

Behind the Screens

Digital Violence Against Women Working in
E-Commerce and Digital Services in Jordan



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Executive Summary

This study on digital violence against women workers in Jordan's e-commerce and digital services sector comes at a time marked by rapid digital transformation, contrasted with a noticeable gap in the legislative and regulatory framework's ability to encompass all dimensions of this shift, particularly those related to protecting women working in digital spaces. While e-commerce and online services represent a growing field within the national economy, many women continue to work within an unregulated digital economy that lacks sufficient protective mechanisms.

The importance of this study is underscored by the increasing economic role of Jordanian women in the digital economy, whether through small home-based businesses, online marketing, or remote service provision; and the need for accurate data that enables an understanding of the scale of digital violence they face, its patterns, and its psychological, social, and economic impacts.

The study gains further significance from its aim to build a national evidence-based database grounded in quantitative data and qualitative analysis. It highlights the prevalence of digital violence against women working in the e-commerce and digital services sector, uncovers its various forms, and examines its effects on women's economic participation and their professional and social stability. With the growing reliance on digital platforms as a means of work and production, new challenges have emerged—most notably gender-based violence in online spaces, which takes multiple forms, including harassment, extortion, content theft, defamation, and verbal abuse, all of which produce direct and indirect psychological and economic consequences.

The study adopted an analytical quantitative methodology based on a comprehensive survey specifically designed to measure the prevalence of digital violence against women working in e-commerce and digital services. The sample included 822 women workers from various governorates across the Kingdom.

The survey was designed to combine closed-ended and optional questions, allowing for an integrated analysis of demographic, psychological, social, and economic dimensions. Data credibility was ensured by cross-checking responses with variables such as age, marital status, educational level, type of business activity, and the digital platform used.

The final sample size reached 822 participants, providing a reliable directional indication of the characteristics of the phenomenon within the studied community; however, the

results cannot be statistically generalized to all women working in digital spaces. To ensure data quality, internal consistency checks were conducted, and missing data were processed according to established descriptive analysis methods.

This sample falls under non-probability sampling techniques (purposive/convenience sampling), as participants were reached through digital platforms and social media channels. Accordingly, the findings help analyze general trends and patterns of digital violence, without representing a probabilistic estimate for the entire population.

The study adhered to the ethical standards applied in gender-based research by obtaining informed and voluntary consent from all participants, ensuring complete confidentiality, and refraining from collecting any personally identifiable data, thereby safeguarding privacy and protecting participants from any potential consequences of taking part in the research.

The study is distinguished by the fact that it does not limit itself to quantitatively documenting the phenomenon of digital violence; rather, it provides an in-depth qualitative analysis of the interrelated personal, social, psychological, and economic factors affecting women working on digital platforms. It also links these findings to the national legislative framework, such as the Cybercrimes Law No. (17) of 2023, and relies on the UN classification of gender-based digital violence, which encompasses all harmful, threatening, surveilling, or extortive acts that occur online and directly or indirectly affect women.

This study is the first of its kind at the national level to analyze digital violence against women working in e-commerce and digital services in Jordan. It offers a comprehensive picture of the scale of the issue, its patterns, influencing factors, and psychological, social, and economic dimensions, based on well-documented field data. Its outputs serve as a scientific tool for decision-makers, government authorities, and human rights organizations concerned with empowering and protecting women in digital spaces, by identifying gaps in legislation, reporting mechanisms, and support systems, and by guiding national policies toward ensuring a safe and equitable digital environment for women working in this vital sector.

Thus, this study is not merely a statistical documentation of digital violence; rather, it constitutes an integrated analytical platform for shaping a multidimensional national response that brings together legislation, digital protection, economic empowerment, and psychosocial support. Its aim is to ensure that Jordan's digital transformation becomes a tool for development and gender justice; not a new driver of inequality and violence.

Introduction

In Jordan, women's economic participation is one of the main pillars for achieving inclusive development and promoting sustainable growth, as women's engagement in the labor market is essential for enhancing national productivity and advancing social justice. However, this participation remains limited compared to regional and global levels due to intertwined institutional and social constraints that restrict women's access to stable and safe employment opportunities and limit their presence in both formal and informal economic activities.

In recent years, digital transformation has opened new horizons for Jordanian women to work from home or through online platforms, offering them additional opportunities for income generation and a degree of economic independence. Yet these opportunities remain fraught with risks due to the weak legal and regulatory protection for women working in digital spaces and the high prevalence of gender-based digital violence, harassment, extortion, and content theft. As a result, digital empowerment of women has become an interconnected issue that cannot be separated from their social, psychological, and legal protection, for it is difficult to speak of economic independence within an unsafe digital environment.

Achieving equitable economic participation for Jordanian women requires more than simply expanding employment opportunities; it also necessitates creating a safe and well-regulated digital environment that enables women to conduct their commercial and service activities with confidence, while ensuring protection from violations and harassment that undermine their economic autonomy and limit their presence in the online labor market.

In this context, e-commerce and digital services have emerged as a modern and significant pathway that has opened wide horizons for Jordanian women to engage in independent work, away from the traditional barriers associated with the formal labor market. Digital technology, online selling platforms, and social media have provided women with new opportunities to establish home-based businesses, develop additional or primary sources of income, and achieve a degree of financial independence without requiring substantial capital or complex institutional licensing.

Although this digital shift has become an expanding gateway to economic empowerment, it has not been accompanied by sufficient legislative or social development to provide adequate protection for women working in digital spaces. While digital platforms have

created flexible and unconventional work opportunities, practical experience has revealed a new pattern of gender-based violence: digital violence against women working online. This violence manifests in multiple forms, most notably verbal harassment through messages, cyber extortion, theft of images or commercial content, and threats of reputational harm. These practices extend far beyond psychological harm, affecting the very structure of women's work, as they threaten income stability and the continuity of professional activity in an environment that lacks a comprehensive legal and regulatory protection framework.

According to data from the Jordanian Department of Statistics for the second quarter of 2025, the unemployment rate among women reached 32.8%, compared to 31% during the same period in 2024, reflecting the ongoing structural difficulties women face in accessing stable employment opportunities. The revised economic participation rate for women was 14.6%, up slightly from 13.9% in the second quarter of the previous year; yet still below the Arab regional average of 18.1%. These indicators show that Jordanian women's participation in the labor market remains among the lowest regionally and globally, and that this modest improvement does not reflect a qualitative shift in employment conditions or in the institutional structures supporting economic empowerment.

In light of this situation, digital work has become a vital option for women seeking flexible economic opportunities that allow them to balance family responsibilities with work requirements, particularly in sectors that do not require physical presence or formal licensing. However, this digital shift has placed women in a dual position: on one hand, it has offered them new opportunities for income generation and financial independence; on the other, it has exposed them to increasing patterns of gender-based digital violence, in the absence of comprehensive regulatory frameworks and with weak digital protection mechanisms.

Despite the amendments introduced by the Cybercrimes Law No. (17) of 2023¹ to the legislative framework governing the digital space, its provisions remain primarily focused on general offenses such as fraud, identity theft, and attacks on information systems. The law does not provide specialized treatment of gender-based digital violence, nor does it establish reporting and protection mechanisms that take into account the specific needs and vulnerabilities of women working through digital platforms. In practice, implementation is hindered by a lack of trust in formal procedures, slow judicial processes, and insufficiently trained personnel capable of handling digital violence cases with gender- and socially-informed sensitivity.

1 Cyber Crime Law No.17 of 2023: [Full Text in English of the Cybercrime Law of 2023](#)

In this context, gender-based digital violence is defined by UN Women as:

“Any act of violence that is committed or amplified through digital means or online platforms, targeting individuals based on their gender or because they are women or girls. It includes threats, harassment, extortion, unlawful surveillance, defamation, or theft of data and images, leading to psychological, social, or economic harm.²”

This form of violence undermines the right to privacy, personal security, freedom of expression, and the ability to work in digital spaces. In the Jordanian context, it represents a modern and growing form of gender-based violence that intersects with digital economic empowerment and threatens women’s right to decent work and digital dignity.

Over the past five years, Jordan has witnessed significant expansion in the e-commerce and digital services sector, with increased reliance on applications such as WhatsApp, Facebook, and Instagram as platforms for selling and marketing. This shift has opened new opportunities for thousands of women to launch small home-based businesses and generate supplemental or primary income.

However, this digital growth has been accompanied by a concerning rise in various forms of digital violations, most notably harassment, extortion, theft of commercial content, and defamation through harmful reviews or offensive comments. These practices result in severe psychological and economic consequences and, in many cases, lead women to withdraw from digital activity; thus threatening the gains achieved in economic empowerment.

This study provides the first in-depth analytical examination of digital violence against women working in Jordan’s e-commerce and digital services sector, based on a sample of 822 women workers. It aims to document the most common patterns of digital violence, analyze their psychological, social, and economic impacts, and identify gaps in the digital and legal protection system; including reporting pathways, social support mechanisms, and levels of awareness regarding digital safety rights.

The study also aims to provide practical, evidence-based recommendations that contribute to developing an integrated national policy framework to protect women in digital spaces and to promote a safe and equitable digital work environment grounded in the principles of justice, accountability, and the protection of women’s digital rights.

² UN Women, *Violence Against Women in the Online Space: Insights from a Multi-Country Study in Arab States, 2021* :[Technology-facilitated Gender-based Violence: A Growing Threat | United Nations Population Fund](#)

International Framework

Although the core international human rights instruments were formulated before the technological boom, they nonetheless affirm a set of rights and obligations that form a comprehensive framework for safeguarding human dignity. These rights include the right to a life free from violence, the right to privacy, freedom of opinion and expression, and the right to access and exchange information through modern communication technologies. These rights extend to the digital sphere, which has become an essential part of individuals' public and private lives.

In this context, the Committee on the Elimination of Discrimination against Women (CEDAW), in its General Recommendation No. 19 (1992) and its updated General Recommendation No. 35 (2017), defines violence against women as a form of gender-based discrimination and a violation of human rights. It encompasses any act that results in, or is likely to result in, physical, sexual, or psychological harm to women, including threats of such acts, coercion, or arbitrary deprivation of liberty, whether occurring in public or private life.

