EGAS MONIZ SCHOOL of HEALTH & SCIENCE

INSTITUTO UNIVERSITÁRIO EGAS MONIZ

MESTRADO EM PSICOLOGIA CLÍNICA E DA SAÚDE

How Online Violence Affects Mental Health: A Relationship to Understand

Trabalho submetido por

Gaëlle Gadomski

para a obtenção do grau de Mestre em Psicologia Clínica e Saúde
Outubro de 2025

INSTITUTO UNIVERSITÁRIO EGAS MONIZ

MESTRADO EM PSICOLOGIA CLÍNICA E DA SAÚDE

How Online Violence Affects Mental Health: A Relationship to Understand

Trabalho submetido por

Gaelle Gadomski

Para a obtenção do grau de Mestreem Psicologia Clínica e da Saúde

Trabalho orientado por

Marta Sofia Pereira Dos Reis

Outubro de 2025

ACKNOWLEDGEMENTS

I would like to thank my supervisor, Dr. Marta Sofia Pereira dos Reis, for her invaluable guidance, support, encouragement and patience throughout the development of this research. Her suggestions and expertise have been essential at every stage of this project.

I am also grateful to the participants who took the time and care to answer the questionnaire and share their experiences with online violence. Without their participation, this study would not have been possible. Thank you.

To my professors and colleagues at the Egas Moniz School of Health and Science, thank you for these 2 years. Your motivation to foster an academic environment that inspired curiosity and critical thinking has helped me improve as a person and as a psychologist.

Finally, I wish to thank my family. In particular my mother Colette and my aunts Martine and Aline. You were incredibly supportive of me during the past two years and your belief in me has been a constant source of strength and motivation to continue my studies. I would also like to thank my friends for their unwavering understanding throughout this journey.

Declaração de Honra

Código | IMP-EM-EI-111_00

Eu, Gaëlle Gadomski, declaro, por minha honra,que o presente trabalho academic é original e foi elaborado por mim próprio (a), não se tendo recorrido a quaisquer outras fontes, para além dasindicadas, usadas, adotadas literalmente ou adaptados apartir dos seus originais (em fontes impressas, não impressas ou na internet) e encontram-se adequados, identificados e citados, com observância das convenções do trabalho académico em vigor.

Mais declaro que esta Dissertação/Tese “How Online Violence Affects Mental Health : A Relationship To Understand” não foi apresentada, para efeitos de avaliação,aqualqueroutra entidade ou instituição, para além da(s) diretamente envolvida(s) na sua elaboração, eqeos conteúdos das versões impressa e eletrónica são inteiramente coincidentes.

Declaro, igualmente, encontrar-me ciente de que a inclusão, neste texto, de qualquer falsa declaração terá consequências legais.

Data: 17/10/25

Declaração Conflito de Interesses (DCI)

Código | IMP-EM-EI-110_00

Eu Gaëlle Gadomski, referente a Dissertação/Tese How Online Violence Affects Mental Health : A Relationship To Understand, declaro que não possuo conflitos de interesse de ordem pessoal, comercial, académica, político ou financeiro.

Data: 17/10/25

Declaração de Financiamento

Código | IMP-EM-EI-113_00

Eu Gaëlle Gadomski, referente a Dissertação/Tese How Online Violence Affects Mental Health : A Relationship To Understand declaro que o meu trabalho não se encontra financiado.

Data: 17/10/25

Declaração de Éticae Registo

Código | IMP-EM-EI-112_00

Eu Gaëlle Gadomski referente a Dissertação/Tese How Online Violence Affects Mental Health : A Relationship To Understand declare que o meu trabalho se encontra aprovado pela Comissão de ética sob o número ou identificação de registo PT-313/24

Data: 18/07/25

EgasMoniz-CooperativadeEnsinoSuperior,CRL Campus
Universitário - Quinta da Granja
2829-511MontedaCaparica,Portugal NIF
504 218 6

RESUMO

A violência online surgiu como uma preocupação crescente de saúde devido ao seu impacto psicológico em indivíduos de diversos grupos sociais. Este estudo teve como objetivo investigar o impacto da violência online na saúde mental, com um foco específico nos sintomas de depressão, ansiedade e stress pós-traumático. Foi empregue um desenho quantitativo transversal com uma amostra de 250 pessoas, divididas em dois grupos: participantes que sofreram violência online (grupo OV) e os que não sofreram (grupo controlo).Os participantes preencheram um questionário online anónimo, que incluiu versões francesas validadas das escalas CES-D, BAI e IES-R. As análises estatísticas revelaram pontuações significativamente mais elevadas em todas as três escalas para o grupo OV em comparação com o grupo de controlo, com tamanhos de efeito grandes a muito grandes ($p < 0,001$). Estas descobertas sublinham o grave impacto psicológico da violência online e realçam a necessidade de estratégias de prevenção mais abrangentes, de sensibilização pública e de serviços de apoio à saúde mental adaptados aos contextos digitais.

Palavras–chave: “ciberviolência; violência online; saúde mental; depressão, ansiedade, PTSD”

ABSTRACT

Online violence has emerged as a growing health concern due to its psychological impact on individuals across diverse social groups. This study aimed to investigate the impact of online violence on mental health, focusing specifically on symptoms of depression, anxiety, and post-traumatic stress. A quantitative, cross-sectional design was employed with a sample of 250, divided into two groups: participants who had experienced online violence (OV group) and those who had not (Control group). Participants completed an anonymous online questionnaire, which included validated French versions of the CES-D, BAI, and IES-R scales. Statistical analyses revealed significantly higher scores on all three scales for the OV group compared to the Control group, with large to very large effect sizes ($p < .001$). These findings underscore the serious psychological toll of online violence and highlight the need for more comprehensive prevention strategies, public awareness, and mental health support services tailored to digital contexts.

Keywords: " cyberviolence; online violence; mental health; depression, anxiety, PTSD"

RÉSUMÉ

La violence en ligne est devenue un problème de santé croissant en raison de son impact psychologique sur des individus de divers groupes sociaux. Cette étude visait à examiner l'impact de la violence en ligne sur la santé mentale, en se concentrant spécifiquement sur les symptômes de dépression, d'anxiété et de stress post-traumatique. Une étude quantitative et transversal a été utilisée auprès d'un échantillon de 250 personnes, divisées en deux groupes : les participants ayant subi des violences en ligne (groupe VO) et ceux n'en ayant pas subi (groupe témoin). Les participants ont rempli un questionnaire en ligne anonyme, comprenant les versions françaises validées des échelles CES-D, BAI et IES-R. Les analyses statistiques ont révélé des scores significativement plus élevés sur les trois échelles pour le groupe VO que pour le groupe témoin, avec des tailles d'effet importantes à très importantes ($p<0,001$). Ces résultats soulignent le lourd tribut psychologique de la violence en ligne et soulignent la nécessité de stratégies de prévention plus complètes, de sensibilisation du public et de services de soutien en santé mentale adaptés aux contextes numériques.

Mots-clés: “cyberviolence, violence en ligne, santé mentale, dépression, anxiété, syndrome de stress post-traumatique”

SUMMARY

INDEX OF FIGURES

INDEX OF TABLES

ANNEX

1. INTRODUCTION

The Concept of Violence

The term *'violence'* is complex and multifaceted, with its meaning shaped by historical, cultural, linguistic, and contextual factors (Imbusch, 2003 ; Rutherford et al., 2007). Although acts of violence have been documented throughout history, they decreased significantly from the 13th to the 21st century (Muchembled, 2012). However, since the late 1960, there has been a consistent increase of violent acts, particularly in Western industrialized countries (Imbusch, 2003). Public discourse and academic debate around terrorism, gender-based violence, and public safety have positioned violence as a major global public health concern (WHO, 1996). In 2002, the World Health Organization (WHO) defines violence as « the intentional use of physical force or power, threatened or actual, against oneself, another person, or against a group or community, that either results in or has a high likelihood of resulting in injury, death, psychological harm, maldevelopment or deprivation » (Krug et al., 2002).This definition recognises that violence is not limited to physical acts but also includes psychological violence, coercion, and neglect**.**

Categories of Violence

The World Health Organization (WHO), in its *World Report on Violence and Health*, classified violence into three broad categories based on the identity of the perpetrator. These include self-directed violence (e.g., suicidal behaviour), interpersonal violence (e.g., domestic or partner abuse), and collective violence (e.g., violence driven by social, political, or economic motives). Violent acts are further categorised into four non-mutually exclusive types, based on the nature of the act: physical, sexual, psychological, and acts of deprivation or neglect (Krug et al., 2002).

Domestic Violence: Definition and Rates

In recent years, domestic violence incidents have risen globally, with marked increases in both physical and emotional abuse, particularly during the COVID-19 pandemic (United Nation Women, 2021). The terms « domestic violence » and « intimate partner violence » are often used interchangeably. Both refer to physical, sexual, or psychological harm perpetrated by a current or former partner or spouse. This type of violence can occur among heterosexual or same-sex couples (Rutherford et al, 2007). In the European context, it remains difficult to determine whether and to what extent domestic violence rates have increased. This difficulty arises in part from inconsistent data collection across EU member states; for example, countries like Poland and Bulgaria do not systematically report case numbers (European Institute for Gender Equality, 2018). In France, official records show a 15% increase in intimate partner violence against women in 2022 compared to 2021(Service Statistique Ministériel De La Sécurité Intérieure, 2023).

