how restricted access to information affects academic performance, social interactions, and psychological well-being among youth. Through survey data and interviews with students affected by such restrictions, this study highlights both the limitations and coping mechanisms developed by young people facing internet censorship. The findings reveal that while firewalls create educational and social obstacles, students often adapt by finding alternative ways to access information, albeit sometimes at personal or legal risk.

1. Introduction

Due to increased internet censorship in many nations in recent years, sophisticated systems known as "nationwide firewalls" have been put in place to limit access to a variety of online information. These limitations are frequently implemented to influence public opinion and regulate the flow of information inside a nation. Firewalls, however, have particular effects on kids and teenagers since they restrict their access to social media, educational materials, and international viewpoints.

This essay aims to investigate the effects of internet restriction on the academic and personal development of youth who depend on the internet for socialization, education, and personal development. This study is guided by the following research question: What are the educational and social effects of a nationwide firewall on Burmese pupils and teenagers? By examining this issue, we can better understand the balance between national policies on censorship and the digital rights of young people in Myanmar (Burma) indicated in this research (iMAP. 2024).

2. Literature Review

2.1 Internet Censorship and Nationwide Firewalls

Previous studies have defined nationwide firewalls as large-scale censorship systems that block access to foreign websites and filter content deemed inappropriate by a government (Li, 2014). Examples include China's Great Firewall and Iran's National Information Network. Such firewalls typically block major platforms like Google, Facebook, and international news sources, limiting access to global perspectives (Scott N. Romaniuk, 2018).

2.2 Impact on Education

The role of internet censorship in limiting access to educational resources has been a critical point of discussion among researchers. Studies like those by (Khattak, 2017) emphasize that students in heavily restricted environments face significant challenges in accessing current scientific research and academic publications, which negatively impacts their academic competitiveness. Students are often limited to government-approved resources, restricting their exposure to diverse sources of information.

2.3 Social and Psychological Effects

Studies have also shown that limited internet access can lead to feelings of isolation and frustration among teens (Kwan, 2018). Restricted access to social media platforms means that teens are often cut off from global conversations and cultural exchanges, which can impact their worldview and sense of belonging (Kirsten Weir, 2023). Moreover, research highlights that young people may experience stress and anxiety due to the restrictions and the need to constantly navigate these barriers.(Mathewson, T. G., & Puertas, M. 2024)

2.4 Coping Mechanisms and Digital Workarounds

To counteract restrictions, students often seek alternative ways to access information, such as VPNs or proxy servers. However, these methods are not without risk; many countries penalize individuals who attempt to bypass censorship (PrivacySavvy. 2024). The risk of punishment for accessing restricted content can exacerbate stress among students, who must weigh the benefits of information access against potential consequences.(García Mathewson, T., & Puertas, M. 2024)

3. Methodology

3.1 Research Design

This study utilized a mixed-methods approach to gather quantitative and qualitative data on the effects of internet censorship. An online survey collected responses from students aged 13–23, and in-depth interviews provided additional insights into their experiences with internet restrictions.

3.2 Participants

The participants included 43 students and teens from Myanmar or was previously from Myanmar. Participants were recruited through academic and social networks to ensure diversity. All participants' information were not collected except for their age and grade for protection against any action they might face if the information were leaked.

3.3 Data Collection Tools

The survey included questions about the frequency of internet restrictions, access to educational resources, and the psychological effects of censorship. Sample survey questions included, “How often do you encounter blocked websites during research?” and “Do restrictions impact your social life?” The interviews delved deeper into personal experiences, including workarounds used to bypass restrictions.

3.4 Data Analysis

Quantitative data were analyzed using descriptive statistics to determine common trends. Qualitative data from interviews were coded and categorized into themes to explore coping mechanisms, perceived educational impacts, and social effects.

4. Results

4.1 Educational Impact

Data analysis revealed that 74% of participants frequently encountered restrictions on educational sites, and 18.8% reported that this hindered their ability to complete assignments. Many noted difficulties in accessing research papers, online textbooks, and foreign educational platforms such as Wikipedia. Many schools implement their own firewalls to restrict internet access, aiming to block inappropriate content and ensure a focused learning environment. According to the survey, 79% of participants reported that their school enforces a firewall to control what students can access online. While these firewalls are intended to promote a safe and academically focused environment, they often inadvertently limit access to legitimate educational resources. Students frequently express frustration with these restrictions, as they can

obstruct research, inhibit creativity, and create additional challenges for completing assignments that require unrestricted internet access.