This concept extends into the digital sphere, where gender-based digital violence encompasses any act of violence against women that is committed or whose effects are partially or fully amplified through information and communication technologies such as smartphones, the internet, email, or social media platforms. It targets women because of their gender or affects them disproportionately. This includes all practices that undermine women's right to digital security, dignity, and equal participation in the public sphere.

National Framework

The legislative framework governing the digital space in Jordan began to take shape with the issuance of the Temporary Law No. (30) of 2010 on Information Systems Crimes, which for the first time established clear rules criminalizing digital offenses such as data breaches, eavesdropping, and interception of information transmitted through digital networks. This law constituted the first foundation for building a legal system aimed at limiting cybercrimes and protecting individuals from violations enabled by the digital environment.

With the expansion of social media use and the emergence of more complex forms of digital offenses, the Cybercrimes Law No. (27) of 2015 was enacted to replace the 2010

law. It imposed stricter penalties and expanded the scope of criminalization to include acts such as slander, libel, insult, and the dissemination of harmful content through digital networks. Although this law contributed to enhancing the protection of individuals, it remained closer to addressing traditional cybercrimes and did not fully account for the subsequent social and economic transformations particularly the rise of home-based e-commerce led by women.

In 2023, Cybercrimes Law No. (17) of 2023 was enacted, replacing the previous Law No. 27 of 2015 and introducing an updated legislative framework to regulate the digital space. The new law includes significantly stricter penalties and expands the scope of criminalization in ways that directly address various forms of digital violence experienced by women working in e-commerce and digital services. The law strengthened the criminalization of acts related to slander, libel, insult, the dissemination of false information, and content aimed at “character assassination” or damaging reputation; patterns widely observed in attacks on business pages managed by women.

The law also introduced more stringent provisions regarding cyber threats and extortion, including the use of personal or professional images or information to pressure, threaten, or influence the victim or her business activities. These practices represent some of the most severe forms of digital violence, often resulting in direct financial losses, withdrawal from online platforms, or diminished trust in digital work. Additionally, the law criminalizes incitement to hatred, the stirring of societal discord, or calls for violence online, acts that may take the form of coordinated mass campaigns targeting women workers with the intent to harm them or undermine their professional presence on digital platforms.

Despite the legislative developments introduced by Cybercrimes Law No. (17) of 2023, the law remains a general framework focused on criminalization and penalties, without providing a specific definition of gender-based digital violence or establishing reporting and protection mechanisms tailored to the needs of women working through digital platforms. This highlights the need to develop specialized legislation or executive regulations that address this form of violence as a dual violation; digital on one hand, and gender-based on the other, while ensuring effective protection guarantees that enhance women’s safety and economic stability within the digital sphere.

Results and Statistical Analysis

Demographic Characteristics of the Sample

Data extracted from the survey, which included **822 women working in the e-commerce and digital services sector in Jordan**, show that the demographic characteristics of the sample clearly reflect the profile of women who have turned to digital work in recent years. The findings indicate that most participants fall within the age group that is most economically and socially active, and that their educational and professional backgrounds reflect a mixed pattern of intermediate education and informal self-employment; consistent with prevailing trends in the Jordanian labor market over the past decade.

1. Age Group

The results showed that 83% of participants were between 24 and 55 years old, representing the most productive segment of society. The largest proportion (40.9%) fell within the 24–35 age group, followed by 42.2% in the 36–55 age group. This indicates that digital work is no longer limited to young university graduates but has become an economic option for the majority of women seeking additional income without leaving their homes.

This trend aligns with changes in the Jordanian labor market, where digital platforms have become an informal extension of the traditional workforce, offering women alternative opportunities in the context of an economic participation rate that remains below 15%. The age distribution also reflects a high degree of adaptability among Jordanian women to modern technological tools, including older age groups. The data showed that 7.5% of workers were over 55 years old and continued to engage in digital fields, an indicator of the nontraditional integration of older women into the digital economy.

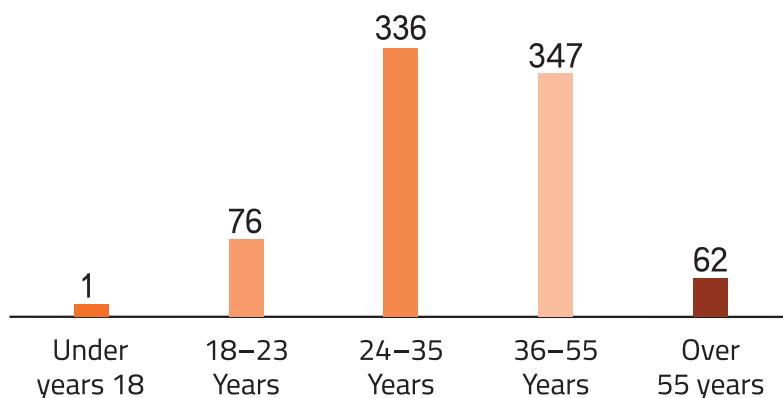


Table 1 Distribution of Participants by Age Group

2. Marital Status

The study shows that more than half of the sample approximately 56.7% were married women, compared to 22.4% who were single, and 20.9% who were divorced or widowed. This distribution clearly highlights the dual roles performed by working Jordanian women, who balance family responsibilities with both household and digital work simultaneously. It also underscores the significance of this distribution in the context of economic empowerment, as married women often face constraints related to time, mobility, and family obligations, making digital work a practical and suitable option for them.

On the other hand, the proportion of divorced and widowed women (about one in every five participants) indicates that online work has also become a vital means for female heads of households to support their families, particularly in light of limited formal employment opportunities and weak social protection for women in informal sectors. These findings highlight the compensatory social role of the digital economy, which provides a space for women who face barriers to entering the traditional labor market.

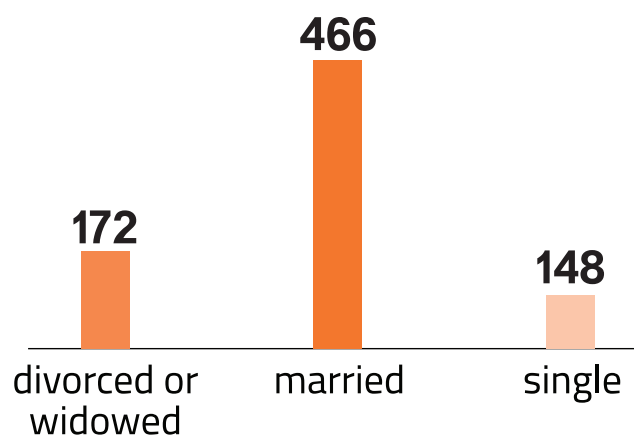


Table 2 Distribution of Participants by Marital Status

3. Educational Level

The results indicate that more than half of the participants hold a medium-level education or lower, with 58.1% having not completed high school or holding only a secondary school certificate. Meanwhile, 21.8% hold an intermediate diploma, 18.6% a bachelor's degree, and only 1.5% have postgraduate studies.

These findings highlight that the digital economy in Jordan has become accessible to a wide segment of women with intermediate education, who rely on self-acquired skills in e-commerce or social media marketing. However, the limited proportion of university-educated women among digital workers also raises questions regarding their ability to

manage digital businesses from a legal and professional marketing perspective, making this group more vulnerable to exploitation or digital violence.

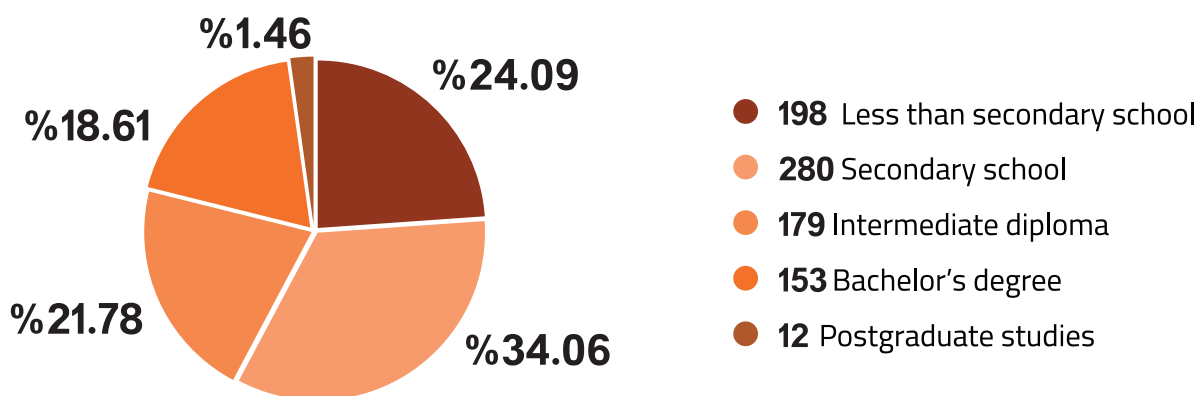


Table 3 Distribution of Participants by Educational Level

4. Nature of Dependence on Digital Work

The data show that 56.1% of women rely on digital work as a partial source of income, while 27.5% depend on it as a primary source, and 16.4% do not actually rely on it as an income source. This distribution reflects that the digital economy in Jordan remains a complement rather than an alternative to the traditional labor market, with most women using it to increase their income or balance life responsibilities.

This pattern of partial dependence indicates instability in the digital labor market, due to the absence of social security, specialized regulations, and fluctuations in online demand. These factors leave women vulnerable to market volatility and digital violence without institutional protection.

