Journal of Ecohumanism
2024
Volume: 3, No: 3, pp. 1266 – 1278
ISSN: 2752-6798 (Print) | ISSN 2752-6801 (Online)
https://ecohumanism.co.uk/joe/ecohumanism
DOI: https://doi.org/10.62754/joe.v3i3.3437

Prevalence, Viewpoints, and Encounters with Cyberterrorism among College Students

Diab M. Al-Badayneh[1]

Abstract

This research aims to describe prevalence, perspective on cyberextremism and encounters of cyberextremism among college students. A sample of 1000 Tafila Technical University (TTU) students) representing 12 Jordanian governates, found that 45.4% were males and 54.6% were females from 12 Jordanian governorates. Science colleges and arts and social colleges split the sample almost equally (49.6% vs. 50.4%), respectively. All students are using the internet, and most of them use it intensively (73%), compared to regular use (27%).

The study found that less than half of the sample described online extremism as hate speech, violence, cyberbullying, sexual pornography, indirect hate speech, assaults, and post-support extremism. Students perceived several procedures to encounter cyberextremism, including closing websites, fines, criminalizing content, holding websites responsible for compensation, establishing a minimum age for viewing extremist content, removing hardening material, and compensation. Males had a higher mean of cyberextremism than females. ANOVA analysis showed significant differences between external attribution and cyberextremism, internal attributions, and no significant differences between males and females.

Keywords: *Attribution, youth, Jordan, gender cyberterrorism and encountering extremis.*

Introduction

The rise of the cyberspace has significantly reduced the geographical proximity of violent extremists, allowing them to communicate instantly with supporters worldwide. The internet's anonymity and high speed make counter-strategies difficult to develop. However, cyberspace can also serve as a neutral medium for the rapid transfer of ideas, beliefs, and agendas. Forces of moderation, integration, and education can use these platforms to promote peace, security, pluralism, and acceptance. To counter extremism, strategies must be carefully targeted towards specific groups and avoid focusing on values, perceptions, or beliefs. Identifying common feelings and emotions between polarized groups can create an inclusive atmosphere and help counter extremists.(Mroz, 2008). The Internet has become a ubiquitous communication tool, with violent extremists using it to socialize, learn, and become activists. The concept of cyber radicalization has gained significant attention in policy circles and academia for the past 15 years. Despite a lack of data-driven research, recent studies have shown an increase in empirical studies examining the role of the Internet in the radicalization process. (Whittaker, 2022). A 13-year-old boy was arrested in Estonia for leading an international terrorist organization, highlighting the increasing accessibility of extremist material online. The capture of Feuerkrieg Division's leader demonstrates the growing impact of social media on extremism and terrorism, with individuals in their teens actively recruiting and leading their peers. (Ware, 2023). "From where did you receive/research/develop your beliefs? The internet, of course. You will not find the truth anywhere else." — Brenton Tarrant, 2019 (cited in Ware, 2023, p. 5). Radicalization refers to the transformation of groups or individuals into political extremists, encompassing both extremist ideas and methods. Experts differentiate between cognitive radicalization and violent radicalization, with governments often labeling terrorists as "violent extremists." (Neumann, 2013). Weimann (2012) argues that the Internet era transformed terrorism was a 'paradigm shift' which changed the nature of terrorism from physical group plotting to lone actor attacks, with the real threat now coming from a single individual.

[1] Department of Security Studies, Graduate College, Police Academy, MOI, Qatar & IKCRS, Amman, Jordan Email: dbadayneh@gmail.com
ORCID: 0000-0001-7416-6722

Journal of Ecohumanism
2024
Volume: 3, No: 3, pp. 1266 – 1278
ISSN: 2752-6798 (Print) | ISSN 2752-6801 (Online)
https://ecohumanism.co.uk/joe/ecohumanism
DOI: https://doi.org/10.62754/joe.v3i3.3437

The rise of AI and digital integration has enabled insurgents to spread propaganda through violent extremism in different countries. A double-edged sword effect of AI in countering extremism, highlighting the need for specific guidelines and legislation to effectively govern the technology's use. (Wan Rosli, 2024).

Meleagrou-Hitchens and Kaderbhai (2017) and Winter et al., (2020) found that the internet offers advantages to terrorists, including access to radicalizing propaganda. However, they argue that the causal connection between online influences and violent acts has not been established. They also note that most scholars agree that online processes complement but do not substitute offline interactions. Recent literature reviews have focused on violent right-wing radicalization online, highlighting the importance of online influences but not necessarily causing radicalization. Scrivens et al. (2022) identified five core functions of extremists' use of the internet: information provision, networking, recruitment, financing, and information gathering. However, there is limited evidence linking online and offline worlds.

Ware (2023), discussed three generations of radicalization on the net as **The first generation** of cyber radicalization began in 1984 with far-right extremists creating bulletin board systems to spread hate. **The second generation** emerged in the mid-2000s, driven by massive public social media platforms like Twitter, Facebook, YouTube, and Instagram. These platforms allowed radicals to share their extreme ideology and recruit terrorists, creating echo chambers and altering human attitudes. The Obama administration recognized the internet's role in radicalization, including among Americans inspired by extremists abroad. **The third generation** of social media radicalization intensified, with lone actors becoming central to the movement. The COVID-19 pandemic has accelerated these trends, with personal grievances becoming more important to the radicalization trajectory. The third generation of far-right terrorists is characterized by a more personalized radicalization experience, with individuals often radicalizing in the shadow of their predecessors, known as "Saints.". Table 1 summarize these generations.

