
ASSESSMENT OF CYBER ABUSE DURING THE YEARS 2021 AND 2022 AMONG A SAMPLE OF EGYPTIAN FEMALES

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ABSTRACT

Violence against women is a global issue, but it is particularly prevalent in the Middle East. According to WHO estimates, approximately 35% of women worldwide have been exposed to physical and/or sexually intimate relationship violence or non-partner sexual violence at some point in their lives. Because nearly one in every two people uses the internet and one billion homes have an internet connection, cyber violence is a growing global epidemic with serious public health implications; it is linked not only to negative psychological, social, and reproductive health outcomes for victims but also to offline physical and sexual assault. Cyber harassment, cyberstalking, defamation, non-consensual pornography, e-mail spoofing, cyber hacking, and virtual rape are examples of cyber violence against women. Data on the scope of cyber violence and its prevalence across various people and cultures is limited, but studies suggest that women, girls, and sexual minorities are more likely to be victims of cyber abuse. **Objectives:** Our research aimed to assess the problem of cyber violence against women in Egypt, including its prevalence, different forms, and impact on victims' lives to identify and develop preventive strategies. **Methodology:** The research was conducted utilizing an online poll distributed over two of Egypt's most popular social media platforms, Facebook, and WhatsApp, to assess if the participants were subjected to cyber abuse for two years, 2020 and 2021. To get a high response rate, the researchers chose groups with many female members. The researchers collected responses by a survey published at the link to the study page for three months, from November 1, 2021, to January 31, 2022. **Results:** Our study included 324 adult female participants, about 52 % were between 31 and 40 years old. About 85 percent of our participants said they had been subjected to cyber violence, 64 percent said they had been subjected to cyber harassment three times or more, and 52.7 percent said they were harassed via social media. **In conclusion**, the Egyptian population has seen a high rate of cyber violence against women in the past two years. As a result, the government must implement robust legislation that makes cyber violence illegal in all its manifestations.

Keywords: Cyber Abuse, Cyber Harassment, Females, Egypt, social media.

INTRODUCTION

Violence against women is a global issue, but it is particularly prevalent in the Middle East. One of the most serious gender-based human rights violations has been identified (Shah et al., 2016). According to WHO estimates, approximately 35% of women worldwide face physical and/or

intimate relationship violence at some point in their lives (WHO, 2017). The rise of information and communication technologies (ICT) and social networking sites (SNS) has opened up new avenues for violence, notably against women, girls, and sexual and gender minorities. The problem of cyber violence encompasses the various

forms of abuse that can occur on and through ICT and SNS. It's characterized as "intentional violence via electronic channels," such as the internet (Arafa et al., 2018 & Kowalski and Limber, 2013).

Because nearly one in every two people uses the internet and one billion homes have an internet connection, cyber violence is a growing global epidemic with serious public health implications. More than 2.5 billion people utilize the internet in developing countries. Egypt is rated 17th in the world with 37.9 million internet users, with 98 percent (35 million) having a Facebook account. Half of the Egyptian internet users have Twitter accounts, while a third have Instagram profiles (MCIT, 2018 & Hassan et al., 2020). In comparison to traditional violence, cyber violence has several distinct characteristics that amplify its negative consequences, including the inability to avoid violence, the presence of a larger and more potential audience, the continuity of bullying regardless of time or location, and the ability to target specific individuals (Arafa and Senosy, 2017).

It is linked to the negative effect on social life, reproductive health, and psychological outcomes for victims and physical and sexual assault in real life (Backe et al. 2018). Cyber harassment, cyber hacking, and virtual rape are examples of cyber violence against women; defamation, non-consensual pornography, and e-mail spoofing are considered violence (Singh, 2015). Data about cyber violence and its prevalence in various people and cultures are limited, but studies showed that women, girls, and sexual minorities are more likely to be victims of cyber abuse. According to the European Agency for Fundamental Rights, one out of every ten women has experienced cyber assault since the age of 15. (Hassan et al. 2020 & Country meters website, 2020).