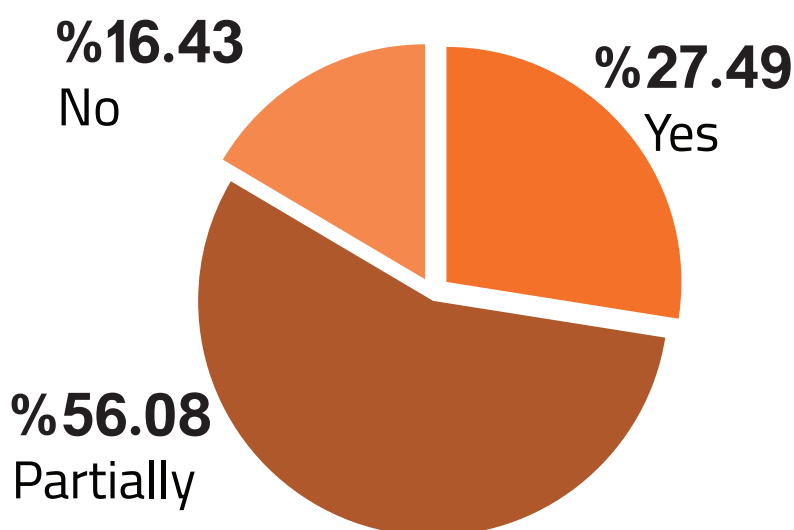


Table 4 Distribution of Participants Based on Their Response to the Question: Is Online Work Your Primary Source of Income?Top of Form

5. Experience and Working Hours

The results indicate that 46.7% of participants have been working in e-commerce for one to three years, while 32.6% have more than three years of experience. This means that roughly eight out of ten women have practical experience exceeding one year. This reflects continuity in women's engagement in the digital economy; not merely a temporary experience, and confirms that they have developed practical and professional skills within this sector.

Regarding daily working hours, the data show that 45.4% work less than four hours per day, 39.3% work between four and eight hours, while 15.3% work more than eight hours per day.

| Indicator | Category | Number | Percentage |
|---------------------|---------------------------|--------|------------|
| Years of Experience | Less than 1 year | 170 | %20.6 |
| | 1-3 years | 384 | %46.7 |
| | More than 3 years | 268 | %32.6 |
| Daily Working Hours | Less than 4 hours per day | 373 | %45.4 |
| | 4-8 hours per day | 323 | %39.3 |
| | More than 8 hours per day | 126 | %15.3 |
| Total Sample Size | — | 822 | 100% |

Table 5 Distribution of Participants by Years of Experience and Daily Working Hours in E-Commerce

6. Fields of Work and Digital Platforms

The areas of commercial activity are distributed across food and homemade products (38.9%), clothing and accessories (25.2%), and beauty and personal care products (16.7%). Smaller categories include page management and digital marketing (5%) and customer service (4.1%). These home-based and handcrafted activities indicate that most women's digital work in Jordan falls within the informal economy, based on individual production and direct consumer sales through social media applications.

The data also show that the most widely used platforms are WhatsApp (83.5%), Facebook (57.7%), and Instagram (32.2%). In contrast, the use of official e-commerce stores did not

exceed 2.8%, while 22.7% used other websites or methods. This means that women rely primarily on social media applications rather than institutional platforms, increasing their exposure to digital violence, harassment, or extortion from male customers, especially since 70% of women workers interact with male customers always or occasionally. Additionally, 93% of these businesses are not formally registered, placing them outside the legal protection offered by labor laws, social security regulations, or even personal data protection legislation.

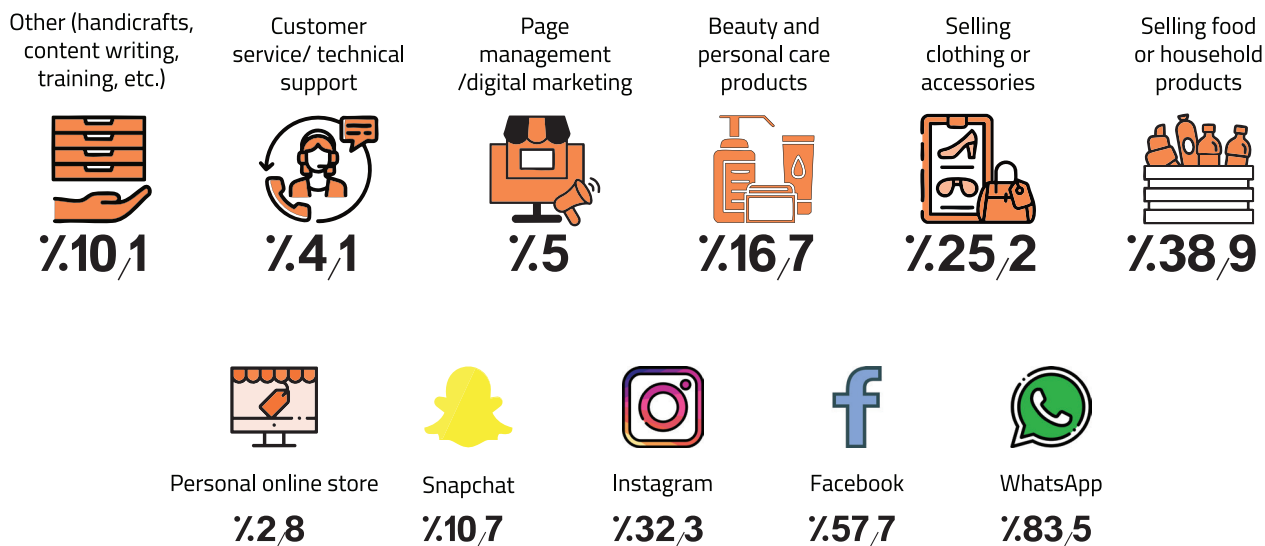


Table 6 Distribution of Participants by Field of Commercial Activity and Digital Platforms Used Bottom of Form

Patterns and Trends of Digital Violence in Jordan

The study’s findings show that digital violence against women working in the e-commerce and online services sector in Jordan is no longer an exceptional behavior, but rather a recurring, multifaceted phenomenon. It extends beyond isolated incidents of harassment to form a structural pattern of gender-based discrimination and violence within the digital work environment.

An analysis of the sample of 822 workers revealed that 48.3% of them (397 women) had experienced at least one form of digital violence. This means that nearly one out of every two women faced some form of digital abuse while working—making this phenomenon comparable in severity and prevalence to traditional forms of violence against women in informal work settings.

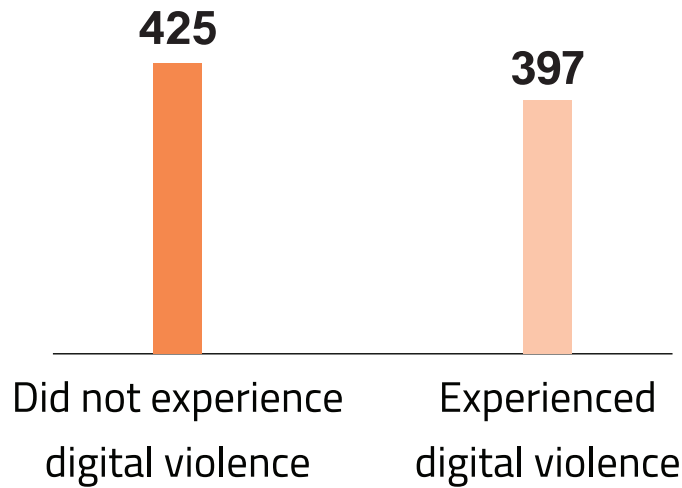


Table 7 Exposure to digital violence among women working in e-commerce

1. Most Common Forms of Digital Violence

The study highlighted that verbal harassment and inappropriate messaging are the most widespread forms of digital violence. Among women who experienced digital violence, 55.7% reported receiving inappropriate messages or comments through the platforms they work on. Additionally, 53.4% indicated that customers or followers requested to contact them on their private phone numbers outside the scope of work—reflecting a blurring of personal and professional boundaries in women’s digital workspaces, and representing a major entry point for harassment or online extortion.

Defamation and economic retaliation also ranked among the most common forms of digital violence. About 31.5% of those exposed reported receiving publicly abusive comments on their pages, while 27.5% experienced retaliatory negative ratings from customers or competitors attempting to damage their professional reputation or affect their sales. This type of violence leads to tangible financial losses, with 29.3% of survivors reporting the loss of clients or actual income.

The theft of photos and commercial content represents another form of economic digital violence. 36% of women who experienced digital violence reported that their product images were stolen or their content was used without permission. Additionally, 8.1% stated that their personal photos were misused or posted on fake accounts. This type of violation deprives women of the results of their work and undermines trust in the protection of intellectual property online.

The findings also revealed instances of direct online extortion. 8.8% of those exposed to digital violence reported receiving sexual content or inappropriate images, while only 3% reported explicit threats to publish private photos—an especially dangerous form of

extortion that often forces women into silence or withdrawal from work due to fear of social stigma. Furthermore, 20.4% of survivors reported being added to inappropriate groups, and 22.7% mentioned experiencing “digital surveillance” by customers or followers, forms of abuse that intensify the feeling of losing control over personal privacy.

| Form / Type | Number | Percentage out of 397 (those who experienced violence) | Percentage out of 822 |
|--|--------|--|-----------------------|
| Inappropriate messages or comments | 221 | 55.7 % | 26.9 % |
| Requested to contact her on her private number | 212 | 53.4 % | 25.8 % |
| Threats or pressure to give a discount | 71 | 17.9 % | 8.6 % |
| Sending sexual images or content | 35 | 8.8 % | 4.3 % |
| Abusive comment on her page | 125 | 31.5 % | 15.2 % |
| Retaliatory negative rating | 109 | 27.5 % | 13.3 % |
| Threat to publish private photos | 12 | 3 % | 1.5 % |
| Theft of photos or content | 143 | 36 % | 17.4 % |
| Misuse of her photos | 32 | 8.1 % | 3.9 % |
| Creating a fake account in her name | 32 | 8.1 % | 3.9 % |
| Adding her to inappropriate groups | 81 | 20.4 % | 9.9 % |
| Monitoring her online activity | 90 | 22.7 % | 11 % |
| Threatening to close her page | 43 | 10.8 % | 5.2 % |
| Felt afraid of a customer | 70 | 17.6 % | 8.5 % |

Table 8 Distribution of participants by the most common forms of digital violence

2. Forms of Digital Violence in the Online Work Environment

Beyond direct exposure to digital violence, the data reveals another important dimension in understanding the scale of the phenomenon. A large proportion of participants reported witnessing various forms of violence directed at other women in the digital space. 48.9% of participants said they had observed others stealing content or photos without permission, while 45.1% reported witnessing inappropriate messages or comments directed at women working in e-commerce and digital services. Additionally, 40.9% had seen cases of defamation or reputation damage, and 35.3% had observed instances of direct or indirect online extortion.

The incidents reported extend beyond harassment and inappropriate behavior. They include account monitoring and tracking (28.2%), threats or pressure in exchange for a service (14.2%), as well as account hacking (10.5%), misuse of photos (9.4%), and creating fake accounts using women's names (7.9%).