Table 1: The Three Generations of Cyber radicalization

	First Generation	Second Generation	Third Generation
Years	1984 to mid-2000s	Mid-2000s to late-2010s	Late-2010s to today
Platforms	One-way forum sites and websites	First generation; large social media platforms, like Twitter, Facebook, YouTube, and Instagram	First and second generation; end-to-end encrypted apps such as WhatsApp and Telegram; and far-right specific apps like Gab and Parler
Impact on Radicalization	Extremist groups and networks spread propaganda more broadly and reach new recruits.	Extremists congregate in "echo chambers" which intensify radicalization, while algorithmic radicalization speeds up the process. Organizations are less important; more extremist ideologies turn to violence.	Ideology also grows less important, as "convergence" blends different traditions. Humor and memes contribute to the radicalization process and strengthen in-group bonds. Attackers more often share manifestos and cite online communities and predecessors. Women and children play a greater role as part of "mass radicalization," as does mental health and a range of other "vulnerabilities."
Impact on Terrorist	Training and command-and-	Violence increasingly defined by lone actors,	Almost all violence now committed by lone actors, employing even more

Journal of Ecohumanism
2024
Volume: 3, No: 3, pp. 1266 – 1278
ISSN: 2752-6798 (Print) | ISSN 2752-6801 (Online)
https://ecohumanism.co.uk/joe/ecohumanism
DOI: https://doi.org/10.62754/joe.v3i3.3437

Tactics and Targeting	control now possible through virtual formats.	with little training, attacking soft targets, using more rudimentary weaponry.	diffuse terrorist targeting, often aimed at "accelerating" collapse. Shortened "flash-to-bang" timelines, often contributing to less effective attacks from less professional fighters. All contributes to a climate of unpredictability.

Ware 2023 p. 30

The White House has released a policy statement to counter violent extremist use of the Internet to recruit and radicalize to violence in the United States. The rapid growth of the Internet has brought opportunities but also risks, and the Federal Government is committed to empowering members of the public to protect themselves against the full range of online threats, including cyber radicalization to violence. Violent extremist groups like al-Qa'ida, violent supremacist groups, and violent "sovereign citizens" are leveraging online tools and resources to propagate messages of violence and division. They use the Internet to disseminate propaganda, identify and groom potential recruits, and supplement their real-world recruitment efforts. To prevent cyber radicalization to violence in the homeland, the Federal Government initially will focus on raising awareness about the threat and providing communities with practical information and tools for staying safe online. The Administration is establishing a new Interagency Working Group to Counter Cyber radicalization to Violence, chaired by the National Security Staff at the White House, involving specialists in countering violent extremism, Internet safety experts, and civil liberties and privacy practitioners from across the United States Government. In the coming months, the Working Group will coordinate with Federal departments and agencies to raise awareness and disseminate tools for staying safe from online violent extremism primarily through three means: incorporating information about online violent extremism into existing Federal Government Internet safety initiatives, working with local organizations throughout the country to disseminate information about the threat, and using preexisting engagement with communities to provide information about Internet safety and details about how violent extremists are using the Internet to target and exploit communities. (Youth.Gov, 2024).

Youth are targeted for recruitment due to extremist environments, identity crises, poverty, unemployment, inequality, and marginalization, including exclusion from political involvement, decision-making, and policy creation. (Al-badayneh, Khalifa & Alhasan, 2016). Most Arab states have implemented anti-terrorism laws, focusing on preventing youth from joining extremist groups and international efforts to combat terrorism and money laundering. This research aims to cyberbullying scale applicable to youth in Jordan and can be extended to Arab States. This scale can be applied and tested, providing knowledge for policy formulation and law and security implications.

The purpose of the Study

Researchers argue that the Internet plays a crucial role in radicalization, with policymakers and media suggesting it shifts the nature of terrorism from physical groups to lone actor attacks. Post, McGinnis, and Moody (2014) argue that the Internet created a host of lone wolf terrorists, who feel they belong to the virtual community of hatred. Sageman (2008) suggests cyber radicalization replaced face-to-face radicalization by the mid-2000s. This study aims to create a youth cyberbullying scale, applicable to Jordanian society and can be generalized to Arab world. The scale can identify conceptual constructs of cyberbullying, aid policy formation, and provide legal and security implications for youth prevention.

Rationale of the Study

Research on cyberbullying requires strong theoretical frameworks, strict methods, and reliable measurements. Public policies should be based on relevant information and national and international goals. Understanding young people's motivations and decision-making processes is crucial. Cyberbullying threatens youth's right to safe university environment. Scale construction aims to create accurate and valid

Journal of Ecohumanism
2024
Volume: 3, No: 3, pp. 1266 – 1278
ISSN: 2752-6798 (Print) | ISSN 2752-6801 (Online)
https://ecohumanism.co.uk/joe/ecohumanism
DOI: https://doi.org/10.62754/joe.v3i3.3437

measures of constructs to evaluate attributes. However, this process is challenging due to the difficulty of observing non-observable constructs like self-report and their complexity. Validation is crucial for creating scales, and researchers may develop standardized measures based on large heterogeneous samples to improve theory construction and testing. Future joint research may also help establish measurements.

Theoretical Framework

Evidence from the latest wave of violent extremists shows that fighter profiles are very different, even though most are young men. Researchers rejected the idea that neither ethnicity, social class, religious ideology, family background, nor socioeconomic status could explain participation in an extremist group. Instead, they turned to the idea that violent extremist action was the end stage of a process that started with radicalization. When used to explain the growth of Daesh and other extremist groups, none of the several explanation models are scientifically sound or accurate. A new perspective on the connection between radicalization and extreme activity has emerged. The decision to join a violent extremist group was still the result of the radicalization process. This was still influenced by particular "push" and "pull" elements. Pull factors are the positive qualities or advantages a group provides in exchange for membership. In contrast, human factors that influence decision-making are the detrimental social, political, economic, and cultural drivers. While hypotheses connecting radicalization to violent extremist conduct or group membership came under closer examination as the Daesh issue approached its fifth year. One claim was that the often cited push-pull and drivers were too general to consistently or effectively account for particular radicalization cases. Although individual cases may have been influenced by unemployment, political marginalization, or religious belief, these events are widespread, leaving models (Harper, 2018).

