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The influence of socioeconomic and cultural factors on emotional violence in gender-based abuse

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ABSTRACT

Gender-based violence (GBV) remains a pervasive global issue that transcends cultural, geographic, and socio-economic boundaries. This study aims to contribute to the growing body of empirical literature on GBV by analysing its prevalence and associated factors across 19 countries using data from the Demographic and Health Surveys (DHS) Phases 7 and 8. While previous studies have often focused on physical or sexual violence, this research provides a holistic perspective, disaggregating findings across physical, sexual, and emotional violence. Further, special emphasis is placed on emotional violence, a subtle yet deeply harmful form of abuse that involves manipulation, humiliation, and control, with far-reaching psychological consequences. Our findings underscore the role of intergenerational violence, socio-economic disparities, and cultural norms in perpetuating emotional violence. Key determinants include childhood exposure to violence, educational attainment, economic dependence, and occupational vulnerabilities, with disparities observed across rural and urban settings. Emotional violence prevalence is particularly high among household workers and women in financially imbalanced relationships, highlighting the need for targeted interventions. The study identifies critical data gaps in understanding emotional violence and advocates for more in-depth questioning and qualitative research to capture its nuanced impacts.

Introduction

Gender-based violence (GBV) is a widespread and deeply rooted issue that transcends cultures, social classes, and geographic boundaries, affecting individuals globally (García-Moreno et al., 2015b). It includes various harmful behaviours directed at individuals based on their gender, such as physical, sexual, emotional, and psychological abuse. While women, girls, and gender-diverse individuals are disproportionately affected, men and boys can also be victims (García-Morenoe al., 2015a). The root causes of GBV are complex and multifaceted, often stemming from systemic inequalities, cultural norms, and power imbalances, and are notably prevalent in emerging nations (Decker et al., 2015; Sardinha et al., 2022). Stöckl et al. (2021) report the median prevalence estimates of lifetime physical or sexual intimate partner violence, or both, among ever-partnered women, are highest in sub-Saharan Africa, South Asia, and Oceania (excluding Australia and New Zealand).

GBV is also associated with significant physical, mental, and sexual and reproductive health risks for women and their families (Bacchus et al., 2018; Beydoun et al., 2012; Ellsberg et al., 2008; Tol et al., 2019). Additionally, it negatively impacts women's productivity in the workforce and the economic stability of households (Vyas et al., 2023b). The pervasive nature and far-reaching impacts of this violence have prompted a global call for a comprehensive response. Hence persistent prevalence of GBV are underscored by continuous studies, either in individual countries or regions or alternatively globally, of which some recent examples are (Breton, 2023; Raftery et al., 2023; Thomas et al., 2022; Wei et al., 2024). These efforts are encapsulated in the Sustainable Development Goal (SDG) target 5.2, a key component of SDG 5 (Halisçelik & Soytas, 2019), which focuses on achieving gender equality and empowering all women and girls. This goal has led to the development of comprehensive strategies that encompass prevention, response, and monitoring (WHO, 2013, 2021; USAID; Yount et al., 2022). While the SDG strategy focuses on progress to be made by 2030, this study provides a snapshot of the global prevalence of GBV during the period 2015–2022.

The objective of this study is to contribute to the growing body of empirical literature on the factors associated with GBV. We take a broad and holistic approach by analysing prevalence rates across 19 countries and multiple dimensions, such as age group, marital status, place of residence, education level, number of children, and partner characteristics. Our study utilises the domestic violence module (DVM) included in the Demographic and Health Survey (DHS), a nationally representative survey that covers many aspects of family and health for both men and women (DHS, 2019). This module has been used periodically by 54 countries, allowing for trend analysis and comparisons. This study focuses on 19 countries that have completed the most recent DHS phases 7 or 8, where physical, sexual and emotional violence are core components.

While self-reporting as a data collection method has its limitations, in the absence of consistent recording mechanisms by health systems and law enforcement agencies, robust population surveys such as the DHS (Asmamaw et al., 2023; Nabaggala et al., 2021; Fabic et al., 2012; Vyas et al., 2023a) and other national demographic surveys continue to provide valuable insights into trends that can inform targeted prevention initiatives and support activities. Comparisons at the country, regional, and global levels (Dickson et al., 2023; Stern et al., 2022; Walters et al., 2021) offer valuable insights into fluctuations in population, community, familial, and individual behaviours, and can help assess whether investments in resources, such as cash assistance and support for grassroots initiatives, are yielding positive results and long-term benefits. Large-scale population comparisons are also useful for identifying patterns or trends and estimating the prevalence of prolonged or permanent behaviours globally (Jansen, 2020; Stöckl et al., 2021).