4.2 Social Impact

Restrictions on social media have become a major concern for many, with 39% of survey participants stating they feel "cut off" from the global community. One participant described the experience as, "It feels like the world is moving forward, but we're stuck in a bubble. I can't follow international news or trends." This reflects the frustration of being disconnected from global conversations due to censorship, a challenge particularly felt by students and young adults who depend on social media for education and social interaction. Furthermore, 44% of respondents reported feeling somewhat excluded from the global community, while 17% indicated they were unaffected by the restrictions. These differing perspectives reveal the broader impact of social media censorship on individuals' sense of connection to the world. For many, the lack of real-time access to international news and trends fosters isolation, restricting their ability to engage with global developments.

Firewalls also significantly shape individuals' perceptions of global events and viewpoints. According to the survey, 51% of participants reported that firewalls had a major impact on their understanding of global issues, citing limited access to diverse perspectives and international news as key challenges. In contrast, 40% reported minimal impact, often due to their use of alternative methods like VPNs to bypass restrictions. The remaining 9% noted no impact, likely due to minimal interaction with blocked content or satisfaction with state-approved narratives. These findings illustrate how firewalls affect information access, influencing how people interpret global affairs. Those most affected experience a narrower worldview shaped by local narratives, while others adapt by seeking alternative sources of information.

4.3 Coping Mechanisms

Approximately 88% of participants reported using VPNs or proxy servers to bypass internet restrictions and access blocked content. While these tools provided a workaround to censorship, many students expressed concerns about the potential legal repercussions of their actions. Several interviewees shared feelings of anxiety, fearing penalties for violating censorship policies. One participant stated, "I have no choice if I want access to essential resources," emphasizing the pressure students face when restricted from educational content. This fear of punishment highlights the ongoing tension between the need for unrestricted information and the risks associated with circumventing government-imposed firewalls. The reliance on VPNs illustrates the lengths to which individuals go to maintain access to vital educational materials, despite the potential legal consequences of such actions.

4.4 Usage of VPNs

Participants' reasons for using VPNs varied widely, but the most common motivations included accessing social media, educational resources, news, and entertainment. For many, the ability to bypass censorship became essential for navigating the restrictions imposed by firewalls. As one interviewee explained, "VPN has become one of my essential software. Without it, I wouldn't be able to access the majority of the websites and apps other countries have access to." This sentiment underscores the critical role VPNs play in helping individuals maintain their connection to global networks, which includes both academic and social engagement (Chen & Yang, 2019; García Mathewson & Puertas, 2024). The reliance on VPNs for such diverse purposes highlights how censorship not only limits access to information but also affects the daily lives and personal connections of students, making these tools indispensable for circumventing online barriers.

4.5 Opinions

According to about 61% of participants, the firewall is generally detrimental to the nation and the community. On the other hand, 30% remained neutral, 3% thought the firewall was helpful, and 6% weren't sure. All things considered, the interviewees clearly agreed with the majority, highlighting worries about the negative consequences of the limitations. Firewalls, according to many, restrict access to vital educational materials, impede international connection, and ultimately impede advancement in fields like social interaction and scholarly study. Similar findings in previous research, which emphasize the detrimental effects of censorship on individual liberties and community development, are echoed by this pervasive unfavorable opinion (Mathewson, T. G., & Puertas, M. 2024, April 13). The unanimity of the 61% who believe the barrier is detrimental

5. Discussion

5.1 Interpretation of Findings

The findings indicate that internet censorship has a multifaceted impact on students, affecting their educational performance, social development, and mental health. While censorship is often justified for political or moral reasons, it inadvertently restricts access to essential educational resources, placing students at a disadvantage.

5.2 Comparison with Literature

These findings align with earlier studies by (Kirsten Weir. 2023) and (Khattak, S. 2020), which show that internet restrictions hinder academic competitiveness and can result in psychological

strain among youth. Unlike previous studies, this research highlights students' use of workarounds as an adaptive response, underscoring the resilience of young people in censored environments.

5.3 Implications

The study suggests that while firewalls can serve a governmental purpose, they may inadvertently affect the intellectual and emotional development of students. Educational policymakers may need to advocate for moderated restrictions or at least make learning resources accessible to students.

5.4 Limitations

One limitation of this study is the sample size and diversity, as the participants may not fully represent the broader student population in Myanmar. Despite efforts to include a range of students, the small sample may lead to findings that are not generalizable. Additionally, language barriers and varying levels of internet access could impact both the responses and the participants' ability to fully engage with the survey. This could be particularly relevant in a country like Myanmar, where access to information and internet services can be uneven across regions.