People are drawn into radical and violent movements through deliberate manipulation and accompaniment (socialization) processes, which are frequently aided by psychological, emotional, or personal factors like alienation, the search for identity and dignity, vengeance for past mistreatment, the breakdown of authority figures' relationships with young people, as well as through online communities. So, a deeper examination and consideration of the pillars of the social structure of nations in danger of violent extremism is necessary. This is to prevent individuals from joining violent extremist groups. (United Nations Development Program, 2016).

A current UN High Commissioner for Human Rights (UNHCHR) report examined current State practices on policies and measures governing "violent extremism" (General Assembly Human Rights Council report A/HRC/33/29, 2016). The report also examined effective practices and lessons learned about how protecting and promoting human rights contributes to preventing and countering violent extremism. The phenomenon of violence is considered more widespread than terrorism, regardless of the definition. There are many different governmental and intergovernmental definitional approaches to violent extremism. Extremism is imposing beliefs, values, and ideologies on others by force to curtail civil and human rights (Schmidt, 2014). Extremism may include the following two essential characteristics (Borum, 2011). Firstly, the imposition of someone's own beliefs, values, and ideologies on other human beings by force, and secondly, religious, gender, and race-based discrimination and violence to defraud the civil and human rights of minorities and others (Hassan, Khattak, Qureshi, & Iqbal, 2021, p.53).

Methodology

Participants

A study of 1000 Tafila Technical University students found that 45.4% were males and 54.6% females, from 12 Jordanian governorates. Cyberbullying exposed 26% to violence. 37% reported depression, 45% no interest in life, and 33% had a death wish.(Table 1).

Journal of Ecohumanism
2024
Volume: 3, No: 3, pp. 1266 – 1278
ISSN: 2752-6798 (Print) | ISSN 2752-6801 (Online)
https://ecohumanism.co.uk/joe/ecohumanism
DOI: https://doi.org/10.62754/joe.v3i3.3437

Table-1 Sample according to the participating governate

Governate	#	%	Governate	#	%
Amman	109	10.9	Zarka	79	7.9
Irbed	82	8.2	Madaba	47	4.7
Balka	50	5.0	Karak	101	10.1
Jarash	58	5.8	Tafilah	257	25.7
Ajloon	49	4.9	Maan	23	2.3
Mafrak	35	3.5	Aqaba	110	11.0
Total				**1000**	**100%**

Method

Cyberextremism measure. A literature review led to the development of a seven-item measure (Table 1). We asked the students to judge each question as either online extremism or not. The answer is yes or no. The total answer represents a specific student's sale score.

Encounter cyberextermism measures. A literature review led to the development of an eight-item measure (Table 2). We asked the students to judge each question on a six-point scale (5 strongly support to 0 strongly do not support). The answer is yes or no. The total answer represents a specific student's sales score.

An attribute of cyberextremism. We asked the students if they perceived the causes of cyberextremism as internal (one dichotomy question) or external (one dichotomy question).

Measures Validity and Reliability

Table 2 shows the reliability and validity coefficients of both measures. The Cronbach's alpha for cyberextremism stands at.834, which is considered very good, while the Cronbach's alpha for encounter cyberextremism is 0.976, which is considered very high. We estimate validity by calculating the correlations between the relevant LSC and each measure. The correlation between cyberextremism and LSC was 0.19** considered acceptable, and between encounter cyberextermism and LSC was 0.82** considered very strong. Reliability for attribution measure was .19 considered slightly weak with acceptable validity with LSC 0.27**

Table 2 Validity and reliability coeffects for both questionnaires.

	Cyberextremism	Encounter cyberextermism	LSC
Cyberextremism	1	.283**	.191**
Encounter cyberextermism	.283**	1	.820**
LSC	.191	.820**	1
Internal attribution			.75**
External attribution			.729**
Attribution measure			.27**

** significant at $\alpha \leq 0.000$

Findings

Prevalence of Online Extremism

Table 3 shows that slight less than half of the sample described online extremism. All items described online extremism were closed in their ratings. Figure 1 represents the participants description.

Journal of Ecohumanism
2024
Volume: 3, No: 3, pp. 1266 – 1278
ISSN: 2752-6798 (Print) | ISSN 2752-6801 (Online)
https://ecohumanism.co.uk/joe/ecohumanism
DOI: https://doi.org/10.62754/joe.v3i3.3437

Table 3 Online students' description of extremism

	Yes	%
Hate speech that calls on people to commit violence	436	43.6
Posting violent content such as murder or rape	455	45.5
cyberbullying, trolling or insulting	439	43.9
Sexual pornographic content	499	49.9
Indirect hate speech	504	50.4
violence such as assaults	488	48.8
Post supports extremism	480	48.0
Average	**471.5**	**47.2%**