However, little is known about cyber violence against women in the Middle East,

particularly Egypt. As a result, **our research aimed to** evaluate cyber violence against women in Egypt, including its prevalence, forms, relationship to sociodemographic characteristics, and effect on victims' lives to identify and develop preventive strategies.

METHODOLOGY

Sampling technique

The research was conducted utilizing an online poll distributed over two of Egypt's most popular social media platforms, Facebook, and WhatsApp. To get a high response rate, the researchers chose groups with many female members. To obtain authorization to distribute the survey, requests were addressed to the administrators of these groups. The researchers then shared the survey's link and a statement explaining its purpose and encouraged participants to participate. The collection of the raw research data took place from November 1, 2021, till January 31, 2022.

Participants

The researchers used a convenience sample strategy in which they searched Facebook groups with a large number of female followers. They circulated notifications about the study to these groups and a link to the study page once they had discovered the groups. This link was open for three months for some groups, and 324 adult females (18 years and above) completed that survey.

The Questionnaire

The research team created a pre-test self-administered e-form questionnaire in Arabic for data collection. It was divided into two sections:

Section I: Including age, marital status, educational attainment, residence, occupation, internet, and cell phone usage (hours per day).

Section II: There were 11 closed-ended questions about cyber violence, which were as follows: Have you been a victim of cyber-

violence through the years 2020 and 2021? (If you answered no, please fill out the form without answering the rest of the questions.) Through 2020-2021, how many times have you been subjected to cyber-violence? How did the offender reach you? How did the offender harm you? Are you familiar with the perpetrator (the individual who used cyber violence against you)? What is the gender of the offender? What was he/she trying to achieve? How did you react to the incident? What effect did cyber-violence have on you? How did you feel on the inside? What was the reaction of your surroundings?

The items were originally written in English and then translated into Arabic by two experts before being returned to English by independent experts. After gathering the opinions of public health professionals, the face and content validity were reviewed. The preliminary data collecting form was tested on ten females to see how clear and understandable the questions were and how long it took them to complete the questionnaire.

The only exclusion item was the age of participants, as the questionnaire was directed to adult females only, and it was mentioned in the introduction part of our questionnaire.

Statistical analysis

The Statistical Package for the Social Sciences application was used to conduct the statistical analysis (SPSS, version 21.0 IBM). Numbers were utilized to summarize the data, and percentages were used for qualitative factors.

RESULTS

Demographic data of the studied population (table 1):

Our study included 324 participants, about 52 % of them were between 31 and 40 years old, most of them were married (74 %), working and non-working participants were nearly equal (43.5% and 41.66 %, respectively), and most of them were highly educated (74%), and 66 % of the participants live in Cairo. About 55% of our participants reported using mobiles and the internet for more than 3 hours per day.

Numbers and perpetrators of cyber harassment (table 2):

About 85 percent of our participants reported they had been subjected to cyber violence, and about 64 % said they had been subjected to cyber harassment three times or more, although 27 % of participants didn't know the perpetrator; 61.45% said the perpetrator was male, and 52.7 % said they were harassed via social media, and 43.27 % said they were harassed via mobile phone.

Table (1): Demographic data of the studied population

	Number	Percentage %
Age		
18-20	21	6.48
21-30	75	23.14
31-40	168	51.85
More than 40	60	18.51
Marital status		
Single	78	24.07
married	240	74.07
divorced	6	1.85

Working status		
student	48	14.81
working	141	43.51
Non-working	135	41.66
Educational level		
Secondary level	9	2.77
High education	240	74.07
Postgraduate studies	75	23.15
residence		
Cairo	214	66.04
Upper Egypt	64	19.75
Lower Egypt	46	14.19
Mobile and internet usage		
Less than 1 hour	21	6.48
1-3 hours	126	38.88
More than 3 hours	177	54.62
Total	324	100