Previous studies have examined various aspects of violence and its long-term effects. However, these studies typically focus on either physical and sexual violence (Bonner et al., 2019; Rubini et al., 2023) or psychological violence (Tavolacci et al., 2023) with few considering all types of violence together and across multiple demographic factors. By systematically collecting data from a large population, this study identifies the major factors contributing to the various types of domestic violence experienced by women and girls worldwide. Our study offers a disaggregated perspective, presenting physical, sexual, and emotional violence separately. Table 1 details the various types of violence, as defined by independent agencies and organisations, such as the World Bank Group (WBG), using guidance from (WHO, 2013) and the European Institute for Gender Equality (EIGE). Emotional and psychological violence are differentiated here, recognising that psychological impact may lead to longer-term mental health issues. Unlike physical violence, emotional violence involves non-physical tactics intended to manipulate, humiliate, degrade, or control a person, typically within an intimate relationship or family setting. This form of violence is pervasive, insidious, and can have severe psychological and emotional consequences that can be as damaging as physical harm. Clinical studies, such as (Vilariño Vázquez et al., 2018) find clinical significance in victims of emotional violence for the various dimensions of depression, obsession-compulsion, anxiety, interpersonal sensitivity. In Coker et al. (2002) when physical and psychological impact is considered, it is the psychological scores that are more strongly associated with adverse health

Table 1. Types of violence.

Type	Definition
Gender-based violence	Violence directed against a person because of that person's gender, gender identity or gender expression, or which affects persons of a particular gender disproportionately. [EIGE]
	It constitutes a breach of the fundamental right to life, liberty, security, dignity, equality between women and men, non-discrimination and physical and mental integrity. [WBG]
Intimate partner violence	Any act of physical, sexual, psychological or economic violence that occurs between former or current spouses or partners, whether or not the perpetrator shares or has shared the same residence with the victim. [EIGE] Refers to behaviour by an intimate partner or ex-partner that causes physical, sexual or psychological harm, including physical aggression, sexual coercion, psychological abuse, and controlling behaviours. [WBG]
Physical	Any act which causes physical harm as a result of unlawful physical force. Physical violence can take the form of, among others, serious and minor assault, deprivation of liberty and manslaughter [EIGE]. Typical forms of physical violence are beating, kicking, strangling, pushing, and the use of weapons.
Sexual	Any sexual act, attempt to obtain a sexual act, or other act directed against a person's sexuality using coercion, by any person regardless of their relationship to the victim, in any setting. [WBG]
Emotional	Any non-physical behaviours that are meant to control, isolate, or frighten. This may present in romantic relationships as threats, insults, constant monitoring, excessive jealousy, manipulation, humiliation, intimidation, and dismissiveness, among others
	Belittling, humiliating or undermining an individual's sense of self-worth/self-esteem (e.g. constant criticism, verbal insults, name-calling, etc.). [EIGE]
Psychological	Any act which causes psychological harm to an individual. Psychological violence can take the form of, for example, coercion, defamation, verbal insult or harassment. [EIGE]

outcomes such as depressive symptoms, substance use, and chronic mental illness, than physical scores. While often used interchangeably, emotional violence refers to deliberate non-physical behaviours intended to undermine an individual's emotional well-being and self-worth. In contrast, psychological violence encompasses broader forms of mental harm, including chronic stress, verbal harassment, coercion, or intimidation.

Most prior studies either omit emotional abuse entirely or subsume it under broader psychological constructs without adequately capturing its distinct characteristics or societal drivers. This study addresses that gap by offering a disaggregated analysis of emotional violence across diverse cultural and socioeconomic contexts. Our aim is to isolate emotional violence as a specific category and examine its unique determinants such as economic dependence, occupational vulnerabilities, and intergenerational cycles of abuse.

The following sections present our methodology, data analysis, and key findings, with particular attention to the socioeconomic determinants of emotional violence.

Methods

Data source

The present study utilised population based cross-sectional survey data from the seventh and eighth rounds of the DHS conducted during 2015–2022 (Croft et al., 2018; DHS, 2019). This survey data is collected from randomly selected women of reproductive age (typically 15–49 years), usually through trained interviewers, within households, and using internationally recognised guidelines for survey methodology and for the ethical collection of data. The selected five regions span: Sub-Saharan Africa (7 countries), Latin America & Caribbean (2 countries), North Africa, West Asia, Europe (3 countries), Central Asia (1 country), South & Southeast Asia (6 countries). Countries were chosen to cover the wider geography and demographically diverse national populations in order to capture varying perspectives and experiences. We focused on the DHS domestic violence module (DVM) which is the most commonly administered module for GBV data collection at the national level in lower-and-middle-income countries (LMICs) (MEASURE, 2014). As the DVM is optional, we selected 19 countries which had a relatively high volume of responses. Furthermore, we focused only on those countries who were in the latest phase of the DHS surveying