Online Violence

Parallel to the rise in domestic violence, reports of online violence have also increased globally—even prior to the COVID-19 pandemic (Glitch, 2020). This trend was also evident in France, particularly in 2018, when the *Haut Conseil pour l'Égalité entre les Femmes et les Hommes* released a report on online violence against women. The report found that 73% of women had experienced online violence (Bousquet et al., 2018). Despite its increasing prevalence, online violence is still rarely included in official classifications of violence (Rutherford et al, 2007). This is partly because it is considered a relatively new and complex phenomenon, making it more difficult to categorise than traditional forms of violence (Rutherford et al, 2007 ; Bildjuschkin et al, 2021).

Online Violence: Definition

Although a variety of terms—such as *technology-facilitated violence*, *cyberviolence*, and *online violence*—are used in the literature, they all refer to the same overarching phenomenon. Online violence is commonly defined as acts that are committed, facilitated, or exacerbated through the use of information and communication technologies (ICTs) or other digital platforms, and which result in or are likely to result in physical, sexual, psychological, social, political or economic harm or other infringement of rights and freedoms.(Chowdhury, 2023; Council of Europe, 2018).

Digital technologies are now deeply embedded in people's everyday lives. It is therefore unsurprising that violence has also migrated to the digital sphere (Beran & Li, 2005; Hicks, 2021). Perpetrators of online violence are now using digital technology tools, such as social networks and cell phones, to widen the scope of violence they can inflict on their victims (Stevens et al., F., 2020).

Specifics of Online Violence

Online violence manifests in various forms, including non-consensual sharing of intimate images, doxing, online harassment, and the dissemination of manipulated content such as deepfake images. Online hate speech, as well as threats of physical violence made through digital means, are also encompassed within this definition (Bailey et al., 2021 ;Barker & Jurasz, 2023 ; Dunn et al., 2023). A distinctive feature of online violence is the potential for perpetrator anonymity, which allows aggressors to access their victims via social media or messaging platforms without revealing their identity. This anonymity complicates both victim protection and the reporting of incidents. In contrast to offline violence, online abuse can occur at any time and in any place, as perpetrators are not constrained by physical proximity (Bailey & Mathen, 2019).

Consequences of Online Violence

Empirical research has demonstrated that online violence can have serious consequences for victims' mental health (Flynn et al., 2023; Staude-Müller et al., 2012). Specifically, it has been associated with the development of post-traumatic stress disorder (PTSD) and suicidal ideation (Henry & Powell, 2018). According to a recent online study by the Audirep Institute for the e-Enfance association, 52% of minor victims of cyberharassment reported experiencing symptoms such as insomnia, appetite disturbances, and feelings of despair. Notably, 31% reported having had suicidal thoughts (Audirep & E-enfance, 2023).

Current State of the Research on Online Violence

Although scholarly interest in online violence is increasing, the concept itself remains relatively recent. Existing research remains limited and tends to focus predominantly on women, especially in the context of online sexual violence (Simões et al., 2022 ; Powell & Henry, 2017), or on children and adolescents (Powell et al., 2020). However, the scarcity of data regarding the experiences of marginalised groups—particularly sexual and gender minorities—limits a comprehensive understanding of the scope and nature of online violence. Members of the LGBTQIA+ community often turn to online spaces to form connections in safer, more accepting environments, free from the risk of direct discrimination or rejection (Gámez-Guadix & Incera, 2021). Nevertheless, despite their active online presence, LGBTQIA+ individuals are disproportionately targeted because of their identities (Stotzer, 2014 ; Gámez-Guadix & Incera, 2021). Research also indicates that due to difficult social experiences and internalized biases (e.g., internalized homophobia), sexual minorities tend to exhibit poorer psychological adjustment and elevated rates of mental health difficulties compared to heterosexual individuals (Lick et al., 2013).

There is, therefore, a clear need for further research on online violence—not only to understand its prevalence and impact on women, but also to address its effects on underserved and under-researched populations.

The present study is also informed by psychological theories that help explain the mechanisms through which online violence affects mental health. For example, Bronfenbrenner's Bioecological Model (1979) situates digital platforms as part of the microsystem that directly influences individual development.

Research Interests

This study aims to contribute to a more comprehensive understanding of how online violence affects various dimensions of mental health across diverse population groups. It is anticipated that the findings will inform future research that integrates an intersectional perspective on online victimization and mental health outcomes. The results may also guide the development of more effective prevention and support interventions for individuals affected by online violence. At a national level, the study may also provide evidence to support public policies aimed at creating and sustaining safer online environments.

Given the growing evidence of the psychological harm associated with online violence, this study also aims to highlight the crucial role of psychologists in addressing this phenomenon. Mental health professionals are essential not only in the early identification and clinical assessment of affected individuals, but also in the development of evidence-based interventions that can support victims in restoring emotional well-being and resilience. Strengthening the involvement of psychologists in the digital context may contribute to more integrated and preventive responses to online violence.

Research Question and Hypothesis

To examine the psychological impact of online violence, this study investigates the presence and severity of depressive, anxiety, and post-traumatic stress symptoms. It is hypothesized that individuals who have experienced online violence will report significantly higher levels of depressive, anxiety, and post-traumatic stress symptoms compared to those who have not.

2. RESEARCH DESIGN AND METHODS

To test the hypothesis that experiencing online violence is associated with increased levels of depressive, anxiety, and post-traumatic stress symptoms, we conducted a quantitative, cross-sectional study with a between-group comparative design. The aim was to compare levels of psychological distress between individuals who reported having experienced online violence and those who had not. The independent variable was exposure to online violence, measured as a dichotomous variable (yes/no). The dependent variables were the scores obtained from a structured online questionnaire, which included a socio demographic section and three validated scales assessing anxiety, depressive, and post-traumatic stress symptoms.

This section outlines the sample characteristics, the psychometric instruments used, and the procedures adopted to ensure the reliability, validity, and ethical soundness of the data collection process.

Study Design

This study employed a quantitative, cross-sectional, and correlational design. Data were collected through self-administered online questionnaires using the Google Forms platform. Participation was anonymous and voluntary, and informed consent was obtained from all respondents.

Sample and Recruitment

A total of 250 participants were recruited from the general population using a non-probabilistic snowball sampling strategy. To be eligible, individuals had to be at least 18 years old and able to understand written French, as the questionnaire was administered in that language.

Recruitment took place through the dissemination of a link to the online questionnaire on social media platforms such as Facebook and Twitter (X). Participants were invited to share the questionnaire after completing it, in an effort to increase the sample's diversity and reach. Based on their self-reported experience of online violence, participants were assigned to one of two groups: the Control group (C), composed of individuals who reported never having experienced online violence, and the Online Violence group (OV), composed of those who had. This distribution is presented in Table 1.

Participation was voluntary and anonymous, and no monetary or material incentives were provided. Additional socio demographic characteristics of the participants are discussed in Section 3.1 – Socio-demographic Results.

Table 1

Group Distribution and Percentages

Group	N	%
Online Violence Group	155	62,0 %
Control Group	95	38,0 %

Materials

Online Form (ANNEX 1)

An online socio demographic form was administered to gather relevant background information from participants, including age, gender, sexual orientation, and social media use, among other variables. For certain questions—such as gender identification and whether they had supported someone facing online violence—participants were invited to provide open-ended responses to elaborate on their answers.

Based on participants ‘responses to Question 10 (*“Have you ever been a victim of online violence?”*), they were categorised into one of two groups: the Control Group (responded "No") or the Online Violence Group (responded "Yes" or "I am still being harassed"). This classification is presented in Table 1.

Participants who selected "No" were automatically directed to skip Questions 11 to 14, which were specifically designed to explore experiences of online violence in greater detail.

Both the socio demographic form and the questionnaire were administered in French and ensured complete anonymity. Once the socio demographic data were submitted, participants proceeded to the psychological assessment section, which included validated self-report scales measuring the presence and severity of depressive symptoms, anxiety, and post-traumatic stress. As with the previous section, this part of the questionnaire remained anonymous and in French.

Measures

French Version of the Center for Epidemiologic Studies Depression Scale (CES-D) (ANNEX 2)

The CES-D is a self-report instrument designed to assess depressive symptomatology. It evaluates how frequently participants have experienced symptoms associated with depression over the past week. The scale consists of 20 items, each scored on a 4-point Likert scale:

- 0 = Never or rarely (less than one day)
- 1 = Occasionally (1 to 2 days)
- 2 = Frequently (3 to 4 days)
- 3 = Most or all of the time (5 to 7 days)

Items reflect key dimensions of depression, including depressed mood, guilt, appetite disturbance, psychomotor slowing, and sleep disturbance (INRS, 2011).
This study used the French version of the CES-D (α=0.90), validated by Fuhrerand Rouillon (1989) for use in clinical and general populations.