These indicators confirm that digital violence has become a common and widely visible pattern in the online work environment, even among women who have not personally experienced it.

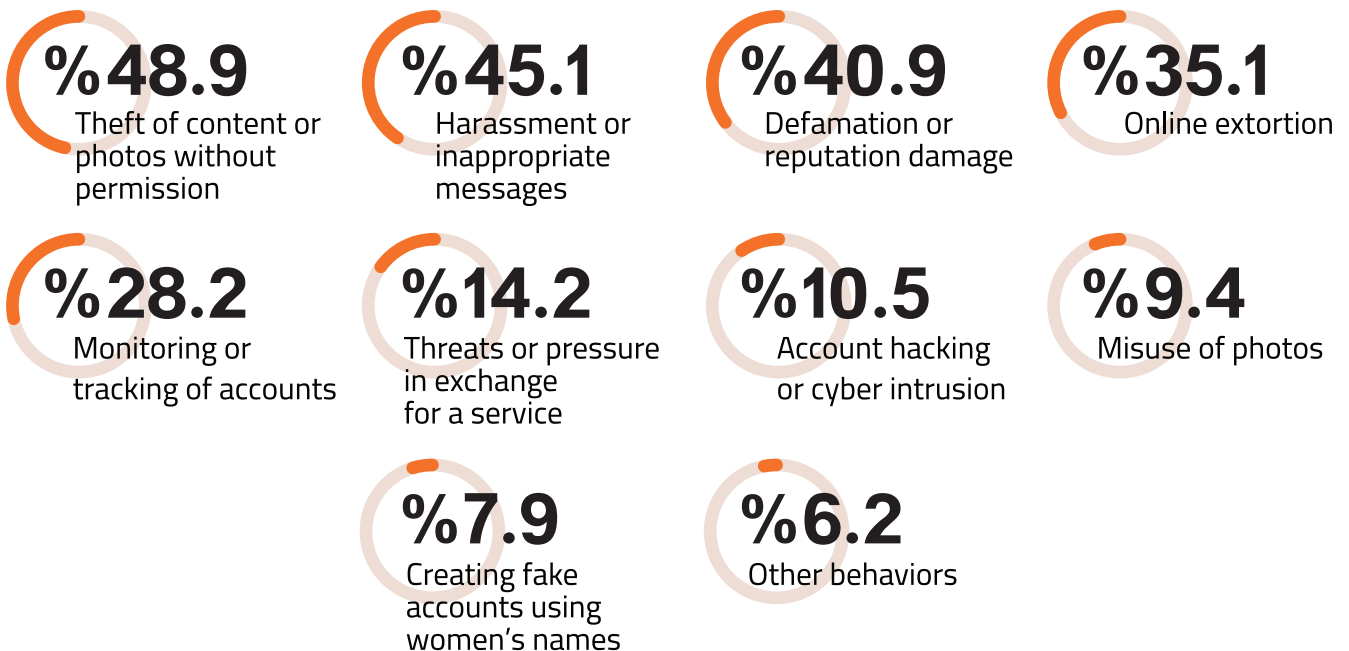


Table 9 Forms of digital violence witnessed by participants (out of 822 participants)

3. Digital Violence as an Extension of Gender-Based Violence

The data shows that digital violence in Jordan is not merely a technological phenomenon, but a direct extension of gender-based violence that takes on more complex forms in digital spaces. According to the results, 70% of participants interact with male customers either always or occasionally, meaning that the likelihood of encountering inappropriate behavior or sexual or verbal exploitation increases with the amount of direct interaction on digital platforms.

At the same time, reporting practices remain extremely limited. Only 11.1% of those who experienced digital violence reported the incident, while 88.9% did not report to any official entity or platform. Among those who did report, 65.9% filed their complaints through the platform itself, while only 36.4% turned to official authorities. This reflects a significant gap in trust in legal procedures or a lack of accessible, gender-sensitive reporting channels.

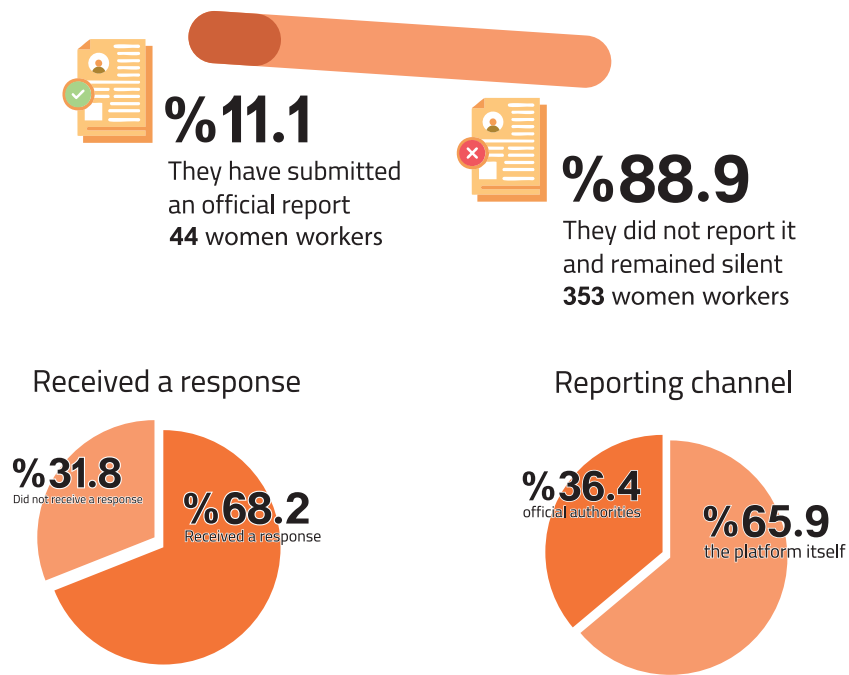


Table 10 Reporting and response patterns among women workers exposed to digital violence

4. The Impact of Digital Violence on Economic Participation

Quantitative analysis shows that digital violence imposes both direct and indirect economic losses on women working in e-commerce and online services. Among those who experienced digital violence and responded to the question about its impact, 44.1% reported losing the desire to continue their work, 29.3% stated that they lost part of their income or customers, and 31% said they had to reduce their use of digital platforms after the incident. These indicators clearly demonstrate that digital violence not only harms women individually, but also directly affects the scale of their participation in Jordan's digital economy by limiting their activity and continuity on online platforms.

This impact is not confined to individual projects; it extends to overall national productivity. The market loses skilled women who had relied on digital platforms as a pathway to income and independent work. It is also important to note that withdrawal or reduced engagement in digital work further exacerbates the gender gap in the labor market, where women's participation is already low (only 14% of women are in the labor force).

| Question | Answer | Number | Percentage out of 397 |
|--|--------|--------|-----------------------|
| Impact of digital violence on your willingness to continue working | Yes | 131 | 44.1% |
| You reduced your use of the platform | Yes | 91 | 31% |
| You lost customers or income | Yes | 86 | 29.3% |

Table 11 Distribution of participants who experienced digital violence and responded to the question on how it affected their work

- ▶ 48.3% of workers (397 women) experienced at least one form of digital violence.
- ▶ One out of every two workers faced digital violence while working.
- ▶ 88.9% of those who experienced digital violence did not report the incidents to any official entity.

The Psychological, Social, and Economic Impact of Digital Violence

Digital violence against women working in Jordan's e-commerce and online services sector cannot be viewed as an isolated behavior or a fleeting psychological experience. Rather, it is a complex phenomenon where psychological, social, and economic dimensions intersect—directly affecting the sustainability of women's empowerment within the digital labor market. When the very platforms that provide women with income become spaces for potential threats, extortion, or defamation, digital work shifts from being a tool of empowerment to a psychological and economic burden, reproducing the same vulnerabilities that women strive to overcome.

1. Psychological Dimension

The study's findings show that the psychological impact of digital violence is severe and far-reaching. 47.1% of survivors reported feeling intense anger, 40.3% reported persistent anxiety, 24.4% reported fear, and 15.6% expressed a loss of self-confidence. These figures indicate that women working in digital spaces live under continuous psychological pressure resulting from the constant threat to their personal safety—whether through abusive messages, account monitoring, or threats to publish their photos. Such experiences lead to what can be described as "digital chronic anxiety," a form of long-term psychological stress that weakens concentration, reduces productivity, and affects women's relationship with their work.

In this context, the survey analysis highlights that fear of threats or defamation is a strong driver of digital withdrawal or reluctance to post content particularly in a conservative society where women's behavior is judged through the lens of reputation and public respectability. As a result, psychological anxiety moves from an individual experience to a collective barrier that limits women's freedom of expression and work, reinforcing indirect economic dependency driven by fear of public exposure.

2. Social Dimension

Socially, Jordan's digital work environment remains heavily influenced by a culture of social blame that places the burden of caution and self-restraint on women rather than on the perpetrator. The data shows that nearly one in four women who experienced digital violence did not talk about the incident with anyone, while 38.5% only informed their family, 33% told a friend, and only 3.4% reached out to an official entity. These figures reflect a significant gap in social and institutional support and reveal the persistence of a stigma

surrounding digital violence as a “private” matter that should not be discussed publicly out of fear of judgment or doubt.

This culture deepens when the blame is directed at the woman rather than the aggressor. The results indicate that 14.8% of survivors were blamed by their social circles after the incident. Such reactions amplify the harm experienced, and over time, transform the incident from an individual event into a systematic social barrier that prevents women from continuing or expanding their digital work.

At the level of self-confidence, the findings show that 46.2% of survivors reported that their confidence (whether greatly or somewhat) was affected after the incident—a critical indicator of how digital violence undermines women’s participation in digital work environments.

3. Economic Dimension

Economically, the impact of gender-based digital violence extends far beyond psychological and social disruption; it becomes a direct factor contributing to the decline of women’s participation in the digital economy. 44.1% of survivors reported that the incidents affected their willingness to continue working, while 31% stated that they reduced their use of digital platforms after the incident. Additionally, 29.3% of survivors indicated that they lost actual income or customers.

These figures demonstrate that gender-based digital violence is not merely a moral violation; it is a real economic threat that undermines the sustainability of women-led small businesses and weakens growth opportunities within the e-commerce sector.