Table (2): Numbers and perpetrators of cyber harassment

Have you been a victim of cyber-violence during the years 2020-2021	yes 84.87% (275)	No 15.12% (49)
Methods of cyber abuse	Number	Percent %
Social media	145	52.73
Mobile phones	119	43.27
e-mail	5	1.82
Online gaming	2	0.73
others	4	1.45
Times of exposure to cyber abuse		
One time	52	18.9
Two times	48	17.45
Three or more	175	63.63
perpetrator of abuse		
male	169	61.45
female	12	4.37
Both	20	7.27
don't know	74	26.91
Total	275	100

The pattern of cyber harassment among participants (table 3):

Participants were given the option of selecting multiple responses in this section. About 61 % of participants said they had received annoying phone calls through internet calling programs, 32.72 percent said

they had received inappropriate text messages, about 31 percent said they had received sexual photos or videos, 10.5 percent said that their account on social media had been hacked, and 9.5 percent said their identity had been stolen on social media.

Table (3): The pattern of cyber harassment among participants

Patterns of abuse	Number	Percent%
Received images or videos with sexual contents	84	30.54
Received sexual texts	90	32.72
Annoying phone calls	168	61.09
private accounts were hacked	29	10.54
Identity was stolen on social media	26	9.45
E-mail was stolen	3	1.09
Private data or photos were accessed and stolen	3	1.09
Received mean or insulting e-mails or messages	20	7.27
Received threats of physical or sexual violence	15	5.45
Online stalking	15	5.45
Insulting comments on social media	26	9.45

. NB: in this table, participants were asked ‘How did the offender harm you’ and they were allowed to choose more than one answer

Effect of cyber harassment among participants (table 4):

The harassment had a psychological impact on most of the individuals (68.72%),

with 37.09 % expressing anger, about 13.5 % expressing worry, 9.09% expressing a desire for vengeance, and 0.72 % expressing suicidal thoughts.

Table (4): Effect of cyber harassment among participants

Effect of cyber violence	Number	percent
physiological	189	68.72
social	23	8.36
physical	6	2.18
Financial	3	1.09
Did not affect	83	30.18
Type of physiological effect		
anger	102	37.09
worry	37	13.45
fear	23	8.36
Desire to revenge	25	9.09
Suicidal thoughts	2	0.72
Type of social effect		
isolated	10	3.63
Withdraw from social media	1	0.36
They turned into a socially inactive person	12	4.36

NB: in this table, participants were asked, 'What effect did cyber-violence have on you? How did you feel on the inside? And they were allowed to choose more than one answer

Response of the victims against harassment and community reaction (table 5):

Although 32 percent of participants ignored the cyber-harassment experience and just blocked the offender and about 24.36 % responded to the perpetrator and did not

notify anyone, around 25.5 % asked for help from their family, about 10.5 % asked for support from friends, and just 4.36 % reported the authorities. Surrounding people, on the other hand, supported and empathized with roughly 34% of participants.

Table (5): Response of the victims against harassment and community reaction

Response of the victims against harassment	Number	Percent%
Asked family help	70	25.45
Asked friends help	29	10.54
Notify the authorities	12	4.36
Blocked the offender and ignored him	88	32
Respond to what was wanted from the offender	67	24.36
I still cannot get rid of harassment	9	3.27
Community response		
Empathic and helpful	94	34.18
Not empathic or helpful	6	2.18
Between this and that	46	16.72
Don't know	129	46.9
Total	275	100

DISCUSSION

As a result of the increase using the internet, smartphones, and social media, cyber violence affects millions of women worldwide (Malanga 2021).

In our study, women in Egypt are subjected to cyber-assault. According to the findings of this study, about 85 percent of our subjects were subjected to cyber violence in its different forms as (receiving symbols or pictures with sexual materials, insulting e-mails or text messages, receiving disrespectful or humiliating postings or comments, obscene or violent pictures that denigrate women and threats sexual and physical violence). 52.7 percent of individuals reported cyber harassment via social media three times or more, while 43.27 percent reported harassment via mobile phone.