French Version of the Beck Anxiety Inventory (BAI) (ANNEX3)

The BAI (Becketal.,1988) is a 21-item self-report scale used to assess the presence and severity of anxiety symptoms. Each item describes a common symptom of anxiety (e.g.,

numbness, feeling hot, difficulty relaxing, rapid heartbeat), and is rated on a 4-point Likert scale:

- 0 = Not at all
- 1=Mildly, but it didn't bother me much
- 2=Moderately, it wasn't pleasant at times
- 3=Severely, it bothered me a lot

For this study,we will be using the French version of the BAI (α=0.92) adapted and validated by Freeston et al in 1994. The BAI was validated in the clinical measurement of anxiety levels (Freeston et al, 1994).

French Version of the Impact of Events Scale-Revised (IES-R)(ANNEX4)

The IES-R (Weiss & Marmar, 1997) is a 22-item self-report measure that evaluates symptoms of post-traumatic stress disorder (PTSD) in adult populations. It is a revised version of the original IES (Horowitz et al., 1979), with 7 additional items capturing hyperarousal symptoms. The IES-R assesses three symptom clusters: Intrusion (e.g., intrusive thoughts, nightmares, dissociative experiences); Avoidance (e.g., emotional numbing, behavioural avoidance); and Hyperarousal (e.g., irritability, hypervigilance, difficulty concentrating). Each item is rated on a Lickert scale of 5-point :

- 0 = Not at all
- 1 = A little bit
- 3 = Moderately
- 4 = Quite a bit

- 5 = Extremely

For this study, we will be using the French version of the IES-R (α=0.95) adapted and validated by Brunet et al in 2003 (Brunet et al., 2003).

Procedure

This study was conducted exclusively online to ensure participant anonymity and accessibility. The recruitment process began with the dissemination of a link to the study on social media platforms, which was subsequently shared by participants using a snowball sampling approach. The link directed participants to an informed consent form. Following its completion, participants were presented with a socio demographic form.

Among the items included in this form, the question regarding previous experience of online violence was used to assign participants into two groups: a Control Group, composed of participants who reported never having experienced online violence, and an Online Violence Group, composed of those who had.

After submitting their socio demographic data, participants gained access to the psychological questionnaire. This section included three validated self-report scales assessing depressive symptoms, anxiety, and post-traumatic stress.

The completion and submission of this final section marked the end of the survey. All responses were automatically recorded using the Google Forms platform, and no personally identifiable information was collected.

Once data collection was complete, the quantitative data were subjected to statistical analysis using appropriate tests (e.g., Student's t-test, ANOVA) to compare results between the two groups. All statistical procedures are described in detail in Section 2.4.

Ethical consideration

The subject of this study, online violence, is a sensitive topic. As with other forms of interpersonal violence, such as domestic abuse, it is essential to address this issue with care to prevent psychological harm to participants. Prior to data collection, the project was submitted to the Egas Moniz Ethics Committee for review, to ensure both participant safety and methodological coherence. Following ethical approval, it was necessary to ensure that all participants fully understood the aims and procedures of the research. Given that the entire study was conducted online to preserve complete anonymity, it is not possible for the researchers—or any third party reading this report—to identify individual participants. However, this also means that it is not possible to delete specific responses once submitted. This limitation was clearly communicated to participants, along with an explanation of how their data would be used and reported. Specifically, only the researchers involved in the study had access to the data, which remained fully anonymous throughout the analysis. Results were reported in aggregate form to ensure that no participant could be individually identified.

The socio demographic questionnaire included general items, with optional open-text responses requiring minimal input. However, these answers are not mandatory and can be skipped if the participant doesn't wish to answer. Nevertheless, a disclaimer is included at the beginning of both the socio-demographic form and the questionnaire, in order to inform participants of their choices: if answering the questions becomes too difficult for them, participants will have the choice to save their current answers and complete the rest at another time, or, they can stop the process altogether and erase their current data. The language used in the questionnaire was carefully selected to be as neutral and non-stigmatizing as possible. For example, the use of the word «victims» will not be used to describe the participants, as many could possibly not identify themselves as victims of violence at the time of the study.

3. RESULTS

Socio-Demographic Results

Gender and Sexual Orientation

The sample for this study was composed of 129 participants identifying as women (51.6%), 102 as men (40.8%) and 19 as non-binary (7.6%).

Table 2

Gender Identity and Percentages

Gender	N	%
Woman	129	51,9 %
Man	102	40,8 %
Non Binary	19	7,6 %

Answers regarding sexual orientation were more dispersed, with 2 participants identifying as Aromantic (0.8%), 24 as asexual (9.6%), 70 as bisexuals (28.0%), 4 as Demisexual (1.6%), 95 as heterosexuals (38.0%), 53 as homosexuals (21.2%) and 2 identifying as pansexual (0,8 %).

Table 3

Sexual Orientation and Percentages

Sexual Orientation	N	%
Aromantic	2	0,8 %
Asexual	24	9,6 %
Bisexual	70	28,0 %
Demisexual	4	1,6 %
Heterosexual	95	38,0 %
Homosexual	53	21,2 %
Pansexual	2	0,8 %

Age and Profession

The average age of the participants was 28.84 years old with a minimum of 18, a maximum of 60 and modes of 27and 33. Among the participants, 66.4% were employees, 22.4% were students and 11.2% were unemployed.

Figure 1

Age of Participants and Percentages

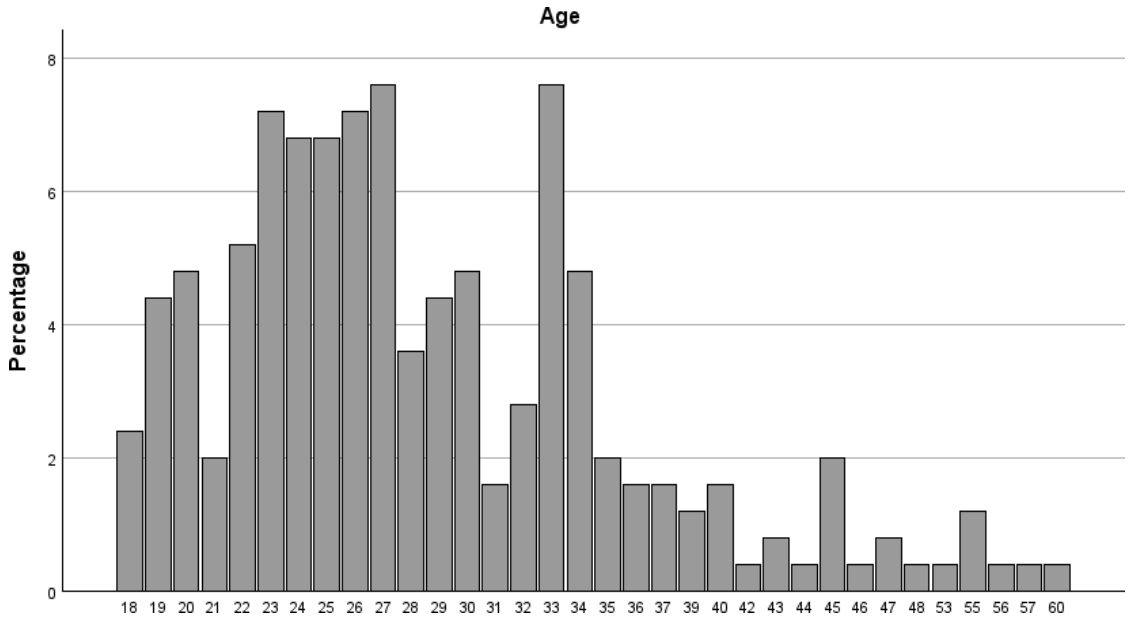


Table 4

Profession and Percentages

Profession	N	%
Employee	166	66,4 %
Student	56	22,4 %
Unemployed	28	11,2%

Nationality, Country of Origins and Country of Residence

The majority of the participants are French (98.0%), were born in France (97.2%) and are currently living in France (91.6%).