In a country where women’s participation in the labor market does not exceed 14%, the withdrawal of women from digital spaces represents the loss of a strategic resource for achieving national economic empowerment goals. This decline also affects inclusive growth indicators, as it reduces women’s contribution to the GDP and undermines the effectiveness of women’s entrepreneurship programs supported by the Ministry of Labour and the Ministry of Digital Economy.

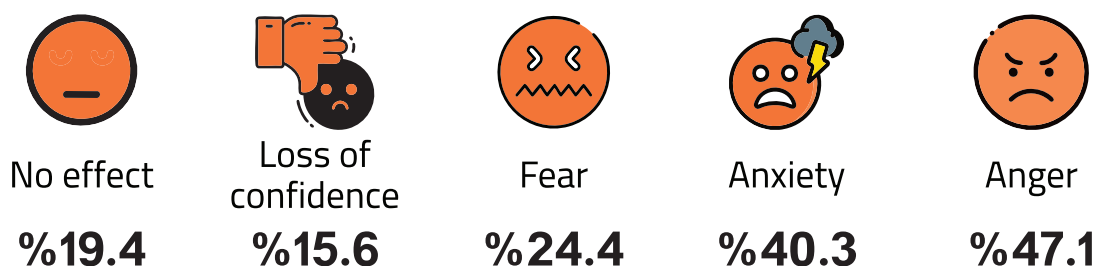
The findings further confirm that many women working in e-commerce suspended their activities temporarily after experiencing online threats or extortion—either to avoid scandal or to protect their families. This demonstrates the cumulative impact of digital violence on women’s financial and professional sustainability.

4. Interconnectedness of the Three Dimensions

The findings reveal that the psychological, social, and economic dimensions are deeply interconnected and mutually reinforcing, forming a closed cycle of marginalization. The psychological experience of violence leads to social isolation; social isolation leads to economic loss; and economic loss, in turn, reinforces financial dependency and fear of reporting. In this way, gender-based digital violence becomes a structural exclusionary factor that reproduces the gender gap that national policies aim to reduce.

This interconnectedness is further strengthened by weak legal and institutional support systems. Although Jordan's recently amended Cybercrimes Law (Law No. 17 of 2023) introduced some reforms, it has yet to provide protection mechanisms or reporting pathways tailored to women working on digital platforms, nor does it explicitly address gender-based violence in online spaces. In the absence of an effective social and legal protection framework, individual experiences of violence evolve into a silent structural phenomenon that threatens women's right to decent work and digital safety.

Psychological and social impact



Economic impact

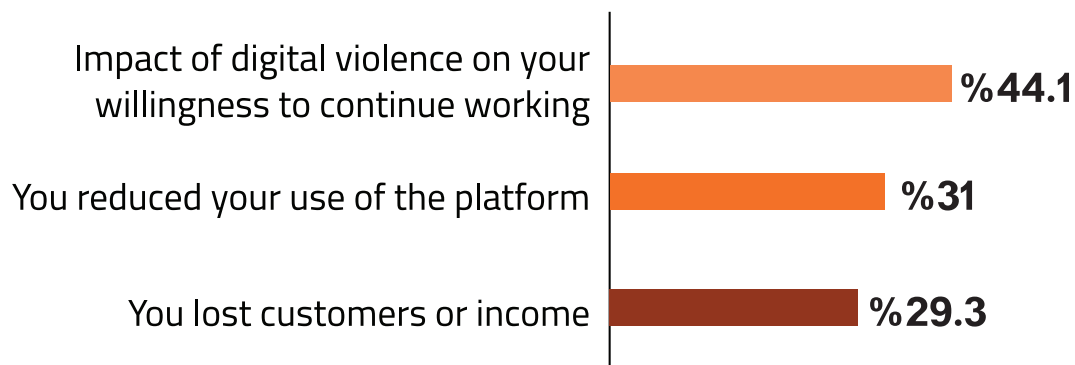


Table 12 The psychological, social, and economic impact of digital violence on women workers

*For the psychological and social impact indicators, percentages are calculated out of the total number of women who experienced digital violence (397). As for the economic impact indicators (44.1%, 31%, 29.3%), they are calculated only from the survivors who responded to the question on how digital violence affected their work.

Towards a Comprehensive Response

The findings confirm that addressing digital violence against women in Jordan requires a holistic approach that integrates legal, psychological, social, and economic dimensions. On the legal front, specialized legislation is needed to clearly define gender-based digital violence and establish clear mechanisms for reporting and protection. At the same time, women working on digital platforms should be empowered through awareness programs and training in digital safety and online risk management. Social support institutions must also provide safe and confidential psychological and legal counseling services that encourage women to report incidents without fear of stigma.

In addition, it is essential for the government and civil society to adopt nationwide awareness campaigns that frame “digital violence as a social and economic crime,” rather than a personal matter. Genuine empowerment of Jordanian women cannot be achieved unless the digital space shifts from a vulnerable environment marked by harassment to a safe and productive ecosystem that guarantees women their rights to work, dignity, and security.

Institutional Support, Protection, and Response Mechanisms

The study’s findings clearly reveal that institutional responses to digital violence against women working in Jordan’s e-commerce and online services sector remain limited. The social and legal support system does not yet match the scope or evolving nature of the phenomenon. Digital violence as a new form of gender-based violence requires an approach different from those applied to traditional forms of violence. Such an approach must take into account the nature of the online environment, the specific social context, and the economic vulnerability of women working in the informal digital economy.

1. Limited Reporting and Low Trust in Official Authorities

The data shows that **88.9%** of women who experienced digital violence did not report the incident, while only **11.1%** filed a report—a very small percentage compared to the prevalence of the phenomenon (**48.3%** of all workers). Among those who did report, **65.9%** filed their complaints through the platform itself (such as Facebook, Instagram, or WhatsApp) using the “report abuse” feature, while only **36.4%** turned to official authorities, such as the Cybercrime Unit at the Public Security Directorate.

These figures reflect a clear trust gap between women and official institutions, linked to several factors: fear of scandal, limited awareness of legal rights, slow official procedures, or concerns about information being exposed or family members being contacted during investigations. The findings also indicate that the absence of a reporting pathway tailored to the needs of women working in digital spaces makes the reporting process socially intimidating, as workers fear being mistreated or blamed for the incident.

2. Platform Response and Limited Impact

Although most women who reported incidents did so through the platforms themselves, the effectiveness of these measures remains limited. **68.2%** of those who reported received a response from the platform, while **31.8%** received no reply at all. While this indicates some level of interaction, platform responses are typically limited to closing an account or deleting a comment without providing psychological support, legal assistance, or any meaningful follow-up mechanism.

Relying on global platforms to protect Jordanian women also highlights a structural contradiction. These platforms’ mechanisms do not account for local cultural or legal contexts and provide no guarantees against repeated abuse or the creation of new accounts. As a result, women’s digital safety remains dependent on the algorithms of private companies rather than a national, institutional protection system.

3. Digital Safety Awareness

The data indicates a significant gap in digital safety awareness and knowledge of legal protection mechanisms among women working online. While **55.3%** of participants stated that they know digital violence is considered a crime under Jordanian law, **44.6%** were not aware of this. Practical ability to document abuse was even weaker, as **68.5%** of participants reported that they do not know how to document digital harassment or violations.

The study also showed that 70.7% of participants had not enabled two-factor authentication to secure their accounts, and 64.3% did not have a separate account for work purposes—both of which increase the risk of hacking or content theft. Additionally, 77.4% of participants did not follow any digital safety awareness pages or campaigns.

These indicators demonstrate that the lack of technical knowledge intersects with insufficient legal empowerment, and that current digital training programs focus largely on technical and commercial aspects without adequately integrating the concept of gender-responsive digital safety.

| Question | Yes (Number) | Yes (%) | No (Number) | No (%) |
|---|-----------------|---------|----------------|--------|
| Do you know that digital violence is considered a crime under Jordanian law? | 455 | %55.3 | 367 | %44.6 |
| Do you know how to document digital abuse? | 259 | %31.5 | 563 | %68.5 |
| Do you use strong and varied passwords? | 431 | %52.4 | 391 | %47.6 |
| Have you enabled two-factor authentication? | 241 | %29.3 | 581 | %70.7 |
| Do you have a separate account for work? | 293 | %35.6 | 529 | %64.3 |
| Do you know how to report or block users on the platform? | 325 | %39.5 | 497 | %60.5 |
| Do you follow any digital safety awareness pages? | 186 | %22.6 | 636 | %77.4 |
| Do you wish there were a specialized entity for digital protection for women workers? | 733 | %89.18 | 89 | %10.8 |

Table 13 Level of digital safety awareness among participants (822)

4. Social and Institutional Support

The data shows that 58.8% of women who experienced digital violence and responded to the question received some form of social support after the incident whether from family or friends. However, 24.4% received no support at all, and 14.8% were blamed, highlighting the fragility of informal support networks. In contrast, formal institutional support is almost nonexistent; only 3.4% of survivors sought help from an official institution.

This weakness in institutional support reflects the absence of effective coordination mechanisms among relevant entities such as the Ministry of Labour, the Ministry of Digital Economy and Entrepreneurship, and the Public Security Directorate; to provide comprehensive protection for women working on digital platforms. It also reveals an institutional gap in addressing digital violence from a gender-sensitive perspective, despite the existence of general legal frameworks such as the Cybercrimes Law No. (17) of 2023 and the Protection from Domestic Violence Law No. (15) of 2017.

| Category / Indicator | Number | (%) of those who experienced violence |
|---|--------|---------------------------------------|
| Entities or individuals spoken to after the incident | | |
| Spoke with family | 112 | %38.5 |
| Spoke with a friend | 96 | %33 |
| Did not speak with anyone | 73 | %25.1 |
| Official entity | 10 | %3.4 |
| Nature of support and social reactions | | |
| Received support | 171 | %58.8 |
| Did not receive support | 71 | %24.4 |
| Was blamed by some | 43 | 14.8% |
| Self-confidence was affected (significantly / slightly) | 135 | %46.2 |

Table 14 Social and institutional support for female workers who experienced digital violence

5. Policy Gaps and Legal Protection

Although Jordan's Cybercrimes Law stipulates in Article (11) that "any person who intentionally sends, resends, or publishes data or information via an information network, website, or any information system that includes defamation, insult, or contempt of any person shall be punished by imprisonment for no less than three months and a fine of no less than 100 dinars and no more than 2,000 dinars," the law does not elaborate on gender-based discrimination nor does it link its provisions to the digital work context or to the protection of workers on online platforms. Similarly, the Flexible Work Regulation No. (22) of 2017, despite promoting remote work, does not include any provisions related to digital safety or online harassment within virtual work environments.