process, namely phases 7 and 8. Five countries (Nepal, Philippines, Ghana, Kenya, Tanzania) had completed the phase 8 survey in 2022, and the remaining 14 countries (Tajikistan, Columbia, Guatemala, Armenia, Jordan, Turkey, Afghanistan, India, Myanmar, Pakistan, Cameroon, Ethiopia, Liberia, Nigeria) were in phase 7 at points during the period 2015–2021.

Sampling

The initial dataset comprised a substantial collection of variables and respondents: 5177 variables were recorded across a total of 973,337 respondents from 19 different countries. This extensive dataset provided a broad foundation for the study, covering various aspects of respondents' demographics and experiences. In the initial phase of data processing, variables were filtered to include only those pertinent to the study's focus: the Domestic Violence Module (DVM) and the respondent's profile. This targeted filtering process significantly streamlined the dataset, reducing the total number of variables from 5177 to 178, as shown in Figure 1. The reduction in variables helped to focus the analysis on relevant factors while simplifying subsequent steps. A key challenge encountered was the imbalance in the number of samples across different countries. For instance, the dataset contained a disproportionately large number of respondents from India (724,115) compared to Ethiopia (3992) which had the lowest number of respondents. To address this imbalance, stratified sampling (by country) was employed. As a result of stratification, the sample size was reduced to 96,422, achieving a balanced representation across countries while maintaining the overall integrity of the data. The sampling probability is:

$$\frac{\left(\dfrac{\text{Total Respondents}}{\text{Proportion of Women}} \right)}{\sum \left(\dfrac{\text{Total Respondents}}{\text{Proportion of Women}} \right)}$$

Where *Total Respondents* is the total number of survey respondents from each country and *Proportion of Women* is the proportion of women within the reproductive age group (typically 15–49 years) relative to the total population of that country. While the total number of respondents was obtained from the dataset itself, the number of women within the reproductive age group
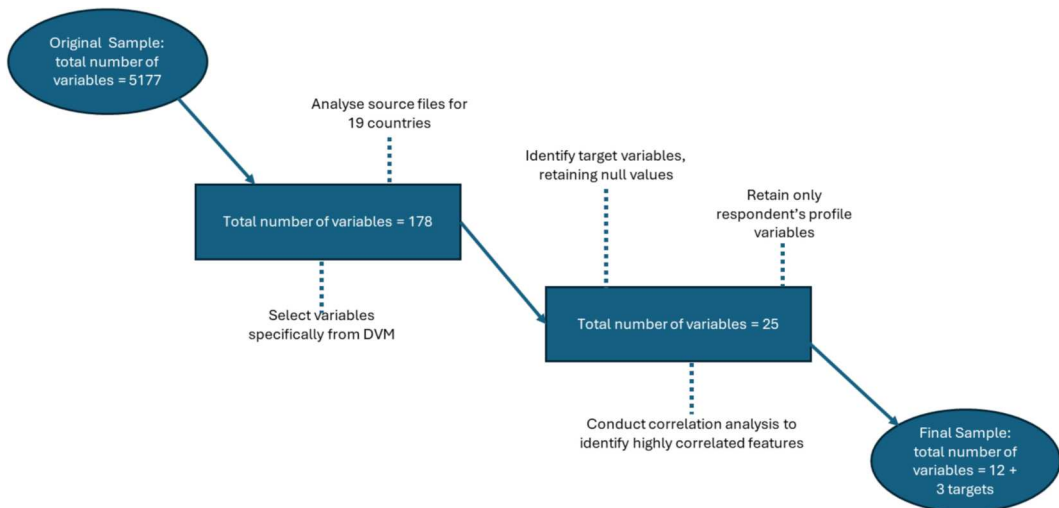

Figure 1. Process of variable selection from the dataset.

and the total population of that country was obtained from the United Nations Department of Economic and Social Affairs (World Population Prospects, 2024).

Variable selection

Subsequent stages of the analysis involved the identification of target variables and features of interest. Each variable was assessed for relevance to study objectives, quality and completeness of responses, and direct connection to respondents (rather than their partners). A thorough examination of each variable was conducted to determine its relevance to the study's objectives. During this stage, all null values were retained to preserve the completeness of the dataset. In the DHS data, null values are retained in instances where questions remain unanswered by respondents. This decision is made to preserve the integrity of the data's original meaning, without conversion into numerical representations. Emphasis is placed on determining the number of women who have either responded or abstained from responding to specific inquiries, facilitating deeper insights into the dataset.