Figure 2

Nationality of Participants and Percentages

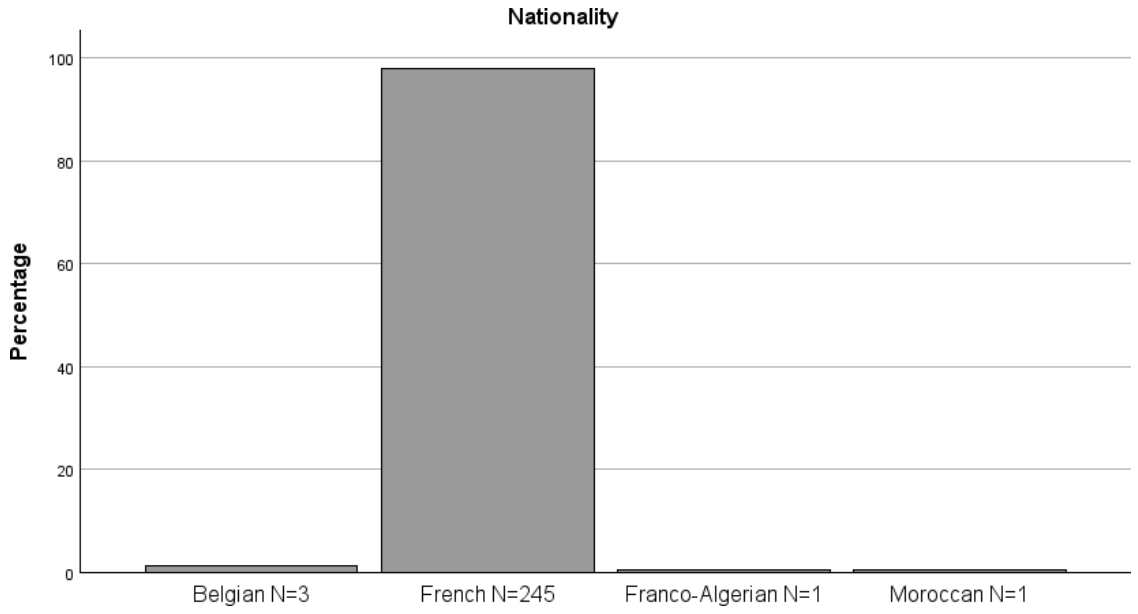


Figure 3

Country of Origins of Participants and Percentages

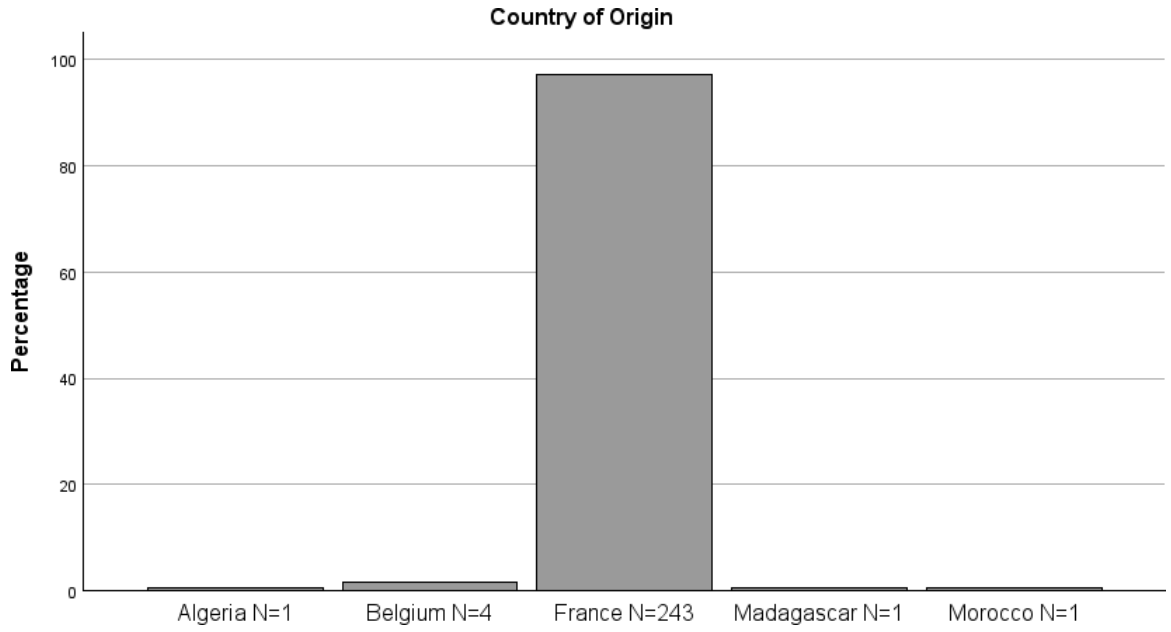
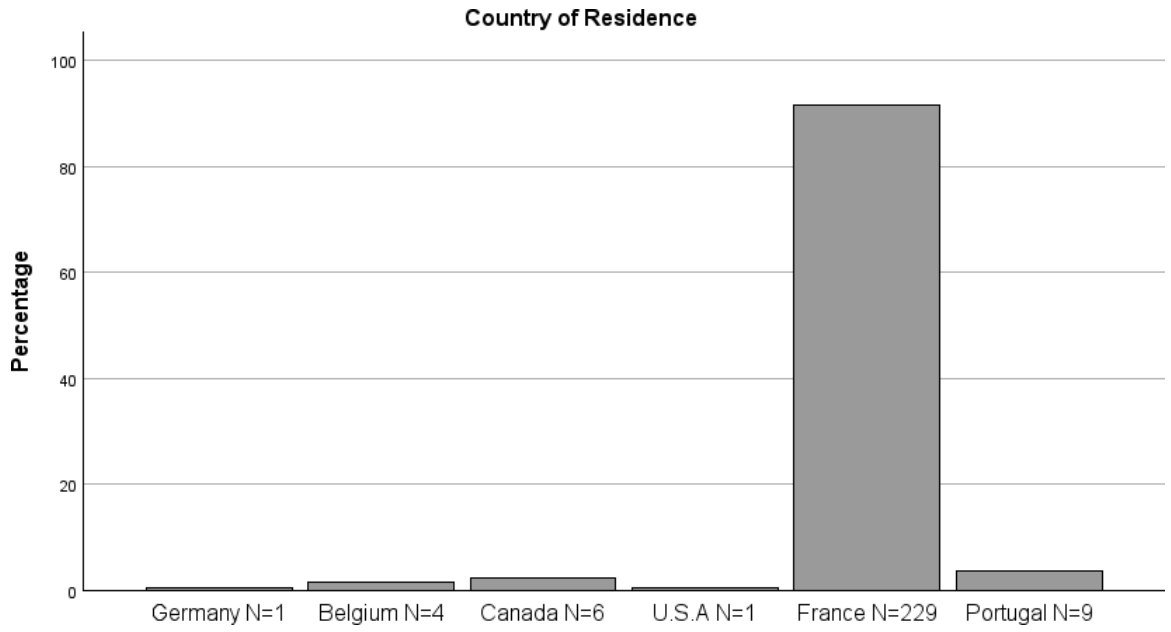


Figure 4

Country of Residence of Participants and Percentages



Online Habits of Participants

Concerning the usage of social networks, 21.6% of the participants answered using a combination of Instagram, Twitter/X, Facebook, Snapchat and Tiktok. Other results included a combination of three or less social networks cited previously. Other social applications were mentioned, such as Youtube, Twitch, Tumblr and dating applications.

37,6% of the participants spend between 3 to 4 hours online daily, 28.8% spend between 1 to 2 hours a day, 21.6% spend between 5 to 6 hours, 7.2% of the participants spend between 7 to 8 hours online. Finally, 4,8% spend more than 8 hours per day online.

Table 5

Hours Spent on Social Networks Per Day and Percentages

Hours Spent on Social Networks Per Day	N	%
1 to 2 Hours	72	28,8 %
3 to 4 Hours	94	37,6 %
5 to 6 Hours	54	21,6 %
7 to 8 Hours	18	7,2 %
More than 8 Hours	12	4,8 %

Experience of Online Violence

Among the 155 participants who experienced online violence, 120 of them (77.4%) think that their gender and/or sexual orientation have influenced their harassment. 125 (80.6%) participants said they were able to talk to someone about their online abuse.

Table 6

Sexual Orientation and Gender Influence on Harassment and Percentages

Sexual Orientation and Gender Influence	N	%
No	35	22,6 %
Yes	129	77,4 %

Table 7

Participants Who Informed Someone of Their Harassment and Percentages

Informing Others of the Harassment	N	%
No	30	19,4
Yes	125	80,6

For 38% of the participants, the reason victims don’t talk about this issue with other people is due to a combination of fearing even more harassment, because they think it will eventually stop, out of shame, and because they don't know who to talk to about it.

74.4 % of the participants say they witnessed at least one act of online violence. Among them, 58.8 % have not offered support against 41.2 % who did. If they wanted, participants could explain how they supported the victim.The most common answers were to report the account and comments made by the instigator, some reached out to the victim via direct messages.

Table 8

Percentage of Participants Who Have Witnessed Acts of Online Violence

Witnessing Online Violence	N	%
No	64	25,6 %
Yes	186	74,4 %

Table 9

Percentage of Participants Who Offered Support to Victims

Support	N	%
No	147	58,8 %
Yes	103	41,2 %

183 participants were aware that a phone number existed for the support of victims of online violence. However, among them, 57.4% of the participants didn’t know what the

Number was. 38.2% answered correctly with the number “3018”and 4.4% of the responses were incorect.

Table10

Online Violence Phone Number Awareness and Percentages

Phone Number Awarness	N	%
No	67	26,8 %
Yes	183	73,2 %

Table 11

Phone Number Answers and Percentages

Phone number	N	%
3018	70	38,2 %
Not Known	105	57,4 %
Incorect Answers	8	4,4 %

Statistical Test

Independent sample *t*-tests were conducted to compare mean scores between the Control Group (C) and the Online Violence Group (OV) across the three psychological scales. Results revealed a statistically significant difference in depressive symptoms as measured by the CES-D, $t(248) = 14{,}04$, $p < {,}001$, with the OV group (M = 31.90, SD = 10.67) scoring significantly higher than the C group (M = 14.52, SD = 8.71). Similarly, anxiety symptoms measured by the BAI showed a significant difference, $t(248) = 9{,}18$, $p < {,}001$ with the OV group (M = 23.47, SD = 12.26) reporting higher anxiety levels than the C group (M = 10.01, SD = 10.59). Finally, post-traumatic stress symptoms assessed by the IES-R were also significantly higher in the OV group (M=47.52, SD=17.17) compared to the C group (M = 19.48, SD = 20.96), $t(248) = 10{,}97$, $p < {,}001$.

.