This legislative gap leaves women working in e-commerce outside the umbrella of labor protection. They cannot benefit from inspection mechanisms or complaints systems available through the Ministry of Labour for formal workers, leaving the digital space open to violations with insufficient deterrence.

The findings show that addressing gender-based digital violence in Jordan requires an integrated institutional approach; one that begins with raising awareness and culminates in establishing a national protection system that incorporates legal, social, and technological dimensions.

Digital Safety Awareness and Required Support

The study's results indicate that the gap in digital-safety knowledge among women working in the e-commerce and online services sector in Jordan is one of the key factors undermining their ability to protect themselves and respond effectively to online violence. Although digital transformation has created new economic opportunities for women, limited awareness of digital and legal safety has left many vulnerable to hacking, harassment, or extortion, without the essential skills to manage accounts, secure data, or document abuse. This gap emerges as one of the most critical areas that national policies must address to ensure women's empowerment in a safe and sustainable digital environment.

1. Digital Safety Awareness

Data indicates that 55.3% of participating women know that digital violence is considered a crime under Jordanian law, while 44.6% are still unaware of this fact—despite the amendments introduced under the Cybercrime Law No. (17) of 2023, which strengthened

penalties for harmful acts committed through electronic means. This means that nearly half of the women working in this sector lack sufficient legal knowledge about their protection rights or the mechanisms for reporting and evidencing violations.

When shifting from legal awareness to practical technical skills, the gap becomes even wider. The results show that 68.5% of participants do not know how to document digital abuse, whether through screenshots, saving messages, or preserving digital evidence in a manner acceptable in legal proceedings. This weakness limits their ability to prove violations or defend their rights before official authorities.

The data also shows that 70.7% of participants had not activated two-factor authentication on their accounts—one of the simplest digital protection tools and that 64.3% do not have a separate account for work purposes, instead using their personal accounts for both business and communication. This increases the likelihood of hacking or data leakage. Regarding reporting or blocking mechanisms, 60.5% of participants stated that they do not know how to use these tools properly, while 77.4% reported that they do not follow any specialized digital-safety awareness pages.

These figures demonstrate that digital awareness among women working in e-commerce remains partial and superficial, and has not yet translated into practical self-protection behaviors. As a result, most workers rely on “immediate reaction responses” when facing threats such as deleting their accounts or ignoring messages, rather than treating online abuse as a crime that requires documentation and reporting.

2. Types of Support Needed

The data shows that women clearly identified the types of support they need to confront digital violence:

- **65%** of participants reported needing **training support**, whether in digital-safety awareness, managing commercial accounts, or protecting personal data.
- **53.2%** of participants requested specialized **legal support** to help them understand the laws, file complaints, and follow up on cases.
- **41.7%** of participants indicated a need for **technical support** to address hacking incidents or recover stolen accounts.
- **30.4%** of participants expressed the need for **psychological and social support** to cope with the fear and anxiety resulting from exposure to digital violence.

- **20.6%** pointed to the need for **other forms of support**, such as media campaigns or specialized advisory services.

These figures indicate that more than half of women working in digital spaces view legal and technical training as the key to protection, while the strong need for psychological and social support shows that digital violence leaves long-term emotional impacts that are no less serious than physical harm. These findings highlight the need for a multisectoral approach that brings together legal, technical, and social actors to establish a comprehensive protection system for women working on digital platforms; one that integrates awareness and support with effective legal response mechanisms.

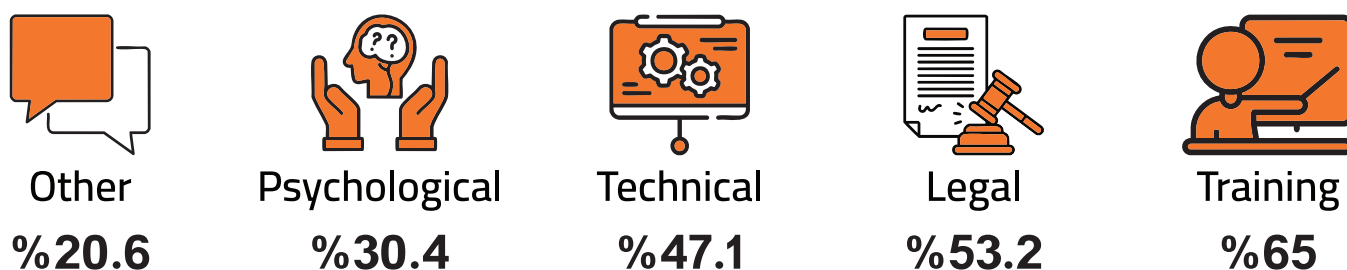


Table 15 The type of support participants need to address digital violence

Structural Analysis of the Interconnected Relationships in Gender-Based Digital Violence within Jordan’s Digital Work Environment

An advanced analytical reading of the study’s findings reveals that digital violence against women working in the e-commerce and online services sector in Jordan is not a transient phenomenon, but rather a complex social and behavioral system in which demographic, technological, psychological, and social variables intersect. These interdependent relationships show that the likelihood of exposure to violence is not accidental; it is the result of a fragile digital-protection structure, weak legislative regulation, and the persistence of gender stereotypes in the public sphere.

It is important to note that these relationships represent descriptive associations derived from cross-tabulation tables and do not indicate a direct causal relationship.

First: The Relationship Between Age and Exposure to Digital Violence

The data shows an inverse relationship between age and the likelihood of exposure to digital violence; that is, the younger the woman, the higher the probability that she will experience such violence.

The age group 18–23 recorded the highest exposure rate (56%), followed by the 24–35 group at (51%). The rate then decreased to (43%) among women aged 36–55, reaching its lowest level among women over 55 years (28%).

This pattern reflects the fact that younger women are more engaged in the digital space, interact more with audiences, and have less experience in protecting their privacy. Additionally, the visibility of young women on digital platforms is sometimes met with negative or biased societal perceptions that associate online activity with excessive freedom or ‘unconventional’ behavior, making young women more vulnerable to digital harassment and abuse. This relationship shows that age is not merely a biological variable, but a behavioral and social indicator of digital interaction patterns and levels of awareness regarding digital safety and rights.

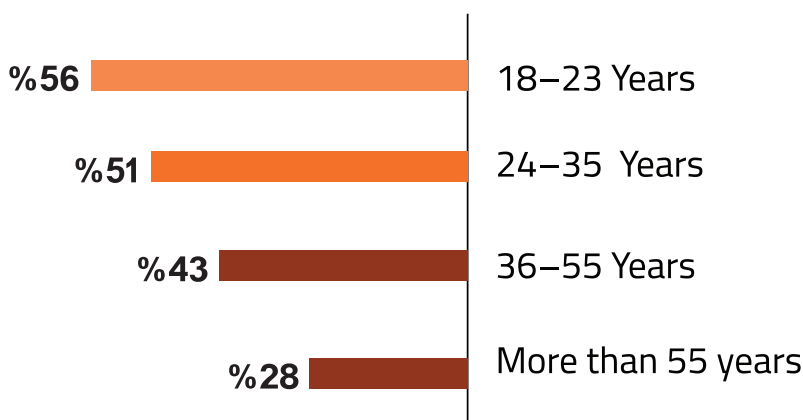


Table 16 Distribution of participants by age and exposure to digital violence

Second: The Relationship Between Marital Status and Exposure to Digital Violence

The results show that marital status is closely linked to levels of exposure to digital violence. The highest rates were recorded among single women (59%), followed by divorced and widowed women (53%), while the rate among married women was (46%).

A social analysis of this pattern highlights that digital violence reflects the broader social structure itself:

- Single women are more present on public and commercial platforms and interact more frequently with clients of both genders, which increases their likelihood of encountering harassment or abusive messages.
- Divorced and widowed women face a double layer of social stigma in the local culture, where some people hold them accountable simply for their presence in the public space, making their digital presence a target for threats or defamation.
- By contrast, married women often benefit from a social and family support network that reduces the chances of being targeted, in addition to a generally “more conservative” societal view toward them.

This relationship confirms that digital violence goes beyond technology and is rooted in social structures, reproducing gender-based discrimination through modern digital tools.



Table 17 Distribution of participants by marital status and exposure to violence

Third: The Relationship Between the Number of Digital Working Hours and Exposure to Violence

The study showed that women who work more than 8 hours per day online are more likely to experience digital violence (57%) compared to those who work less than 4 hours (45%).

This can be interpreted through three interconnected perspectives:

1. Digital time as a risk factor: The more hours spent interacting online, the higher the likelihood of encountering a diverse and unfamiliar audience.
2. Mental fatigue: Long periods in front of the screen reduce alertness and weaken preventive responses to harassment.
3. Professional dependency on platforms: Women who rely entirely on digital platforms for income are often less willing to confront abuse for fear of losing customers or harming their business reputation.

This pattern shows that digital work itself carries an invisible psychological and social cost, highlighting the need for specialized professional awareness policies focused on “preventing digital fatigue and digital violence”.

Fourth: The Relationship Between Educational Level and Exposure to Digital Violence

The results showed that women with lower levels of education (below secondary or secondary) are more likely to experience digital violence (52%) compared to women holding a diploma or bachelor's degree (45%).

Education here acts as a partial empowerment factor, providing women with tools for critical thinking, distinguishing between acceptable and abusive behavior, and basic knowledge of legal protection procedures.

However, what is notable is that the decrease in exposure rates with higher education was not substantial, indicating that digital violence is not limited to groups with lower awareness. It also affects more educated women due to the absence of an institutional protection system. In other words, education supports awareness, but it does not provide safety unless it is translated into a legally regulated digital environment."