Future research should address these limitations by increasing the sample size and diversifying the demographic representation to better capture the experiences of all students. It would also be beneficial to explore additional factors such as the long-term effects of censorship on career opportunities, as students' ability to access global knowledge could influence their professional prospects. Moreover, incorporating the Burmese language into surveys and interviews could help eliminate language barriers, improving the clarity and ease of understanding for participants. Such steps would contribute to a more comprehensive understanding of how nationwide firewalls and internet censorship affect students' educational and career development.

6. Conclusion

This study highlights the complex effects of nationwide firewalls on students and teens. Internet censorship limits access to essential educational resources, blocking access to important websites, publications, and even social media platforms that contribute to global awareness. Despite these obstacles, students demonstrate remarkable resilience by utilizing tools such as VPNs to bypass restrictions and continue their learning. However, this reliance on workarounds raises concerns about legal risks, adding to the challenges they face. Moving forward, it is crucial

for policymakers to strike a balance between protecting national security and enabling students to access vital educational resources. By creating more flexible policies that allow students to freely engage with global knowledge, governments can support academic success without sacrificing security or regulation.

7. References

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8. Appendices

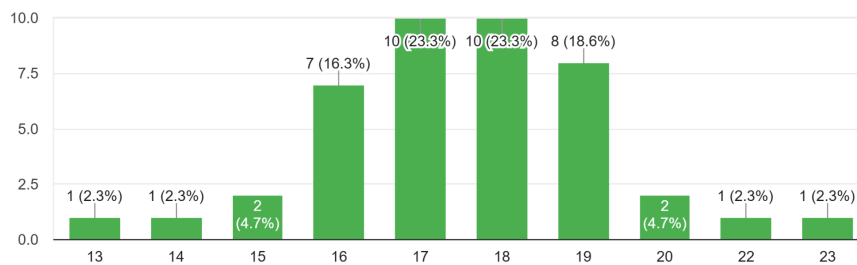
- **Survey and Interview Questions:** Age, Grade, Does your school have its own firewall? Did you know there is a nation-wide firewall? Have these restrictions affected your academic performance or ability to complete assignments? How often do you find educational resources (such as websites, articles, videos) blocked or unavailable? Has the firewall affected your social life? What blockage of Website / App affects your life the most? How often do you feel isolated or left out of global conversations due to these restrictions? How has the firewall influenced your understanding of global events or

perspectives? Do you use VPN to bypass the firewall? What are the main reasons you use them? Do you believe the internet restrictions are beneficial, harmful, or neutral for students in your country?

- **Data Charts and Tables:**

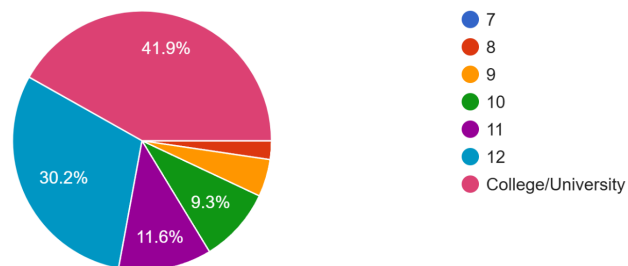
Age

43 responses



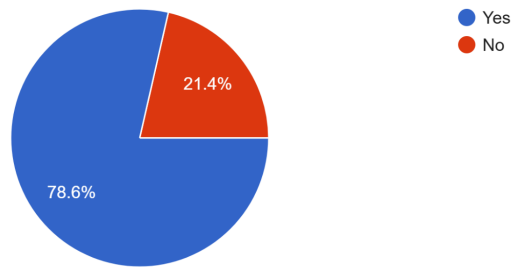
Your Grade

43 responses



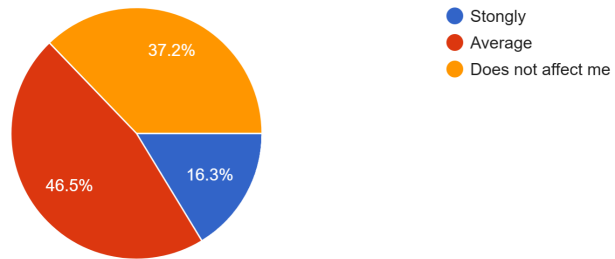
Does your school have its own firewall?