These results indicate that individuals who experienced online violence reported significantly greater levels of psychological distress across all domains. Moreover, the OV group demonstrated higher variance in CES-D and BAI scores, suggesting greater heterogeneity in the severity of depressive and anxiety symptoms. In contrast, the lower variance observed in the IES-R scores for the OV group may reflect a more homogeneous experience of post-traumatic stress symptoms among those exposed to online violence.

Table 12

Mean Differences Between Control Group (C) and Online Violence Group (OV) Across Psychological Scales (CES-D, BAI, IES-R)

Scale	Group	N	M	SD	Variance	t	p	Interpretation
CES-D	C group	95	14,52	8,71	75,891	14,04	p<,001	Very significant difference
	OV group	155	31,90	10,67	113,867	14,04	p<,001	Very significant difference
BAI	C group	95	10,01	10,59	112,181	9,18	p<,001	Very significant difference
	OV group	155	23,47	12,26	150,199	9,18	p<,001	Very significant difference
IES-R	C group	95	19,48	20,96	439,423	10,97	p<,001	Very significant difference
	OV group	155	47,52	17,17	294,927	10,97	p<,001	Very significant difference

Statistical Analysis

Before conducting further statistical analyses, it was necessary to assess the normality of the data distribution. The Shapiro–Wilk test was applied to each of the psychological scales to evaluate the assumption of normality.

Shapiro-Wilk Normality Test

Following the analysis, results indicated that the data did not meet the assumption of normality. However, given the relatively large sample size (N=250), parametric tests such as the *t*-test and ANOVA can still be applied, as they are considered robust to violations of normality in large samples. Additionally, non-parametric tests were conducted to further support and validate the findings obtained from the parametric analyses.

Table 13

Shapiro-Wilk Normality Test

Scale	Group C M	Group OV M	Group C SD	Group OV SD	W	p	Interpretation
CES-D	14,52	31,90	8,71	10,67	0,974	p = .00014	Abnormal Distribution
BAI	10,01	23,47	10,59	12,27	0,948	p < .000001	Abnormal Distribution
IES-R	19,48	47,52	20,97	17,17	0,926	p < .000000001	Abnormal Distribution

Mann-Whitney Test

As the distributions of scores did not meet the assumption of normality (as indicated by significant Shapiro–Wilk tests for all three scales), a non-parametric Mann–Whitney *U* test was conducted to ensure the robustness of the results.

The analyses revealed statistically significant differences between participants in the Online Violence (OV) group and those in the Control (C) group:

- CES-D : $U = 13074$, $p < .001$
- BAI: $U = 11734{,}5$, $p < .001$

- IES-R : $U = 12429$, $p < .001$

These results suggest that OV group participants exhibit significantly higher levels of symptoms and severity than the participants in the control group, even after accounting for the non-normality of the data.

Table 14

Mann-Whitney Test

Scale	Group C M	Group OV M	Group C SD	Group OV M	U	p	Interpretation
CES-D	14,52	31,90	8,71	10,67	13074,0	p < .001	Very significant difference
BAI	10,01	23,47	10,59	12,26	11734,5	p < .001	Very significant difference
IES-R	19,48	47,52	20,96	17,17	12429,0	p < .001	Very significant difference

T-test

A Student's t-test (Welch'st-test) was performed in order to examine the differences between the scores of the two groups (Online violence vs Control) on the CES-D, BAI, and IES-R scales.

Table 15

Welch's t-Test Results Comparing Psychological Symptoms Between Control and Online Violence Groups

Scale	GroupCM	GroupOV M	GroupCSD	GroupOV SD	t	d	p	Interpretation
CES-D	14,52	31,90	8,712	10,671	14,04	1,99	p < .001	Very significant difference
BAI	10,01	23,47	10,592	12,256	9,18	1,32	p < .001	Very significant difference
IES-R	19,48	47,52	20,962	17,173	10,97	1,71	p < .001	Very significant difference

The results of the T-test indicate that having experienced online violence is linked to higher levels of depressive symptoms (CES-D score), anxiety (BAI score) and post-traumatic stress (IES-R score) symptoms than those in the control group. Specifically, depressive symptoms (CES-D), anxiety (BAI), and post-traumatic stress symptoms (IES-R) were all significantly elevated in the OV group ($p < .001$ for all comparisons). The effect sizes (d) are all over 0.80, which indicate that the differences between the groups are very marqued. Higher mean values such as 14.04 ; 9,18 and 10,97 all indicate significant differences between the group means for each scale. These differences are also shown with small p-values, all inferior to < .001 ($\alpha = 0,05$). These findings support the conclusion that online violence is associated with increased psychological distress.

ANOVA Analysis

A one-way ANOVA was conducted to examine the impact of experiencing online violence on levels of depressive symptoms (CES-D), anxiety (BAI), and post-traumatic stress (IES-R). The results indicated that the experience of online violence had a statistically significant effect on scores across all three psychological measures.

Table 16

One-Way ANOVA Results for the Effect of Online Violence on Psychological Symptoms

Scale	Group C M	Group OV M	Group C SD	Group OV SD	F	p	η^2	η^2 Interpretation
CES-D	14,52	31,90	8,71	10,67	179.01	p< .001	.42	Very Important Effect
BAI	10,01	23,47	10,59	12,26	78.59	p< .001	.24	Important Effect
IES-R	19,48	47,52	20,96	17,17	132.35	p< .001	.35	Very Important Effect

NOTE: η^2 (eta squared) values of .01, .06, and .14 correspond to small, medium, and large effects, respectively.

For the CES-D, the group effect accounted for a substantial proportion of variance in depressive symptoms, $F(1, 248) = 179.01$, $p < .001$, $\eta^2 = .42$. Similarly, for anxiety levels measured by the BAI, a significant group effect was observed, $F(1,248) = 78.59$,$p < .001$, $\eta^2 = .24$.Forpost-traumatic stress symptoms (IES-R), the group effect was also significant, $F(1, 248) = 132.35$, $p < .001$, $\eta^2 = .35$.

Effect size estimates (η^2) surpassed the conventional threshold for a large effect (.14), indicating that the experience of online violence had a substantial impact on psychological distress. In all three scales, participants in the OV group presented significantly higher symptom levels compared to the control group.

4. DISCUSSION

Results

The main objective of this study was to explore the impact of online violence on mental health in the general population, with a specific focus on whether experiencing online violence is significantly associated with increased symptoms of depression, anxiety, and post-traumatic stress. To address this, three validated instruments were employed: the CES-D for depressive symptoms, the BAI for anxiety, and the IES-R for post-traumatic stress symptoms.

Although the distribution of the data did not meet normality assumptions, the relatively large sample size (N=250) justified the use of parametric tests. Importantly, all significant findings were corroborated using non-parametric analyses, enhancing the robustness and reliability of the results.

More than 60% of participants reported having experienced some form of online violence, underscoring the prevalence and pervasiveness of this phenomenon in contemporary digital contexts.

The results demonstrated statistically significant differences between participants who had experienced online violence and those who had not. Across all three psychological scales, individuals in the Online Violence (OV) group scored significantly higher than those in the Control (C) group ($p < .001$ in all analyses). These differences were supported by both Welch's t-tests and Mann–Whitney U tests, indicating the consistency of the findings regardless of statistical assumptions.

One-way ANOVA results revealed large to very large effect sizes (e.g., η^2=.42 for depressive symptoms), while Cohen's d values reached as high as 1.99, highlighting substantial differences in psychological symptomatology between the two groups. These

Findings provide strong support for the hypothesis that online violence is associated with elevated psychological distress.

Furthermore, the OV group demonstrated greater individual variability in depressive and anxiety symptoms, as reflected by larger variances in these domains. In contrast, post-traumatic stress symptoms appeared to be more consistently elevated across OV participants, suggesting a more uniform psychological impact in relation to traumatic re-experiencing—a pattern previously reported in trauma literature(Weathersetal.,2014; Brunet et al., 2003)..

Individuals who experienced online violence not only exhibit significantly higher levels of psychological distress, but also show significant individual variability, particularly with regard to depression and anxiety. In contrast, symptoms of post-traumatic stress disorder appear to be more uniformly elevated.

Beyond the symptomatology, responses to the socio-demographic questionnaire revealed important gaps in knowledge and help-seeking behaviour. Although most victims attempted to manage online violence using in-platform tools (e.g., blocking or reporting), offline support mechanisms appeared to be underutilized. Notably, 57.4% of participants who were aware of support hotlines did not know the national helpline number (3018), and only one participant who supported another victim mentioned helping them to file a formal police report.

These results underline the urgent need for increased psychological support for victims of online violence, improved digital literacy, and the promotion of formal reporting pathways. They also point to the necessity of more effective platform moderation policies and legal responses to digital aggression, in line with recent recommendations from mental health and human rights organisations (WHO, 2022).

In summary, the analyses confirmed our hypothesis that experiencing online violence is associated with significantly higher levels of depressive, anxiety, and post-traumatic stress symptoms. These findings are consistent across different statistical methods and demonstrate large effect sizes, reinforcing the psychological relevance of online victimisation.

This leads us to reflect on our central research question: “Does experiencing online violence have a significant impact on an individual’s mental health, particularly in terms of depression, anxiety, and post-traumatic stress?” The evidence gathered in this study offers a strong affirmative answer to this question.