Our findings are greater than those of Hassan et al. (2020), who found that less than half of the female participants in their

study (41.6%) faced numerous forms of cyber violence, the most common of which were cyber stalking and cyber harassment, Arafa and Senosy, (2017), claim that, Cyberbullying was reported by 52.9 percent of females in their survey, 69.9% of people say they've been exposed to Cyberbullying more than once. They also indicated that internet harassment was the most common type of harassment. However, compared to the studied sample, their participants were university students of varying ages, and they conducted the study in a single Egyptian province.

In addition, several researchers have found that cyber-harassment is the most widespread type of cyber violence against women, which supports our findings. According to a poll conducted by Battered Women's Support Services in Malawi, nearly a third of the women polled said they had been harassed or stalked on the internet (West, 2014).

Also, the African Development Bank Group (2016) reported that more than one-third of the population who experienced the survey in Kenya had faced online abuse. Another third is subjected to personal hate speech, cyberbullying, trolling, and being solicited by imposters.

More than half of the participants in the current study said that social media platforms were the most prevalent manner of being exposed to cyber violence. This was in accordance with a Pew Research Center survey study that indicated that online harassment was more common in some online contexts than others, with the majority of occurrences occurring on social networking sites (Duggan et al. 2014).

Around 27% of participants did not know the perpetrator in our study. However, approximately 61 percent stated that the perpetrator was male. This contradicts Hassan et al. (2020), who indicated that 92.6 percent of their victims had no idea who the perpetrators were. Duggan et al. (2014) also said that half of the perpetrators were unknown.

In our study, about 61% reported that the perpetrator was male. Alike Pasricha (2016) discovered that men were responsible for 85 percent of the occurrences reported in their survey. In addition, studies conducted by women's rights organizations in three Nordic nations (Iceland, Denmark, and Norway) identified perpetrators as predominantly men (Jóhannsdóttir et al. 2017). Hassan et al. (2020) found that ten of the 11 known offenders were males.

In terms of the impact of cyber violence, our research found that 68.72% of participants were psychologically affected, followed by social, physical, and economic effects. It also mentioned several psychological symptoms, including the most common: anger, concern, and fear, as well as the most serious: suicide thoughts. Similarly, Hassan et al. (2020), and West (2014),

discovered that 65 percent of survey respondents were psychologically affected.

In our study, female victims of cyber violence frequently responded by blocking the perpetrator, reporting content to platforms, and altering their contact information. The same conclusion was reached in previous studies by Duggan et al. 2014 and Pasricha 2016.

Surprisingly, none of the victims in our study reported the offenses to law enforcement. Victims may believe that these acts are personal and that reporting and making them public may harm their reputation. Unawareness of the laws prohibiting cyber-violence could also be a factor (Lewis et al., 2017).

According to our findings, about 32 percent of participants ignored the cyber-harassment experience, roughly 24% responded to the abuser on their own and did not inform anyone, 25 percent asked for help from family, and 10 percent asked for support from friends, and just 4.36 % reported the authorities. Surrounding people, on the other hand, supported and empathized with roughly 34% of participants. This is in line with Hassan et al. (2020), who found that around a third of their victims did not tell anyone about their cyber-violence exposure.

We explain that the conservative nature of our community and the fear of humiliation, embarrassment, or guilt that may result from exposing their experience even to family or friends may be the root of the problem.

CONCLUSION

In conclusion, the Egyptian population has seen a high rate of cyber violence against women in the past two years. As a result, the government must implement robust legislation that makes cyber violence illegal in all of its manifestations. It is also critical to organize awareness programs for women on how to maintain their online personal safety, secure their identities, and respond to cases of cyber assault.