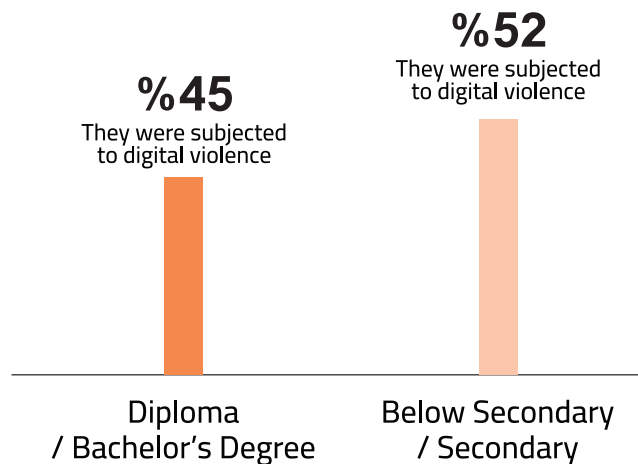


Table 18 Distribution of participants by educational level and exposure to violence

Fifth: The Relationship Between Interacting with Male Customers and Digital Violence

The results show that 70% of women workers interact with male customers (always or sometimes), and among them, the exposure rate to digital violence reached (51%), compared to only (34%) among women who do not interact with men.

This relationship is one of the strongest indicators that digital violence in Jordan is gendered in nature. In an unregulated environment where no clear digital professional conduct policies exist and where reporting tools within platforms are ineffective women become the weaker party in the digital power dynamic.

The results also show that some women face repeated abuse from male customers, ranging from offensive comments to attempts at personal contact, creating an unsafe work environment.

These findings confirm that online commercial harassment should be included within the scope of labour law and digital security frameworks, as it represents a violation tied to the work environment, not personal communication.



Table 19 Distribution of participants by interaction with male customers and exposure to violence

Sixth: The Relationship Between the Type of Violence and Its Psychological and Social Impact

A qualitative analysis of the data shows that each form of digital violence produces distinct psychological and behavioral effects:

- **Verbal harassment or inappropriate messages** generate feelings of anger and anxiety among nearly half of those exposed (47% anger, 40% anxiety).
- **Blackmail and threats involving images** lead to fear and loss of self-confidence (at least 25%).
- **Defamation and retaliatory reviews** result in direct economic consequences, such as losing customers or reducing activity on digital platforms (31%).

This analysis demonstrates that digital violence is not merely psychological harm; it is also an economic exclusion tool that pushes women to withdraw or reduce their professional activity. In other words, 'emotional harm' transforms into real economic marginalization, hindering women's empowerment despite the apparent opportunities offered by technology.

| Form of Digital Violence | Impact | Percentage |
|--|---|------------|
| Verbal harassment / inappropriate messages | Anger | %47 |
| Verbal harassment / inappropriate messages | Anxiety | %40 |
| Blackmail / image-based threats | Fear | %25 |
| Blackmail / image-based threats | Loss of self-confidence | %25 |
| Defamation / retaliatory reviews | Economic impact (loss of clients or reduced activity) | %31 |

Table 20 Distribution of participants by type of violence and psychological/social impact

Seventh: The Relationship Between Digital Awareness and the Decision to Report

Although 55% of women know that digital violence is a legal crime, only 11% have filed an official complaint. Additionally, only 31% know how to document abuse.

This contradiction between awareness and behavior reflects that theoretical knowledge does not translate into actual empowerment in the absence of institutional trust and social support.

Women workers understand their rights, but they lack safe and effective reporting channels, and they fear social consequences such as reputational stigma or losing customers. As a result, 'digital silence' becomes a social defense mechanism in the context of weak legal frameworks.

Eighth: The Relationship Between the Type of Violence and the Decision to Report

It was found that the majority of women who filed reports did so in cases involving blackmail or threats to publish private photos (68%), while reporting rates for verbal harassment were very low (15%).

This indicates that the severity of the abuse and the level of actual danger are the decisive factors in making the decision to report. Meanwhile, everyday minor harassment

is viewed as “normal” within the digital commercial space, leading to the normalization of symbolic and verbal violence in the online work environment.

Ninth: The Relationship Between Type of Commercial Activity and Exposure to Digital Violence

The study’s findings show that the type of commercial activity is a major factor in determining the level of exposure to digital violence among women working in the e-commerce and online services sector. Home-based and food-related businesses which make up 38.9% of the sample recorded the highest exposure rates, ranging between 55–60%, due to the highly interactive nature of this work and its reliance on direct communication via WhatsApp. The clothing and accessories sector, representing 25.2% of participants, also showed a high exposure rate of 50–55%, largely because of its heavy dependence on visual display and images, which often attract inappropriate comments or messages. The beauty and personal care sector (16.7%) showed the highest digital-violence rate at around 60%, explained by the nature of the products, which frequently draw verbal harassment or inappropriate contact. In contrast, sectors with a more institutional nature—such as page management and digital marketing (5%)—recorded lower exposure rates at around 40%, and technical support or customer service activities (4.1%) showed the lowest rates at 35–40%, due to the more formal and less personal nature of communication. These results indicate that the most popular and most interactive activities—such as beauty, food, and clothing—are also the most vulnerable to digital violence because they combine informal home-based economies, direct interaction, and the use of open platforms that allow direct access to women workers.

| Type of Business Activity | Rate of Exposure to Violence |
|-----------------------------|------------------------------|
| Home-made products / Food | High (55–60%) |
| Clothing & Accessories | High (50–55%) |
| Beauty & Personal Care | Highest (approximately 60%) |
| Page Management / Marketing | Medium (40%) |
| Customer Service | Medium (35–40%) |
| Other Activities | Variable |

Table 21 The relationship between type of commercial activity and exposure to digital violence

Tenth: The Relationship Between Age, Education, and Exposure to Digital Violence

The cross-analysis shows that age is the strongest driver influencing the likelihood of digital violence against women working in online commerce and services, while the educational level serves as a secondary factor that mitigates risk but does not eliminate it. Comparisons across groups indicate that younger women particularly those aged 18 to 23 are the most vulnerable to all forms of digital violence, whether harassment, intrusion, requests for personal contact numbers, or content theft. This is linked to the nature of this age group's presence in the digital space, as they are the most engaged on platforms, the most interactive with customers, and generally have limited experience in managing digital risks or handling abuse.

When incorporating education level into the analysis, it becomes evident that having a lower educational level (secondary or below) significantly increases the probability of exposure to violence. Women aged 18–23 with secondary education or less record exposure rates of 60% to 62%. This is driven by a set of interconnected factors, including limited legal awareness, weak skills in responding to abuse, lack of knowledge on documentation mechanisms, and reliance on open communication platforms without proper privacy controls. In contrast, while university and diploma education reduce exposure levels to around 50% within the same age group, age remains the most influential factor overall. The risk persists due to the high level of digital engagement among younger women.

Meanwhile, the age group 24–35 years considered the most active and digitally productive, shows a similar pattern though less intense. Women with a secondary education or below experience digital violence at a rate of approximately 55%, while the rate decreases to around 48% among those holding a diploma or bachelor's degree. This difference indicates that education plays a clear role in promoting conscious digital behavior, such as using separate accounts, enabling two-factor authentication, and managing interactions with male customers in a more controlled manner. Nonetheless, this age group remains the second most exposed after younger women, due to its central role in digital work and platforms, and because it encompasses the largest number of home-based and online commercial projects.

Exposure rates decrease significantly among women aged 36–55. Those with lower education levels record exposure rates of around 45%, compared to 40% among women

with university-level education. This decline is attributed to the lower intensity and more professional nature of this group's online presence, as well as their more cautious communication strategies and reduced random interactions with the public.

The lowest exposure rates are found among women above 55 years of age, with all educational levels combined recording only 28%. This can be explained by the limited activity of this group in e-commerce compared to younger groups, and their reliance on narrower, less interactive communication circles.

| Educational Level | Age Group | Exposure Rate |
|-----------------------------|-----------|---------------|
| Secondary or Below | 18–23 | 60–62% |
| Diploma / Bachelor's Degree | 18–23 | 50% |
| Secondary or Below | 24–35 | 55% |
| Diploma / Bachelor's Degree | 24–35 | 48% |
| Secondary or Below | 36–55 | 45% |
| Diploma / Bachelor's Degree | 36–55 | 40% |
| All Levels | +55 | 28% |

Table 22 The Relationship Between Age, Education, and Exposure to Digital Violence

The Economic Cost of Digital Violence

Digital violence against women working in the e-commerce and online services sector represents a multidimensional economic burden. Its impact goes beyond a direct decrease in income to include reduced business activity, withdrawal from digital platforms, and the loss of expansion opportunities. This, in turn, generates broader economic consequences for households and the national economy.

The study shows that 29.3% of women who experienced digital violence lost actual income or clients, indicating that the economic loss associated with digital violence is a recurring pattern rather than an isolated occurrence.

An estimate of the average loss per case can be generated (noting that this estimate is based on a hypothetical analytical model and does not rely on direct financial data from the sample; it is intended only to illustrate the potential economic impact of digital violence). This estimate relies on a simplified equation based on the average monthly income of

women workers, their reliance on digital income, and the decline in sales following the incident. The expected loss can be expressed as follows:

Average loss per case of violence = (Average monthly income × Percentage of reliance on digital income) × Percentage decline in sales after the incident × Number of affected months.

When applying this equation to a simple digital business, assuming for example that the average monthly income is 250 JOD, that reliance on this income accounts for 70% of the household income, and that sales decline by 25% for three months following a digital violence incident, the estimated loss per case becomes:

Estimated loss = (250 × 0.70) × 0.25 × 3 months = approximately 131 JOD per incident.

However, the cost does not stop there. The impact of digital violence extends beyond direct financial loss to structural declines in a woman's ability to continue working. The study shows that 31% of women who experienced digital violence reduced their use of digital platforms, and 44.1% lost the desire to continue working online, making digital violence a direct cause of shrinking women's economic participation.

The cost of partial or complete withdrawal can be estimated (this scenario represents a complete withdrawal from digital activity—an upper-limit estimate that can be adjusted to reflect different levels of partial decline) through an additional equation that reflects the annual loss resulting from a woman discontinuing digital work, as follows:

Annual Withdrawal Cost = Average monthly income × 12 months × the percentage of this income's contribution to household income.