42 responses



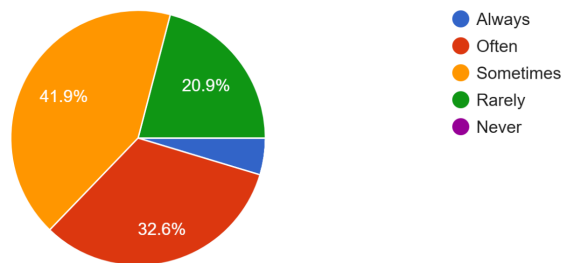
Have these restrictions affected your academic performance or ability to complete assignments?

43 responses



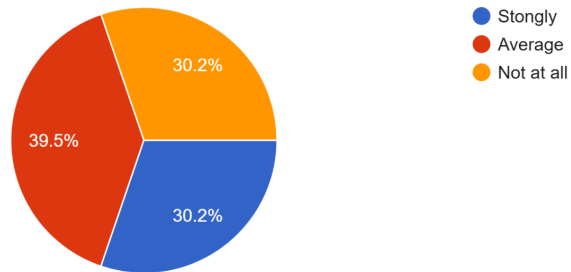
How often do you find educational resources (such as websites, articles, videos) blocked or unavailable?

43 responses



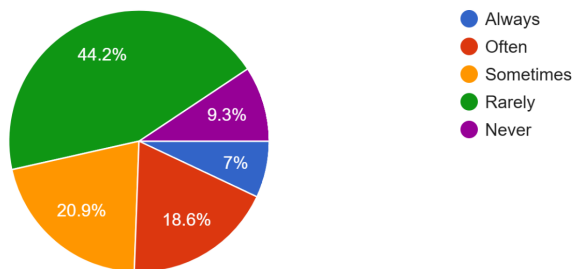
Has the firewall affected your social life?

43 responses



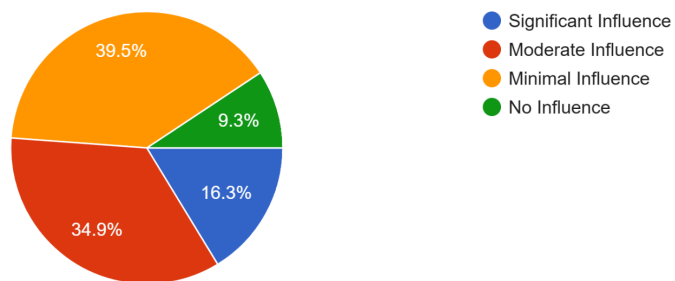
How often do you feel isolated or left out of global conversations due to these restrictions?

43 responses



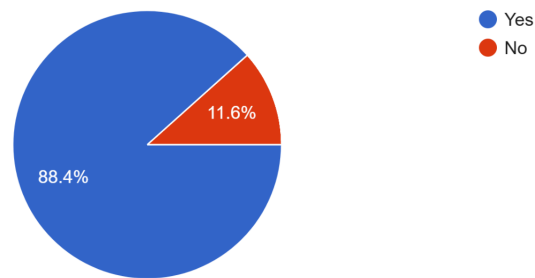
How has the firewall influenced your understanding of global events or perspectives?

43 responses



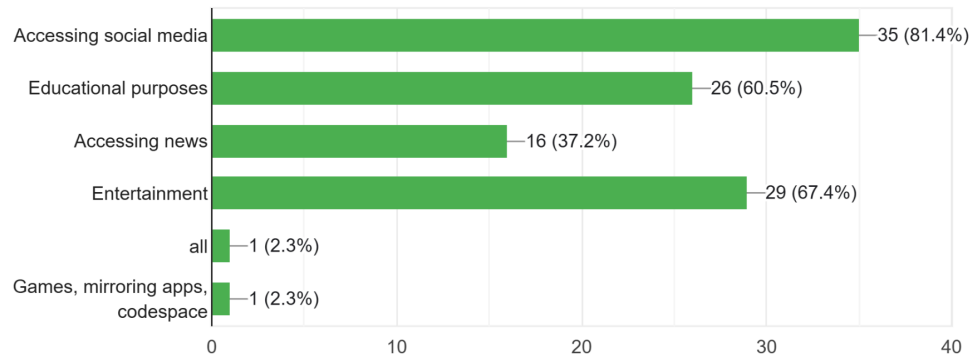
Do you use VPN to bypass the firewall?

43 responses



What are the main reasons you use them?

43 responses



Do you believe the internet restrictions are beneficial, harmful, or neutral for students in your country?

43 responses