RECOMMENDATIONS

- Media awareness initiatives should be increased to modify society's attitude toward women who are victims of cyber assault.
- More study is needed to obtain accurate female representations of the situation and identify awareness-raising requirements.

Conflict of Interest

The authors have declared no conflict of interest, financial and personal relationships with other people or organizations that could inappropriately influence (bias) their work.

Authors' contributions

All authors participated in practical work and scientific writing of the manuscript.

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المخلص العربي

تقييم العنف الإلكتروني خلال عامي 2021 و2022 علي عينة من النساء في مصر

رباب عبد المعز أمين الطوخي، أمل سلامه محمود محمود، شيماء أحمد السعيد
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يعد عنف المرأة قضية عالمية ، ولكنها منتشرة بشكل خاص في الشرق الأوسط. وفقاً لتقديرات منظمة الصحة العالمية ، فإن ما يقرب من 35% من النساء حول العالم قد تعرضن للعنف الجسدي و / أو الجنسي في العلاقات الحميمة أو العنف الجنسي من غير الشريك في مرحلة ما من حياتهن. نظراً لأن واحداً من كل شخصين تقريباً يستخدم الإنترنت ومليار شخص يستخدم الاتصال بالإنترنت ، فإن العنف الإلكتروني هو وباء عالمي له آثار خطيرة على الصحة العامة ، وهو مرتبط ليس فقط بالنتائج السلبية النفسية والاجتماعية للضحايا ولكن أيضاً إلى الاعتداء الجسدي والجنسي دون اتصال بالإنترنت. المضايقات الإلكترونية والمطاردة عبر الإنترنت والتشهير والمواد الإباحية غير الرضائية وانتحال البريد الإلكتروني والقرصنة الإلكترونية والاعتصاب الافتراضي كلها أمثلة على العنف الإلكتروني ضد المرأة. وبالرغم من أن البيانات المتعلقة بنطاق العنف الإلكتروني وانتشاره عبر مختلف الأشخاص والثقافات محدودة ، إلا أن الدراسات تشير إلى أن النساء والفتيات والأقليات الجنسية هم أكثر عرضة لأن يكونوا ضحايا إساءة استخدام الإنترنت. **الأهداف:** يهدف بحثنا إلى تقييم مشكلة العنف الإلكتروني ضد النساء في مصر ، بما في ذلك انتشاره ، وأشكاله المختلفة ، وتأثيره على حياة الضحايا لتحديد وتطوير استراتيجيات وقائية له. **المنهجية:** تم إجراء البحث باستخدام استطلاع عبر الإنترنت تم توزيعه على اثنين من أشهر منصات التواصل الاجتماعي في مصر ، وهما تطبيق فيسبوك و واتساب للحصول على معدل استجابة مرتفع ، وقد اختار الباحثون مجموعات بها عدد كبير من العضوات عبر استبيان لمدة ثلاثة شهور، ابتداءً من 1 تشرين الثاني (نوفمبر) 2021 حتى 31 كانون الثاني (يناير) 2022. **النتائج:** شملت دراستنا 324 مشاركة ، حوالي 52% منهن كانت أعمارهن بين 31 و 40 سنة. قال حوالي 85 بالمائة من المشاركات لدينا إنهن تعرضن للعنف الإلكتروني ، وقال 64 بالمائة إنهن تعرضن للمضايقات الإلكترونية ثلاث مرات أو أكثر ، وقال 52.7 بالمائة إنهن تعرضن للمضايقات عبر منصات التواصل الاجتماعي.

الاستنتاجات: أن السكان المصريين قد شهدوا معدلاً كبيراً من العنف الإلكتروني ضد النساء في العامين الماضيين.
المقترحات: يجب على الحكومة تنفيذ تشريعات قوية تجعل العنف الإلكتروني بجميع مظاهره غير قانوني.
الكلمات المفتاحية: إساءة استخدام الإنترنت ، العنف الإلكتروني ، النساء ، مصر ، منصات التواصل الاجتماعي.