Applying an illustrative example for a woman earning 250 JOD per month through a digital business, full withdrawal due to blackmail or defamation would result in an estimated annual loss of:

Withdrawal cost = 250 × 12 = 3,000 JOD per year,

which is a significant amount for households that rely on a single income or two limited incomes.

The economic cost deepens when the analysis expands from individual loss to estimating the economic impact on all women working in the e-commerce and online services sector. It then becomes possible to estimate the annual sector-wide loss caused by digital violence.

Given the absence of an official figure for the number of women working in e-commerce in Jordan, a conservative estimate of ten thousand women workers³ was adopted for the purpose of this economic analysis. It is important to emphasize that this figure is an approximation used to illustrate the potential scale of loss and can be replaced by any official number once available.

It is important to note that the estimated figure of 10,000 women working in the e-commerce and online services sector is not an official number, but rather an analytical approximation used to construct the sector-wide economic loss model. This estimate represents a conservative value that reflects the minimum expected size of women's digital employment, given the widespread prevalence of home-based online commerce in Jordan. It can be replaced by any official figure once available, without affecting the analytical methodology or its overall conclusions.

Using the study's findings which indicate that 48.3% of women workers experience digital violence, that 29.3% of those affected lose actual income or clients, and that the estimated average annual loss per affected worker is 3,000 JOD the total economic loss of digital violence can be calculated using the following equation:

Annual Total Loss = Number of women working in e-commerce × Percentage exposed to digital violence × Percentage who lost income due to this violence × Average annual loss per affected worker.

Applying this equation to the assumed scenario namely, 10,000 women workers the estimated annual loss becomes:

Annual Total Loss = 10,000 workers × 48.3% × 29.3% × 3,000 JOD = approximately 4,245,000 JOD per year.

This figure, despite being based on a conservative estimate of the sector's size, shows that digital violence results in an economic loss exceeding **4.2 million JOD annually**. This confirms that the economic cost of this phenomenon is neither marginal nor individual; rather, it directly affects women's ability to continue working and producing, and it has repercussions on the national digital economy as a whole. This estimate also demonstrates that improving digital safety and strengthening protection mechanisms is not only a social

³ The estimated figure of 10,000 women working in the e-commerce and online services sector is not an official number but rather an analytical approximation used to construct the sector-level economic loss model. This estimate represents a conservative value that reflects the minimum expected size of women's digital employment, given the widespread nature of home-based online commerce in Jordan. It can be replaced with any official figure once available, without affecting the analysis methodology or its overall conclusions.

and human rights necessity but also an economic imperative essential for safeguarding women's contribution to the digital labor market and preventing a growing financial drain as e-commerce continues to expand in Jordan.

The impact of digital violence extends to the Gross Domestic Product (GDP) by reducing women's economic contribution. E-commerce has become a primary economic outlet for women who have lost access to formal employment or who have found in digital work a safe way to generate income from home. When digital violence pushes a significant proportion of these women to reduce their activity or withdraw entirely, the economy loses part of its productive capacity and loses a growing segment of women entrepreneurs who could have contributed to increasing women's economic participation already among the lowest in the region. This loss is not measured only through direct financial impact; it is also reflected in the decline of small businesses, the contraction of the digital market, and the slowing growth of the e-commerce sector.

The cost is not limited to the national economy; it directly affects households. Many of the women working in e-commerce are breadwinners or provide the most stable source of income for their families. Consequently, income loss translates into a chain of effects, including a lower standard of living, increased dependence on assistance, and higher levels of economic vulnerability. As digital violence persists, these losses become interconnected and cumulative, forming a structural barrier to women's empowerment in the digital space.

Thus, it becomes clear that digital violence is not an isolated incident but an influential economic factor that weakens productivity, reduces market size, affects household income, and lowers women's contribution to the national economy. The preceding calculations demonstrate that investing in combating digital violence is not only a human rights obligation; it is also an economic necessity to ensure that the potential of women's digital entrepreneurship is fully realized and protected from erosion and forced withdrawal.

Conclusion and Recommendations

The study reveals that digital work has become a primary outlet for Jordanian women seeking income and flexible opportunities. However, in the absence of legal and regulatory protection, it turns into a fragile space that reproduces gender-based violence through new tools.

Women working in e-commerce and digital services are active in a sector that still lacks adequate regulation and protection. They are not fully covered by labor laws, social security systems, or specialized legislation addressing digital violence. This regulatory gap does not place responsibility on them for the violations they face; instead, it highlights the absence of an institutional framework that organizes professional relationships and protects women from abusive practices such as harassment, extortion, content theft, defamation, and digital surveillance.

The findings clearly show that digital violence is neither an individual incident nor an isolated behavior. It is a structural phenomenon tied to patterns of gender-based discrimination and deeply rooted social stereotypes, in addition to imbalances of power within the digital space. The evidence indicates that the most exposed groups are not vulnerable because of personal traits or individual choices, but because of the nature of their presence on digital platforms and the level of direct interaction with the public—especially male customers.

Categories most exposed include younger women, unmarried women, those working long hours on digital platforms, and those whose services require direct interaction with customers. These groups face the highest levels of digital violations. This demonstrates how age, social status, and educational level intersect with the nature of digital work to produce heightened levels of risk. It also reflects that the root of the problem lies in an unregulated digital environment, the absence of clear protection standards, and a persistent social perception that blames women for what happens in the digital space instead of holding perpetrators accountable.

This violence leaves deep psychological and social impacts; it generates anxiety and fear, and pushes many women to remain silent and avoid reporting due to stigma, reputation concerns, or the complexity of procedures. It directly affects women's self-confidence and their willingness to continue working or develop their businesses, turning the digital space from a potential sphere of empowerment into a source of pressure and threat.

Economically, this reality weakens the sustainability of women-led small businesses and reduces women's presence in the digital economy through gradual withdrawal, decreased activity, and loss of income and customers. In this way, digital violence becomes an invisible exclusionary factor that hinders ongoing efforts to increase women's participation in the labour market and enhance their contribution to the national economy.

Conversely, the study reveals a clear gap in the digital safety system among women workers. It shows that although a considerable number of them possess legal and technical awareness, this awareness remains largely theoretical and does not translate into practical protection measures. The findings highlight limited ability in documentation and reporting, alongside a common reliance on individual reactions such as deleting accounts, ignoring messages, or complete silence instead of turning to formal or institutional mechanisms capable of addressing violations in a systematic manner.

The study also shows that the responses of global digital platforms remain limited in effectiveness, often restricted to superficial technical actions that do not account for the local context or provide comprehensive protection that considers the psychological, social, and legal dimensions of digital violence. This underscores the need to develop a specialized national digital protection system, where roles are coordinated among governmental institutions, human rights organizations, and security entities to ensure a safe and sustainable digital working environment for women.

In light of this, the study highlights the need for an integrated national approach to address digital violence against women working in the e-commerce and online services sector. The issue is no longer merely a technical or behavioral challenge; it is a gendered and economic concern that requires clear legislative and regulatory intervention. This approach should include enacting specialized laws that define gender-based digital violence and provide reporting and protection mechanisms tailored to the needs of women working on digital platforms, in addition to establishing a national digital safety system that coordinates the roles of legal, technical, and social entities to ensure an effective response.

The study also emphasizes the importance of training and digital empowerment programs that incorporate a gender-sensitive perspective, equipping women with skills in digital protection, documentation, and electronic risk management. Such skills enable them to benefit from digital opportunities without facing violations. Without these steps, the digital economy will remain an unstable environment for women and will continue to reproduce vulnerability rather than transform into a safe space for economic and social empowerment.

Recommendations

At the Legislative Level

3. **Amend the Cybercrime Law No. (17) of 2023** to include a clear definition of gender-based digital violence and specify its forms (harassment, extortion, defamation, content theft, digital surveillance).
4. **Introduce specific provisions to protect women working on digital platforms** within the Jordanian Labour Law or through new regulations governing online work.
5. **Link digital protection to the provisions of the Protection from Domestic Violence Law No. (15) of 2017** in order to expand the scope of legal protection.

At the Institutional Level

1. **Establish a National Digital Safety Unit for Women** within the Ministry of Digital Economy and Entrepreneurship, responsible for monitoring cases of digital violence and providing technical, legal, and psychological support.
2. **Launch a national hotline** for receiving digital violence reports with full confidentiality, and train response teams on gender sensitivity.
3. **Develop a national guideline for responding to digital violence**, to be distributed electronically in simplified language, outlining steps for documentation, reporting, and accessing support.

At the Social and Psychological Level

1. **Integrate digital safety programs** into women's economic and social empowerment initiatives through the Ministry of Labour, the National Aid Fund, and vocational training centers.
2. **Establish specialized psychological support centers** in cooperation with the Ministry of Health and civil society organizations.
3. **Launch awareness campaigns** emphasizing that "digital safety is a labor right" and that "digital violence is a social and economic crime."

At the Technical and Training Level

1. **Integrate digital protection skills** into university and school curricula.
2. **Organize specialized workshops for women working in e-commerce** on cybersecurity, managing business accounts, and strategies for responding to blackmail.
3. **Sign cooperation agreements with major technology companies (Meta, Google, TikTok)** to ensure rapid and effective responses to reports submitted by Jordanian users.

At the National Policy Level

1. **Integrate digital violence prevention** into the National Strategy for Jordanian Women, recognizing it as one of the indicators of economic and digital empowerment.
2. **Establish a national database** that monitors patterns of digital violence and documents cases on a regular basis, serving as a reference for government bodies and policymakers.

Conclusion

Digital violence in Jordan represents the new face of gender-based violence and has taken on a more complex form with the expansion of the digital economy and the increasing reliance on online platforms as a primary or supplementary source of income for women.

While technology has opened unprecedented opportunities for empowerment, the absence of specialized legislation and protection mechanisms has left women working in the digital space more exposed to violence and less able to report or confront it.

Therefore, the needed national response must be grounded in recognizing digital violence as an issue of social and economic justice, not merely a technical matter.

Digital empowerment for women is not achieved merely by providing internet access or platforms, but by ensuring a safe and fair working environment that protects their dignity and rights.

Every woman forced to withdraw from the digital space out of fear represents an irreplaceable loss to the national and knowledge economy. Establishing a national digital safety framework in Jordan is no longer optional; it is a developmental and legislative necessity to ensure that digital transformation progresses hand in hand with gender justice and human dignity.