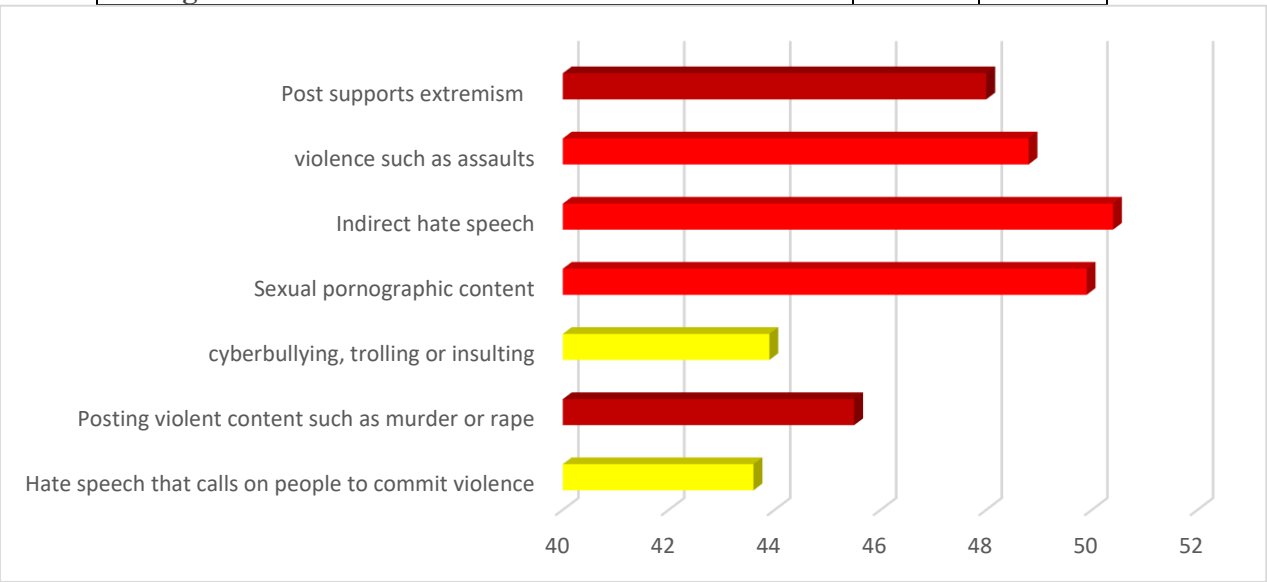


Figure 1 students rating for the online extremism.

Students' perspective on encountering extremism

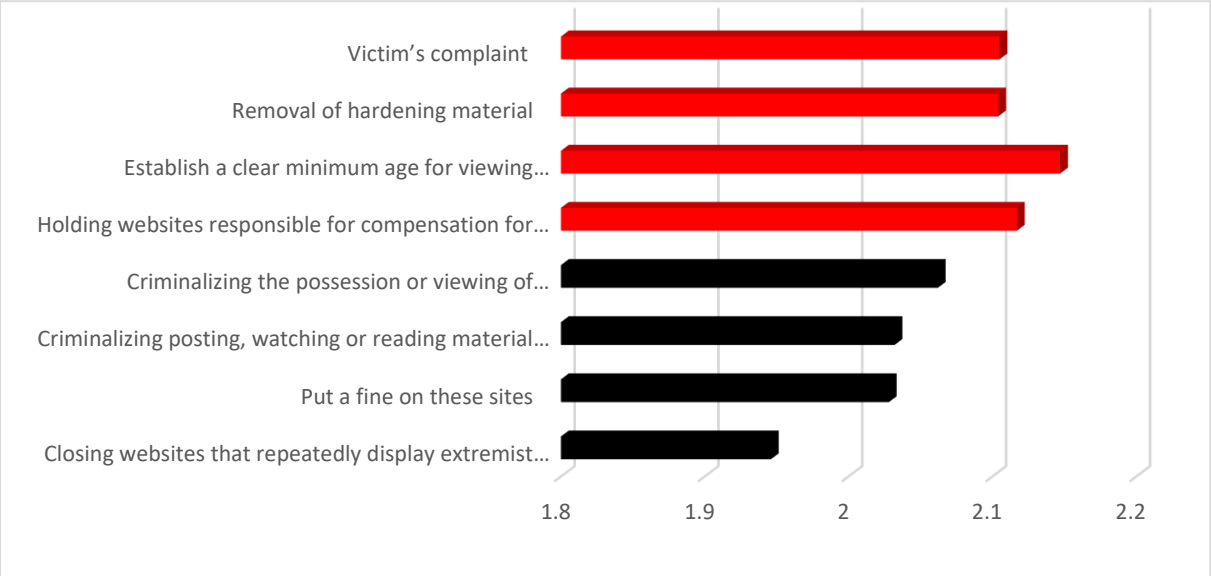
Students took a moderate mean on perspective on encountering extremism with a grand mean (2.) and slandered deviation (1.5). The lowest mean was on Closing websites that repeatedly display extremist material. The highest average was on age restrictions (Establish a clear minimum age for viewing extremist content). (table 4, Figure 2).

Table 4 Online Students' perspective on encountering extremism

	Mean	SD
Closing websites that repeatedly display extremist material	1.9460	1.67269
Put a fine on these sites	2.0280	1.52169
Criminalizing posting, watching or reading material with extremist content	2.0320	1.56314
Criminalizing the possession or viewing of extremist content	2.0620	1.55196
Holding websites responsible for compensation for damages caused to victims	2.1170	1.60745
Establish a clear minimum age for viewing extremist content	2.1470	1.60249
Removal of hardening material	2.1040	1.60180
Victim's complaint	2.1050	1.57367
Grand Mean	2.0676	1.5869

Journal of Ecohumanism
2024
Volume: 3, No: 3, pp. 1266 – 1278
ISSN: 2752-6798 (Print) | ISSN 2752-6801 (Online)
https://ecohumanism.co.uk/joe/ecohumanism
DOI: https://doi.org/10.62754/joe.v3i3.3437

Figure 2 Student perspective on encountering extremism



Cyberextremism Attribution

External Attribution

Cyberextremism. Table 5 displays the descriptive results; however, the mean of cyberextremism for the (yes) group was slightly higher than that of the (no) group (M = 3.6 vs. 3), with a close variation (2.5 vs. 2.3).

Encounter cyber-extremism. Table 5 presents also the descriptive results, indicating that (yes) external respondents had a slightly higher mean of encountering cyberextremism compared to (no) external respondents (M = 22.5 vs. 13.3), with a close variation (11.3 vs. 10), respectively.

Table 5 External Cyber extremism Attribution (no-yes)

Cyberextremism	N	Mean	Sd
no	654	3.0979	2.39248
yes	346	3.6850	2.57449
Total	1000	3.3010	2.47154
Encounter cyberextremism			
no	654	13.3761	10.67546
yes	346	22.5231	11.33908
Total	1000	16.5410	11.74088

ANOVA analysis findings showed significant differences between external attribution in cyberextremism ($F = 12.921$ $\alpha \leq 0.000$). Furthermore, Table 6 illustrates the significant differences between external attribution in encountering cyberextremism. ($F = 159.076$ $\alpha \leq 0.000$).