In the following section, we will discuss these results in greater depth, relating them to the existing body of literature on digital violence and psychological wellbeing, and highlighting the implications for mental health practice, digital education, and public policy.

Discussion

The present study set out to examine the psychological impact of online violence, with the aim of determining whether individuals who have experienced digital victimisation exhibit greater psychological distress than those who have not. The results clearly support this hypothesis: individuals in the Online Violence (OV) group reported significantly higher levels of depressive, anxiety, and post-traumatic stress symptoms than those in the Control group, across all three validated psychometric scales (CES-D, BAI, and IES-R). These differences were statistically robust and demonstrated large to very large effect sizes, thereby confirming the psychological salience of online violence.

These findings are consistent with previous research suggesting that online violence—ranging from cyberbullying and harassment to doxxing and non-consensual image sharing—can have profound psychological consequences (Kowalski et al., 2023; Chen et al., 2024). Several studies have linked exposure to digital aggression with increased risk for depression, anxiety, and PTSD-like symptoms, particularly in adolescents and young adults (Martínez-Monteagudo et al., 2020). Our results extend these findings to a broader adult population and provide empirical support for the assertion that online violence is not a trivial or transient experience, but a meaningful psychological stressor.

One of the most salient results was the particularly high levels of post-traumatic stress symptoms in the OV group. Although there was greater variability in depressive and anxiety

Symptoms, suggesting a range of individual reactions, post-traumatic stress symptoms were more uniformly elevated. This may reflect the particularly intrusive and uncontrollable nature of online violence, which can persist over time and across digital spaces, exacerbating the sense of helplessness and hypervigilance characteristic of PTSD (Weathers et al., 2013). Similar patterns have been observed in victims of cyberstalking and online abuse,where the perceived omnipresence of the aggressor contributes to sustained psychological harm (Siddiqua et al., 2020).

In addition to symptomatology, the study highlighted important knowledge gaps and help-seeking behaviours among participants. Although many victims used platform-based tools such as blocking or reporting, few were aware of formal support resources or legal mechanisms available offline. Only one participant mentioned having supported another victim in filing a police complaint, and more than half were unaware of the specific hotline number for online violence victims. These findings align with prior research showing that victims of online abuse often suffer in silence, unsure of how to seek help or doubting the efficacy of formal responses (Livingstone et al., 2021).

Taken together, the results of this study underline the urgent need for psychological support services to address the consequences of digital violence. Mental health professionals, particularly psychologists, should be trained to recognize the clinical manifestations of online victimisation and integrate this reality into their assessment and intervention practices (Tokunaga, 2010; WHO, 2022). Public health campaigns and educational programmes must also be developed to improve digital literacy and ensure that citizens—especially younger generations—are aware of both prevention strategies and available support channels.

Study Limits

Despite presenting robust and statistically significant findings, this study is not without limitations. Firstly, data were collected through self-report questionnaires, which may introduce biases such as social desirability and subjective interpretation of items. Participants may have responded in a manner they deemed socially acceptable, or misunderstood certain items, which can affect the accuracy and consistency of the responses.

Secondly, the questionnaire did not include detailed information regarding the specific characteristics of the online violence experienced—such as the frequency, duration, timing, or type of digital aggression (e.g., harassment, threats, image-based abuse). As a result, the study does not fully capture the subjective nuances and context of participants' experiences. This limitation may constrain the depth of understanding of how particular forms and patterns of online violence differentially affect mental health outcomes.

Research perspectives

Several avenues for future research can be pursued to deepen the understanding of the psychological consequences of online violence:

- Longitudinal designs would offer valuable insight into the long-term effects of digital victimisation. Tracking individuals over time would allow for the analysis of symptom persistence, potential recovery trajectories, or worsening of psychological distress. As highlighted in the current study's limitations, no information was collected about the temporal context of the violence (e.g., whether it occurred recently or in the distant past), nor about its frequency or repetition. A longitudinal approach would enable comparisons between participants at different time points, shedding light on the evolution of psychological symptoms.

- Qualitative or mixed-method approaches may also be highly beneficial for future studies. In-depth interviews could provide richer understanding of victims' lived experiences, coping strategies, emotional responses, and perceived barriers to seeking help. A qualitative lens would help capture the complexity and subjectivity of digital victimisation, which may be overlooked in strictly quantitative assessments.

- Differentiation of types of online violence should be a focus in subsequent studies. Distinguishing between forms such as cyberstalking, doxing, deepfake dissemination, or hate speech could facilitate the development of more targeted prevention and intervention strategies. Moreover, integrating cultural, legal, and educational

dimensions—including public perceptions, institutional responses (e.g., law enforcement), and preventive policies—would enhance the ecological validity and societal relevance of future research in this area.

Implications and Recommendations

The findings of this study have important implications for clinical practice, public health, education, and digital policy. They provide empirical confirmation that online violence is not merely a social inconvenience but a significant psychological stressor capable of triggering or exacerbating symptoms of depression, anxiety, and post-traumatic stress.

Clinical Implications

From a clinical psychology perspective, these results underscore the need for professionals to systematically assess experiences of online victimisation during intake and case formulation. Digital contexts are now central to social life, particularly among younger populations, and clinical interviews should routinely explore patients' online interactions as potential sources of distress. Given the severity and variability of the symptoms observed in the Online Violence group, it is crucial that clinicians are prepared to:

- Recognise the specific clinical presentations linked to digital victimisation
- Integrate trauma-informed approaches when treating individuals affected by online violence
- Provide psychoeducation on the psychological impacts of cyberviolence
- Offer emotional regulation and coping skills training

- refer to specialised services when necessary (e.g., legal support or cybercrime units).

Furthermore, there is a need to expand clinical training programmes to include content on cyberpsychology and the digital mental health landscape, ensuring that future practitioners are adequately equipped to address these emerging challenges.

Educational and Preventive Strategies

At an educational level, the findings point to the importance of fostering digital literacy and emotional resilience from an early age. Schools and universities should implement curricula that promote safe online behaviours, empathy in digital environments, and recognition of abusive interactions. Prevention campaigns must also inform students and staff about reporting mechanisms and available psychological support services.

Teachers, school psychologists, and student support teams should receive training to identify warning signs of online violence and intervene promptly. Prevention must be participatory and continuous, not restricted to isolated awareness days.

Policy and Institutional Recommendations

On a policy level, stronger moderation systems and clearer institutional protocols are required to protect individuals from harm in digital spaces. Platform accountability and transparency in moderation decisions must be improved. Legal mechanisms for reporting, documenting, and penalising digital violence should be simplified and better publicised.

Public health agencies and government bodies should also support awareness campaigns that demystify the consequences of online violence,challenge the normalization of digital aggression, and encourage help-seeking behaviours.

Interdisciplinary Collaboration

Finally, the complex and evolving nature of online violence calls for interdisciplinary collaboration. Mental health professionals, educators, sociologists, legal experts, and technologists must work together to create comprehensive and responsive systems of protection, intervention, and support.

Conclusion

This study has demonstrated that online violence is significantly associated with increased levels of depressive symptoms, anxiety, and post-traumatic stress among adult participants. The results, supported by both parametric and non-parametric analyses, revealed large effect sizes and consistent differences between those who had experienced online violence and those who had not. These findings confirm our hypothesis and provide empirical support for the growing concern surrounding digital aggression and its psychological consequences.

The results underline the need for online violence to be taken seriously within both clinical and societal contexts. In particular, clinical psychology has a crucial role in identifying and addressing the emotional and behavioural consequences of cybervictimisation. Mental health professionals must be equipped with tools and training to recognise symptoms related to digital harm and to offer trauma-informed care adapted to online contexts.

Beyond the clinical setting, the findings also reinforce the importance of prevention, education, and public awareness. Victims often lack knowledge about legal resources and support services available offline, highlighting the need for more accessible and better-communicated mechanisms of support.

Future research should expand upon these findings through longitudinal and mixed-method approaches that better capture the complexity of digital victimisation. Indoing so, we move towards a more comprehensive and humanised understanding of online violence, one that not only measures symptoms, but also informs prevention, care, and social transformation.

BIBLIOGRAPHY

Audirep Institute, Association e-Enfance (2023). Caisse d'epargne study- Association e-childhood/3018. Cyber-bullying among 8-18 year-olds. https://newsroom.groupebpce.fr/assets/20231017-infographie-etude-caisse-depargne-e-enfance-cyberharcelement-1-pdf-e388-7b707.html

Bailey, J., & Mathen, C.(2019). Technology-facilitated violence against women & girls: Assessing the Canadian criminal law response.Can.B.Rev.97,664.

Bailey, J., Henry, N., & Flynn, A. (2021). Technology-Facilitated Violence and Abuse: International Perspectives and Experiences. The Emerald International Handbook of Technology-Facilitated Violence and Abuse, 1-17. https://doi.org/10.1108/978-1-83982-848-520211001

Barker, K., & Jurasz, O. (2023). Digital and online violence: international perspectives. International Review of Law, Computers & Technology, 1-4.

Beck, A.T., Epstein, N., Brown, G., & Steer, R.A. (1988). An inventory for measuring Clinical anxiety: Psychometric properties. Journal of Consulting and Clinical Psychology, 56, 893-897.

Beran,T., & Li, Q. (2005). Cyber-harassment: A study of a new method for an old behavior. Journal of educational computing research, 32(3), 265.