Journal of Ecohumanism
2024
Volume: 3, No: 3, pp. 1266 – 1278
ISSN: 2752-6798 (Print) | ISSN 2752-6801 (Online)
https://ecohumanism.co.uk/joe/ecohumanism
DOI: https://doi.org/10.62754/joe.v3i3.3437

Table 6 ANOVA Analysis for the External attribution in cyberextremism and Encounter cyberextermism

Cyberextremism	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	78.000	1	78.000	12.921	**.000**
Within Groups	6024.399	998	6.036		
Total	6102.399	999			
Encounter cyberextremism					
Between Groups	18932.536	1	18932.536	159.076	**.000**
Within Groups	118777.783	998	119.016		
Total	137710.319	999			

Internal Attribution

Cyberextremism. Table 7 displays the descriptive results; however, the mean cyberextremism for the (yes) internal group was slightly higher than that of the (no) external group (M = 3.5 vs. 3), with an equal variation (2.4 vs. 2.4).

Encountering cyberextremism. The descriptive results are shown in Table 7. They show that (yes) internal respondents had a slightly higher mean of encountering cyberextremism than (no) external respondents (M = 17.8 vs. 16.5), with a close difference (12.7 vs. 11.7).

Table 7 Attribution of Internal encountering cyberextremism (no-yes)

Cyberextremism		N	Mean	Sd
No		524	3.0668	2.45910
yes		476	3.5588	2.46207
Total		1000	3.3010	2.47154
Encountering cyberextermism no		524	15.3664	10.64261
yes		476	17.8340	12.72824
Total		1000	16.5410	11.74088

ANOVA analysis findings showed significant differences between internal attribution (yes-no)in cyberextremism ($F = 9.974$ $\alpha \leq 0.002$). Furthermore, Table 6 illustrates the significant differences between internal attribution (yes-no) in encountering cyberextremism. ($F = 11.130$ $\alpha \leq 0.001$).

Table 8 ANOVA Analysis for the internal attribution in cyberextremism and Encounter cyberextermism

Cyberextremism	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	60.384	1	60.384	9.974	.002
Within Groups	6042.015	998	6.054		
Total	6102.399	999			
Encounter cyberextremism					
Between Groups	1518.781	1	1518.781	11.130	.001
Within Groups	136191.538	998	136.464		
Total	137710.319	999			

Gender Differences

Cyberextremism. Table 9 displays the descriptive results; however, the mean cyberextremism for males was slightly higher than that of the females (M = 3.4 vs. 3.2), with an equal variation (2.4 vs. 2.4).

Journal of Ecohumanism
2024
Volume: 3, No: 3, pp. 1266 – 1278
ISSN: 2752-6798 (Print) | ISSN 2752-6801 (Online)
https://ecohumanism.co.uk/joe/ecohumanism
DOI: https://doi.org/10.62754/joe.v3i3.3437

Encountering cyberextremism. As can be seen from table 9. males respondents had a slightly higher mean in encountering cyberextremism than females (M = 18 vs. 15), with a close difference (12.7 vs. 11.5).

Table 9 Attribution of Internal encountering cyberextremism (no-yes)

Cyberextremism	N	Mean	Sd
male	454	3.4031	2.52809
female	546	3.2161	2.42256
Total	1000	3.3010	2.47154
Encounter cyberextermism			
male	454	18.0308	11.77845
female	546	15.3022	11.57498
Total	1000	16.5410	11.74088

ANOVA analysis findings showed no significant differences between males and females in cyberextremism. Furthermore, Table 10 illustrates the significant differences between males and females in encountering cyberextremism. ($F = 11.557$ $\alpha \leq 0.000$).

Table 10 ANOVA Analysis for the gender differences in cyberextremism and encountering cyberextermism

Cyberextremism	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	8.665	1	8.665	1.419	.234
Within Groups	6093.734	998	6.106		
Total	6102.399	999			
Encounter cyberextremism					
Between Groups	1845.613	1	1845.613	13.557	.000
Within Groups	135864.706	998	136.137		
Total	137710.319	999			

Discussion

The study revealed that slightly less than half of the sample described online extremism as hate speech, violence, cyberbullying, sexual pornography, indirect hate speech, assaults, and post-support extremism. This indicates a lower-than-average level of awareness among students about cyberextremism, and could potentially indicate their acceptance of such behaviors, which is a concerning trend. On the one hand, we can leverage this finding to heighten students' awareness and enhance their ability to confront cyberextremism. Since they may be both offenders and victims, younger students are ideal for preventing and intervening in education-related cyberbullying. They should understand that messages can cause discomfort or harm (Al-Badayneh, Al-Hagry, and Ben Brik, 2022). Conversely, it's crucial to provide assistance and services to the victims. According to Al-Badayneh et al., 44.5% of students experienced bullying, with males more likely to be victims and bullies than females. (Al-Badayneh, Al-Khattar, Al-Kresha, and Al-Hassan, 2012). As online environments constantly evolve, research on cyberextremism emphasizes the need for constant reassessment of extremism trends on the internet. (Meili, 2023). Extremists have been using the internet for three decades, often leading to violent acts. Low data quality and growing concerns about cyberextremism have pushed people to adopt extreme beliefs or commit violence. (Whittaker, 2022).

Cyberextremism, a form of violence utilizing new technologies, necessitates a thorough understanding from a criminal law perspective, as well as from the perspective of university corruption and the student body. Policymakers must take steps to create and enforce laws that combat cyberextreimism and protect students. (Al-Badayneh, Ben Brik, and Elwakad, 2024).

Journal of Ecohumanism
2024
Volume: 3, No: 3, pp. 1266 – 1278
ISSN: 2752-6798 (Print) | ISSN 2752-6801 (Online)
https://ecohumanism.co.uk/joe/ecohumanism
DOI: https://doi.org/10.62754/joe.v3i3.3437

Another significant finding was that students perceived several procedures to encounter cyberextremism, including closing websites, fines, criminalizing content, holding websites responsible for compensation, establishing a minimum age for viewing extremist content, removing hardening material, and compensation. When faced with cyberextremism, students can use this finding to align their viewpoints with university policies. This will prove to be an effective measure as student participation approaches encounters with cyberextremism. Despite young people's involvement in violent extremism, there is a common acknowledgement that they have the ability to prevent it. The 2013 study by Von Behr et al. identified five hypotheses about radicalization that apply to extremism: the Internet enhances extremist opportunities, serves as an echo chamber, speeds up the process, permits extremism without physical contact, and generates opportunities for self-extremism. Understanding the drivers of violent extremism among young people is critical for developing effective strategies. Updating youth policies and strategies aligned with universal human values is critical to addressing the lack of research-based policies in education and development.

University policies should consider gender differences when addressing cyberextremism. Males had a higher mean of cyberextremism than females, and there were no significant differences between males and females in cyberextremism. Female socialization is characterized by sensitivity and softness, while male socialization is characterized by violence and hardness. Cyberextremism is a form of violence that males can engage in as part of their masculinity.

In cyberextremism, the ANOVA analysis revealed significant differences between external and internal attributions. Attribution theory explains how people attribute negative events to external forces, while situational attribution assigns causes to external events. However, when explaining one's own behavior, we tend to blame external forces, known as the actor-observer bias, rather than personal characteristics.

To prevent cyberextremism among youth, policymakers and education must adopt a knowledge-based approach that considers social, legal, political, educational, and ideological issues, as well as empowering them through sport and education.

References

Ajodo-Adebanjoko, A., (2022). The Role of Youths in Countering Violent Extremism in Northeast Nigeria. Conflict & Resilience Monitor. https://www.accord.org.za/conflict-trends/the-role-of-youths-in-countering-violent-extremism-in-northeast-nigeria%EF%BF%BC/

Alava, S., Frau-Meigs, D., & Hassan, G. (2017). Youth and violent extremism on social media: Mapping the research. United Nations Educational, Scientific and Cultural Organization. Paris 07 SP, France. ISBN: 978-92-3-100245-8. Retrieved from file:///C:/Users/HP/Downloads/260382e%20(1).pdf

Al-Badayneh, D. & Al Hassan, K. (2017). Determinant factors of radicalization among Arab University students. Journal of Security Studies. 19 (2) 89-113. Retrieved from https://guvenlikcalismalari.pa.edu.tr/Upload/DergiDosya/arap-universite-ogrencileri-arasinda-radikallesmeye-yol-acan-faktorler-dergidosya5e46be25-2ea2-47a5-94d4-1f46da628d74.pdf

Al-Badayneh, D. (2012). Radicalization incubators and terrorism recruitment in the Arab world, pp 1-44 in The use of the Internet in terrorism finance and terrorists recruitment. NAUSS, KSA. Retrieved from http://www.nauss.edu.sa/Ar/DigitalLibrary/Books/Pages/Books.aspx?BookId=833

Al-Badayneh, D., Khelifa M. & Al Hassan, K. (2016). Radicalizing Arab University students: An emerging global threat. Journalism and Mass Communication, 6(2), 67-78 doi: 10.17265/2160-6579/2016.

Australian Government measures (2017). Update on Australian government measures to counter violent extremism: a quick guide. Research paper series, 2017–18 Retrieved from https://apo.org.au/sites/default/files/resource-files/2017-08/apo-nid103081.pdf

Barracosa, S., & March, J. (2021). Dealing With Radicalized Youth Offenders: The Development and Implementation of a Youth-Specific Framework. Frontiers in Psychiatry, 12. https://doi.org/10.3389/fpsyt.2021.773545

Behr, Ines von, Anais Reding, Charlie Edwards, and Luke Gribbon. 2013. "Radicalization in the Digital Era: The Use of the Internet in 15 Cases of Terrorism and Extremism." RAND Corporation.

Boateng G., Neilands T. B, Frongillo E. A., Melgar-Quiñonez, H. R. & Young, S. L. (2018). Best Practices for Developing and Validating Scales for Health, Social, and Behavioral Research: A Primer Front. Public Health, 6(149). doi: 10.3389/fpubh.2018.00149 file:///C:/Users/HP/Downloads/fpubh-06-00149%20(2).pdf

Journal of Ecohumanism
2024
Volume: 3, No: 3, pp. 1266 – 1278
ISSN: 2752-6798 (Print) | ISSN 2752-6801 (Online)
https://ecohumanism.co.uk/joe/ecohumanism
DOI: https://doi.org/10.62754/joe.v3i3.3437

Bondokji, N., Agrabi, L. and Wilkinson, K., (2016). Understanding Radicalization: A Literature Review of Models and Drivers' WANA Institute.

Borum, R. (2011). Radicalization into Violent Extremism II: A review of conceptual models and empirical research. Journal of Strategic Security, 4(1), 37-62.

Buchanan-Clarke, Stephen and Lekalake, Rorisang (2016) 'Let the People Have a Say', Afrobarometer Policy Paper No. 32

Cattell, R. B. (1966). The Scree Plot Test for the Number of Factors. Multivariate Behavioral Research, 1, pp. 140-161. Retrieved from http://dx.doi.org/10.1207/s15327906mbr0102_10

Cronbach, L. J., & Meehl, P. E. (1955). Construct validity in psychological tests. Psychological Bulletin, 52(4), pp. 281–302.

DeVellis R. F. (2012). Scale development: Theory and application. Los Angeles, CA: Sage Publications.

Dicko, A., Mousa, I., Oumaro, I., & Issaka, M., (2018). International Organization for Migration, p. 1. Retrieved from https://publications.iom.int/system/files/pdf/youth_violence_en.pdf

Dokubo, Charles (2018) 'Youth Empowerment and National Development in Nigeria: Niger Delta Amnesty Program in Perspective', Paper presented at a National Defense College seminar on Enhancing National Development through Youth Empowerment, 3 October, Abuja.