Bildjuschkin, K., Ewalds, H., Hietamäki, J., Kettunen, H., Koivula, T., Mäkelä,J.,...& Siukola, R. (2021). Glossary of concepts related to violence.

Bousquet, D., Durand, E., Ronai, E., Gayraud, A., Guiraud, C. (2018). En finir avec

Impunity for online violence against women: an emergency for victims. High Council for Equality between Women and Men (HCE)

Bronfenbrenner,U.,& Ceci,S.J. (1994). Nature-nuturere conceptualized in

Developmental perspective: A bioecological model. Psychologicalreview,101(4), 568.

Brunet,A.,St-Hilaire,A.,Jehel,L.andKing,S.(2003).ValidationofaFrench Version

oftheImpactofEventScale-Revised.CanadianJournalofPsychiatry,48(1),55-60 Chen,

F., Li, I. Y., Ling, C., & Zou, H. (2024). The effect of cyberbullying

victimization, traditional bullying victimization and suicidal ideation among college students: do specific affective problems play a mediate role?. BMC psychology, 12(1), 762.

Chowdhury, R. (2023). Technology Facilitated Gender-Based Violence in an era of

Generative AI. UNESCO Publishing.

Council of Europe (2018). Mapping study on cyberviolence. Cybercrime Convention

Committee (T-CY)
https://rm.coe.int/t-cy-mapping-study-on-cyberviolencefinal/1680a1307c

Dunn,S.,Vaillancourt,T.,& Brittain, H.(2023). Supporting safer digital spaces.

Center for International Governance Innovation.

European Institute for Gender Equality (2018). Data collection on intimate partner

Violence by the police and justice sectors.
https://eige.europa.eu/publications-resources/publications?ts=&a=All&tpc=All&y=%202018&tl=All&page=6

Flynn, A., Powell, A., & Hindes, S. (2023). An Intersectional Analysis of Technology-Facilitated Abuse: Prevalence, Experiences and Impacts of Victimization. British Journal of Criminology. https://doi.org/10.1093/bjc/azad044

Freeston, M.H., Ladouceur, R., Thibodeau, N., Gagnon, F.,et al. (1994). L'inventaire d'anxiété de Beck. Propriétés psychométriques d'une traduction française [The Beck Anxiety Inventory: Psychometric propeties of a French translation]. L'Encéphale: Revue de psychiatrie clinique biologique et thérapeutique, 20(1), 47-55.

Fuhrer,R.,&Rouillon,F.(1989).The French version of the CES-D scale (Center for Epidemiologic Studies-Depression Scale). Description and translation of the scale self-evaluation. Psychiatry and Psychobiology, 4(3), 163-166.

Gámez-Guadix, M., & Incera, D. (2021). Homophobia is online: Sexual victimization And risks on the internet and mental health among bisexual, homosexual, pansexual, asexual, and queer adolescents. Computers in human behavior, 119, 106728.

Glitch (2020). The Ripple Effect: COVID-19 and the Epidemic of Online Abuse.

Henry, N., & Powell, A. (2018).Technology-Facilitated Sexual Violence: A Literature Review of Empirical Research. Trauma,Violence, & Abuse, 19(2),195-208. https://doi.org/10.1177/1524838016650189

Hicks, J. (2021). Global evidence on the prevalence and impact of online gender-based violence. K4D Help desk Report. Institute of Development Studies. DOI:10.19088/K4D.2021.140

Horowitz, M.,Wilner, N., & Alvarez,W. (1979). Impact of Event Scale: A measure of subjective stress. Psychosomatic medicine, 41(3), 209-218.

Imbusch, P. (2003). The Concept of Violence. In: Heitmeyer, W., Hagan, J.(eds) International Handbook of Violence Research. Springer, Dordrecht. https://doi.org/10.1007/978-0-306-48039-3_2

INRS (2011). Risques psychosociaux: outils d'évaluations. Documents pour le Médecin du Travail N°127, 3° trimestre 2011.

Kowalski, R.M., & Wingate,V.S. (2023). Cyberbullying in children and adolescents. Cyberbullying and Values Education,13-29.

Lick, D. J., Durso, L. E., & Johnson, K. L. (2013). Minority stress and physical health among sexual minorities. Perspectives on Psychological Science,8(5),521-548.

Livingstone, S., & Stoilova, M. (2021). The 4Cs: Classifying online risk to children.

Martínez-Monteagudo, M. C., Delgado, B., Díaz-Herrero, Á., & García-Fernández, J. M. (2020). Relationship between suicidal thinking, anxiety, depression and stress in university students who are victims of cyberbullying. Psychiatry Research, 286, 112856.

Muchembled, R. (2012). Une histoire de la violence. Média Diffusion.

KrugE, DahlbergL, MercyJ. Et al. (2002).World report on violence and health. Geneva: World Health Organization.

Powell, A., & Henry, N. (2017). Sexual violence in a digital age. Springer.

Powell, A., Scott, A.J., & Henry, N. (2020). Digital harassment and abuse: Experiences Of sexuality and gender minority adults. European Journal of Criminology, 17(2), 199 223. https://doi.org/10.1177/1477370818788006

Radloff, L.S. (1977). The CES-D Scale: a self-report depression scale for research in the general population. Applied Psychological Measurement, 1:385-401.

Rutherford, A., Zwi, A.B., Grove, N.J., & Butchart, A. (2007).Violence: a glossary. Journal of epidemiology & community health, 61(8), 676-680.

Service Statistique Ministériel De La Sécurité Intérieure (2023). Domestic violence Recorded by security services in 2022. https://www.interieur.gouv.fr/actualites/communiques-de-presse/violences-conjugales-enregistrees-par-services-de-securite-en-2022

Siddiqua, R.,Sahni, S.P., & Faruk, M.O.(2020). Cyber Violence Victimization: Nature Of Psychological Impact on Victims. International Journal of Education Humanities and Social Science, 3(4), 326-338.

Simões, R. B. D., Amaral, I., Santos, S., & Alcantara, J. (2022). Online Violence Against Women: Reports From the COVID-19 Pandemic Experience. Comunicação e sociedade, (42), 179-203.

Staude-Müller, F.,Hansen, B., &Voss, M. (2012). How stressful is online victimization? Effects of victim's personality and properties of the incident. European Journal of Developmental Psychology, 9(2), 260-274.

Stevens, F., Nurse, J.R.C., & Arief, B.(2020). Cyber Stalking, Cyber Harassment, and Adult Mental Health: A Systematic Review. Cyberpsychology, Behavior, and Social Networking. doi:10.1089/cyber.2020.0253

Stotzer, R.L. (2014). Bias crimes based on sexual orientation and gender identity: Global prevalence, impacts, and causes. Handbook of LGBT communities, crime, and justice, 45-64.

Tokunaga, R.S. (2010). Following you home from school: A critical review and Synthesis of research on cyberbullying victimization. Computers inhuman behavior, 26(3), 277-287.

United Nations Women (2021). Measuring the shadow pandemic: Violence against women during COVID-19. UN.

Weathers, F.W., Marx,B.P., Friedman, M.J., & Schnurr, P.P. (2014). Posttraumatic Stress disorder in DSM-5: New criteria, new measures, and implications for assessment. Psychological Injury and Law, 7(2), 93-107.

Weiss, D.S., & Marmar, C.R. (1997). The Impact of Event Scale-Revised. InJ. P. Wilson, & T.M. Keane (Eds.), Assessing Psychological Trauma and PTSD: A Practitioner's Handbook (pp.399-411). New York: Guilford Press.

World Health Organization. (2022).What works to prevent violence against children online ?

World Health Assembly *Resolution WHA49.25 Prevention of violence:a public health priority*. Forty-Ninth World Health Assembly, 1996. Geneva: WHO, 1996

ANNEX

Annex 1: *Consent Form*

Comment la violence en ligne affecte la santé mentale: une relation à comprendre

Dans le cadre du Master en Psychologie Clinique et de la Santé de l'institut universitaire EGAS MONIZ, sous la direction de Marta Sofia Pereira dos Reis, Docteur en psychologie, nous demandons votre autorisation pour participer à notre étude "Comment la violence en ligne affecte la santé mentale : Une relation à comprendre".

L'objectif de cette etude est d'étudier la relation entre les violences en ligne et la santé mentale, notamment en termes de dépression, d'anxiété et de stress post-traumatique. En participant à cette étude, vous devrez répondre à un questionnaire sur vos caractéristiques personnelles, vos sentiments, ainsi que vos habitudes, et experiences sur Internet. Il vous sera également demandé de répondre à une échelle évaluant la presence de symptoms dépressifs, une échelle évaluant la présence de symptômes anxieux et une échelle évaluant la présence de symptômes de stress post-traumatique.

La participation à cette étude est volontaire et anonyme. Les informations seront seulement collectées afin de répondre aux objectifs de l'étude. Votre participation permettra de mieux comprendre l'impact que peuvent avoir les violences en lignessurlasantémentale d'un large panel d'individus.