Federal Bureau of Investigation (FBI) (2021). Strategic Intelligence Assessment and Data on Domestic Terrorism. Available at: https://www.fbi.gov/file-repository/fbi-dhs-domestic-terrorism-strategicreport.pdf/view

Glazzard A., & Martine Zeuthen, M. (2016). "Violent extremism," Retrieved from http://www.gsdrc.org/professional-dev/violent-extremism/.

Government Offices of Sweden (2011). Sweden's action plan to safeguard democracy against violence promoting extremism. Government Communication. /12:44, Point 3.2. Retrieved from https://www.government.se/49b75d/contentassets/b94f163a3c5941 aebaeb78174ea27a29/action-plan-to-safeguard-democracy-against-violence-promoting-extremism-skr.-20111244

H.M. Government (UK). (2015). Counter-Extremism Strategy. London, Counter-Extremism Directorate, Home Office. Para. [See to HM Government (2011). Prevent Strategy. The Stationery Office, Norwich. Annex A. Note that the 2013 UK Task Force on Tackling Radicalization and Extremism defined "Islamist extremism".] Retrieved from https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/97976/prevent-strategy-review.pdf

Harper, E. (2018) Reconceptualizing the drivers of violent extremism: an agenda for child & youth resilience. https://www.tdh.ch/sites/default/files/tdh_wana_pve_en_light.pdf

Kaiser, H.F. (1974). An index of factorial simplicity. Psychometrika, 39, pp. 31-36.

Makhlouf O. C. (2015). Adolescents in Arab countries: Health statistics and social context, DIFI Family Research and Proceedings:1 Retrieved from http://dx.doi.org/10.5339/difi.2015.1 https://www.difi.org.qa/wp-content/uploads/2017/10/adolescents_in_arab_countries.pdf

Meili, C. (2023). "Wilayat Facebook and Instagram: An Exploration of Pro-IS Activities on Mainstream Platforms." Global Network on Extremism & Technology, April 21, 2023. https://gnet-research.org/2023/04/21/wilayat-facebook-andinstagram-an-exploration-of-pro-is-activities-on-mainstream-platforms/

Meleagrou-Hitchens, Alexander, and Nick Kaderbhai. 2017. "Research Perspectives on Cyber radicalization: A Literature Review, 2006-2016." International Centre for the Study of Radicalization (ICSR), King's College London. https://icsr.info/2017/05/03/icsr-vox-pol-paper-research-perspectives-online-radicalisation-literature-review-2006-2016-2/

Mlambo, N. (2020) 'Africa: Triple Threat – Conflict, Gender-Based Violence and COVID-19,' All Africa, 26 April, Available at:https://allafrica.com/stories/202004240366.html

Mroz, R. J. (2008). Countering Violent Extremism Videopower And Cyberspace Policy. Paper 1/2008. https://www.files.ethz.ch/isn/90544/2008-02-17_Countering-Violent-Extremism_Videopower.pdf

Neumann, P. R. (2013). Options and Strategies for Countering Cyber radicalization in the United States. Studies in Conflict & Terrorism, 36(6), 431–459. https://doi.org/10.1080/1057610X.2013.784568

No Lost Generation Initiative. (2017). Translating research into scaled-up action: Evidence symposium on adolescents and youth in MENA (summary report). Retrieved from https://www.nolostgeneration.org/sites/default/files/eman/Highlights/SUMMARY%20REPORT_ESAY2017.compressed.pdf https://www.nolostgeneration.org/

Norwegian Ministry of Justice and Public Security. (2014). Action plan against radicalization and violent extremism. p.7 Retrieved from https://www.regjeringen.no/en/dokumenter/Action-plan-against-Radicalisation-and-Violent-Extremism/id762413/

Organization for Economic Cooperation and Development (OECD), Development Assistance Committee (2016). DAC High-Level Meeting, Communiqué of 19 February 2016

OSCE (2013). OSCE ODIHR Expert Roundtables Preventing Women Terrorist Radicalization Vienna. The Role and Empowerment of Women in Countering Violent Extremism and Radicalization that Lead to Terrorism Vienna.

Pickering, T. (2019). Developments in violent extremism in the Middle East and beyond: Proceedings of a workshop in brief. Retrieved from http://nap.naptionalacademies.org/25518

Journal of Ecohumanism
2024
Volume: 3, No: 3, pp. 1266 – 1278
ISSN: 2752-6798 (Print) | ISSN 2752-6801 (Online)
https://ecohumanism.co.uk/joe/ecohumanism
DOI: https://doi.org/10.62754/joe.v3i3.3437

Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat. (2020). World Population Prospects 2019 revision. Retrieved from https://population.un.org/wpp/

Post, Jerold, Cody McGinnis, and Kristen Moody. 2014. "The Changing Face of Terrorism in the 21st Century: The Communications Revolution and the Virtual Community of Hatred." Behavioral Sciences & the Law 32 (2): 306–36.

Price, JL & Mueller, C.W. (1986). Absenteeism and Turnover of Hospital Employees, JAI, Greenwich, CT.

Public Safety Canada, (2009). Report on plans and priorities. Retrieved from https://www.publicsafety.gc.ca/lbrr/archives/hj%2013.a12%20t7%202008-09%20pt.3-p-eng.pdf

Sageman, M. 2008. "The Next Generation of Terror." Foreign Policy, March/April: 36–42.

Sageman, Marc. 2004. "Understanding Terror Networks." Philadelphia, PA: University of Pennsylvania Press.

SALTO Cultural Diversity Resource Centre (2017). Young people and extremism: a resource for youth workers. SALTO Cultural Diversity Resource Centre. The European Commission and the British Council & Erasmus. Retrieved from Young People & Extremism: A Resource Pack for Youth Workers | Educational Tools Portal

Schmid, A. P. (2014). Violent and non-violent extremism: Two sides of the same coin. Research Paper. The Hague: ICCT.