Annex 2 *: Socio Demographic Form*

1. Quel est votre genre?

□ Homme □ Femme □ Autre

Si autre, préciser

2. Quelle est votre orientation sexuelle?

3. Quel est votre âge?

4. Quelle est votre Profession?

□ Salarié □ Etudiant □ Sans Emploi

5. Quelle est votre Nationalité?

6. Quel est votre pays d'origine?

7. Quel est le pays où vous résidez actuellement ?

8. Quels réseaux sociaux utilisez-vous ?

□ Instagram

□ Twitter/X

□ Facebook

□ Snapchat

□ Tiktok

□ Autre

Si autre, préciser

9. Combien de temps passez-vous sur les réseaux sociaux par jour ?

□ 1 à 2 heures

□ 3 à 4 heures

□ 5 à 6 heures

□ 7 à 8 heures

□ Plus de 8 heures

10. Avez-vous déjà été victim de violence en ligne?

□ Oui□ Non

(Note: the following questions: 13 and 14 will only be proposed to participants that answered « Oui » or options to question J.

13. Pensez-vous que votre orientation sexuelle ou votre genre ait pu influencer votre harcèlement ?

□Oui □ Non

14. En avez-vous déjà parlé à une autre personne ?

□ Oui □Non

15. Selon vous, pour quoi les personnes harcelées n'en parlent pas forcément autour d'elles ?

□ Par peur d'être encore plus harcelé

□ Parce qu'ils pensent que ça finira par s'arrêter

□ Par honte

□ Parce qu'ils pensent que personne ne peut rien faire pour l'aider

□ Parce qu'ils ne savent pas à qui en parler

16. Avez-vous déjà été témoin d'un acte de violence en ligne envers une autre personne?

□ Oui □ Non

17. Avez-vous aidé ou soutenu cette personne?

□ Oui □ Non

Si oui, comment ?

18. Existe-t-il un numéro à appeler en cas de besoin/soutien ?

□ Oui □Non

Si oui, lequel ?

Socio-demographic form

Annex 3: *French Version of the CES-D Scale*

Echelle de dépression CES-D (Center for Epidemiologic Studies- Depression)

		Jamais	Très rarement	Occasionnellement	Assez souvent	Fréquemment	En permanence	CODAGE
Durant la semaine dernière j'ai trouvé que:								
CES-D1	J'ai été contrarié(e) par des choses qui d'habitude ne me dérangent pas	☐0	☐0	☐1	☐2	☐3	☐3	☐
CES-D2	Je n'ai pas eu envie de manger, j'ai manqué d'appétit	☐0	☐0	☐1	☐2	☐3	☐3	☐
CES-D3	J'ai eu l'impression que je ne pouvais pas sortir du cafard, même avec l'aide de ma famille et de mes amis	☐0	☐0	☐1	☐2	☐3	☐3	☐
CES-D4	J'ai eu le sentiment d'être aussi bien que les autres	☐3	☐3	☐2	☐1	☐0	☐0	☐
CES-D5	J'ai eu du mal à me concentrer sur ce que je faisais	☐0	☐0	☐1	☐2	☐3	☐3	☐
CES-D6	Je me suis senti(e) déprimé(e)	☐0	☐0	☐1	☐2	☐3	☐3	☐
CES-D7	J'ai eu l'impression que toute action me demandait un effort	☐0	☐0	☐1	☐2	☐3	☐3	☐
CES-D8	J'ai été confiant(e) en l'avenir	☐3	☐3	☐1	☐2	☐0	☐0	☐
CES-D9	J'ai pensé que ma vie était un échec	☐0	☐0	☐1	☐2	☐3	☐3	☐
CES-D10	Je me suis senti(e) craintif(ve)	☐0	☐0	☐1	☐2	☐3	☐3	☐
CES-D11	Mon sommeil n'a pas été bon	☐0	☐0	☐1	☐2	☐3	☐3	☐
CES-D12	J'ai été heureux(se)	☐3	☐3	☐1	☐2	☐0	☐0	☐
CES-D13	J'ai parlé moins que d'habitude	☐0	☐0	☐1	☐2	☐3	☐3	☐
CES-D14	Je me suis senti(e) seul(e)	☐0	☐0	☐1	☐2	☐3	☐3	☐
CES-D15	Les autres ont été hostiles envers moi	☐0	☐0	☐1	☐2	☐3	☐3	☐
CES-D16	J'ai profité de la vie	☐3	☐3	☐1	☐2	☐0	☐0	☐
CES-D17	J'ai eu des crises de larmes	☐0	☐0	☐1	☐2	☐3	☐3	☐
CES-D18	Je me suis senti(e) triste	☐0	☐0	☐1	☐2	☐3	☐3	☐
CES-D19	J'ai eu l'impression que les gens ne m'aimaient pas	☐0	☐0	☐1	☐2	☐3	☐3	☐
CES-D20	J'ai manqué d'entrain	☐0	☐0	☐1	☐2	☐3	☐3	☐

French version of the CES-D scale (Fuhrer & Rouillon, 1989)

Annex 4: *French Version of the BAI*

INVENTAIRE DE BECK POUR L'ANXIÉTÉ

Voici une liste de symptômes courants dus à l'anxiété. Veuillez lire chaque symptôme attentivement. Indiquez, en encerclant le chiffre approprié, à quel degré vous avez été affecté par chacun de ces symptômes *au cours de la dernière semaine*, aujourd'hui inclus.

Au cours des 7 derniers jours, j'ai été affecté(e) par…		**Pas du tout**	**Un peu Cela ne m'a pas beaucoup dérangé(e)**	**Modérément C'était très déplaisant mais supportable**	**Beaucoup Je pouvais à peine le supporter**
1.	Sensations d'engourdissement ou de picotement	0	1	2	3
2.	Bouffées de chaleur	0	1	2	3
3.	«Jambes molles», tremblements dans les jambes	0	1	2	3
4.	Incapacité de se détendre	0	1	2	3
5.	Crainte que le pire ne survienne	0	1	2	3
6.	Étourdissement ou vertige, désorientation	0	1	2	3
7.	Battements cardiaques marqués ou rapides	0	1	2	3
8.	Mal assuré(e), manque d'assurance dans mes mouvements	0	1	2	3
9.	Terrifié(e)	0	1	2	3
10.	Nervosité	0	1	2	3
11.	Sensation d'étouffement	0	1	2	3
12.	Tremblements des mains	0	1	2	3
13.	Tremblements, chancelant(e)	0	1	2	3
14.	Crainte de perdre le contrôle de soi	0	1	2	3
15.	Respiration difficile	0	1	2	3
16.	Peur de mourir	0	1	2	3
17.	Sensation de peur, «avoir la frousse»	0	1	2	3
18.	Indigestion ou malaise abdominal	0	1	2	3
19.	Sensation de défaillance ou d'évanouissement	0	1	2	3
20.	Rougissement du visage	0	1	2	3
21.	Transpiration (non associée à la chaleur)	0	1	2	3

French version of the BAI (Freeston et al, 1994)

Annex 5: *French Version of the IES-R*

IES-R version française

Instructions. Voici une liste de difficultés que les gens éprouvent parfois à la suite d'un événement stressant. Veuillez lire chaque item et indiquer à quel point vous avez été bouleversé(e) par chacune de ces difficultés *au cours des 7 derniers jours* en ce qui concerne l'événement :

.....

Dans quelle mesure avez-vous été affecté(e) ou bouleversé(e) par ces difficultés ?

	Pas du tout	Un peu	Moyen-nement	Passa-blement	Extrême-ment
1. Tout rappel de l'événement ravivait mes sentiments face à l'événement	0	1	2	3	4
2. Je me réveillais la nuit	0	1	2	3	4
3. Différentes choses m'y faisait penser	0	1	2	3	4
4. Je me sentais irritable et en colère	0	1	2	3	4
5. Quand j'y repensais ou qu'on me le rappelait, j'évitais de me laisser bouleverser	0	1	2	3	4
6. Sans le vouloir, j'y repensais	0	1	2	3	4
7. J'ai eu l'impression que l'événement n'était jamais arrivé ou n'était pas réel	0	1	2	3	4
8. Je me suis tenu loin de ce qui m'y faisait penser	0	1	2	3	4
9. Des images de l'événement surgissaient dans ma tête	0	1	2	3	4
10. J'étais nerveux (nerveuse) et je sursautais facilement	0	1	2	3	4
11. J'essayais de ne pas y penser	0	1	2	3	4
12. J'étais conscient(e) d'avoir encore beaucoup d'émotions à propos de l'événement, mais je n'y ai pas fait face	0	1	2	3	4
13. Mes sentiments à propos de l'événement étaient comme figés	0	1	2	3	4
14. Je me sentais et je réagissais comme si j'étais encore dans l'événement	0	1	2	3	4
15. J'avais du mal à m'endormir	0	1	2	3	4
16. J'ai ressenti des vagues de sentiments intenses à propos de l'événement	0	1	2	3	4
17. J'ai essayé de l'effacer de ma mémoire	0	1	2	3	4
18. J'avais du mal à me concentrer	0	1	2	3	4
19. Ce qui me rappelait l'événement me causait des réactions physiques telles que des sueurs, des difficultés à respirer, des nausées ou des palpitations	0	1	2	3	4
20. J'ai rêvé à l'événement	0	1	2	3	4
21. J'étais aux aguets et sur mes gardes	0	1	2	3	4
22. J'ai essayé de ne pas en parler	0	1	2	3	4

*French version of the IES-R (*Brunet et al., 2003)