Schmitt; N.W., & Khmoski, R.J. (1991). Research methods s human resources management. Cincinnati: South-Western Publishing.

Scrivens, Ryan, Tiana Gaudette, Maura Conway, and Thomas J Holt. 2022. "Right-Wing Extremists' Use of the Internet: Emerging Trends in the Empirical Literature." In Right-Wing Extremism in Canada and the United States, edited by Barbara Parry, Jeff Gruenewald, and Ryan Scrivens, 355–80. Palgrave Hate Studies.

Tay, L.,& Jebb, A. (2017). Scale development. In S. Rogelberg (Ed), The SAGE Encyclopedia of Industrial and Organizational Psychology, 2nd edition. Thousand Oaks, CA: Sage

UN (2015) 'Amman Youth Declaration Adopted at Global Forum on Youth, Peace and Security', Available at: https://www.un.org/youthenvoy/2015/08/amman-youth-declaration-adopted-global-forum-youth-peace-security> [Accessed 18 March 2020].

UNESCO. (2017). Preventing violent extremism through education sustainable development goals. Guide for policy-makers. United Nations Educational, Scientific and Cultural Organization, Paris France ISBN 978-92-3-100215-1, Retrieved from https://unesdoc.unesco.org/ark:/48223/pf0000247764_eng

United Nations Counter-Terrorism Centre (UNCCT) and the United Nations Interregional Crime and Justice Research Institute (UNICRI) (2021) Algorithms and Terrorism: The Malicious Use of Artificial Intelligence for Terrorist Purposes. United Nations Office of Counter-Terrorism. https://www.un.org/counterterrorism/sites/www.un.org.counterterrorism/files/malicious-use-of-aiuncct-unicri-report-hd.pdf

United Nations Office On Drugs And Crime UNODC (2020). Preventing Violent Extremism through Sport. Technical Guided https://www.unodc.org/documents/dohadeclaration/Sports/PVE/PVE_TechnicalGuide_EN.pdf

United Nations Office On Drugs And Crime UNODC. (2018). Radicalization' and 'violent extremism. Retrieved from https://www.unodc.org/e4j/zh/terrorism/module-2/key-issues/ radicalization-violent-extremism.html

UNODC. (2018). Radicalization' and 'violent extremism. Retrieved from https://www.unodc.org/e4j/zh/terrorism/module-2/key-issues/ radicalization-violent-extremism.html

USAID. (2011). "The development response to violent extremism and insurgency: Putting principles into practice." USAID Policy, September 2011. p. 2. Retrieved from https://www.usaid.gov/sites/default/files/documents/1870/VEI_Policy_Final.pdf

Wan Rosli, W. (2024). 46 on Artificial Intelligence Violent Extremism and Artificial Intelligence: A Double-Edged Sword in the Context of ASEAN. Commonwealth Cyber Journal ISSN 2959-3018 (print), ISSN 2959-3026 (online) thecommonwealth.org/cyber-journal Special Section. Pp 46-58. https://thecommonwealth.org/publications/commonwealth-cyber-journal-volume-2/violent-extremism-and-artificial-intelligence-double-edged-sword-context-asean

Ware, J. (2023) The Third Generation of Cyber radicalization. https://extremism.gwu.edu/sites/g/files/zaxdzs5746/files/2023-06/third-generation-final.pdf . Program on Extremism at George Washington University 2000 Pennsylvania Avenue NW Washington, D.C. 20006 https://www.extremism.gwu.edu

Weimann. 2012. "Lone Wolves in Cyberspace." Journal of Terrorism Research 3 (2): 75–90.

Weslatin; O., Ben Salah,N., Al Nighaoui, I., Russo; F., (2018). Policy Brief The Legal And Judicial Framework Of Preventing Youth Radicalization. MEF. https://idl-bnc-idrc.dspacedirect.org/bitstream/handle/10625/57738/57640.pdf

Whittaker, J., (2022). Cyber radicalization: What we know. RAND. Luxembourg: Publications Office of the European Union. https://home-affairs.ec.europa.eu/document/download/0489fc64-9a49-40cf-8153-b264eb3c9bbd_en?filename=RAN-online-radicalisation_en.pdf&prefLang=cs

Winter, Charlie, Peter Neumann, Alexander Meleagrou-Hitchens, Magnus Ranstorp, Lorenzo Vidino, and Johanna Fürst. 2020. "Online Extremism: Research Trends in Internet Activism, Radicalization, and Counter-Strategies." International Journal of Conflict and Violence 14 (2): 1–20.

Journal of Ecohumanism
2024
Volume: 3, No: 3, pp. 1266 – 1278
ISSN: 2752-6798 (Print) | ISSN 2752-6801 (Online)
https://ecohumanism.co.uk/joe/ecohumanism
DOI: https://doi.org/10.62754/joe.v3i3.3437

World Bank. (2017). Harmonized list of fragile situations. Retrieved from http://www.worldbank.org/en/topic/fragilityconflictviolence/brief/harmonized-list-of-fragile-situations

Youth.Gov (2024). Online Safety for Youth: Working to Counter Cyber radicalization to Violence in the United States. https://youth.gov/feature-article/online-safety-youth-working-counter-online-radicalization-violence-united-states

Zachary, L., and Masters, J., (2014). "The Islamic State in Iraq and Syria." Backgrounders. Council on Foreign Relations. https://www.files.ethz.ch/isn/181537/Islamic%20State%20in%20Iraq%20and%20Greater%20Syria%20(Al-Qaeda%20in%20Iraq)%20-%20Council%20on%20Foreign%20Relations.pdf

Zogg, F., Kurki, A., Tuomala, V., & Haavisto, R. (2021). Save the Children, youth as a target for extremist recruitment, Retrieved from https://pelastakaalapset.s3.eu-west-1.amazonaws.com/main/2022/02/17133213/youth-as-a-target-for-extremist-recruitment_stc_en.pdf