Following this detailed examination, the number of variables was further refined (see Figure 1) to a total of 25. This step involved an extensive correlation analysis to identify variables with meaningful relationships to the target variables. Additionally, as the primary objective of the study is focussed on respondent characteristics, those variables related to the respondent's partner or husband were excluded from the analysis. Finally, a more focused selection of variables was made, resulting in a reduction to 12 key variables. The final selection prioritised indicators that captured:
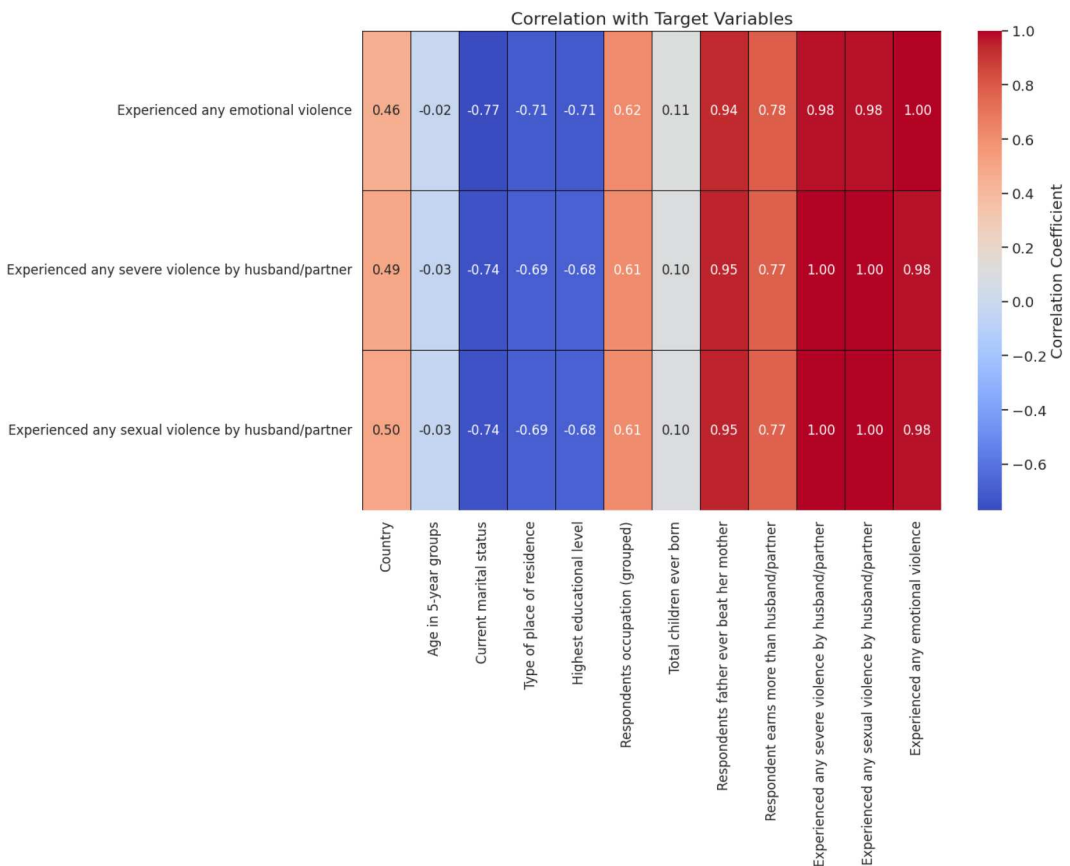
Figure 2. Correlation heatmap showing the degree of correlation between dependent and independent variables.

educational attainment, economic status, occupational role, household structure, exposure to violence during childhood and place of residence.

We conducted a correlation analysis which produced the correlation heatmap, shown in Figure 2, for identifying the key influencers, i.e. those respondent characteristics which influence whether she is undergoing any kind of violence, namely physical, sexual or emotional, or not. To ensure the validity of the sampling approach, we compared patterns in the full and stratified datasets. The correlation structure remained consistent across both samples, affirming that stratified sampling did not distort variable relationships and supported the reliability of subsequent findings.

Dependent and independent variables:

Dependent/target variables are those that we aim to predict or explain, specifically related to experiences of violence. In this study these are 'Experienced any emotional violence', 'Experienced any severe physical violence by husband/partner' and 'Experienced any sexual violence by husband/partner'.

Table 2. Variables in final sample and their mapping.

Variables	Mapping	Relevance to study
Country code and phase	Afghanistan AF7, Armenia AM7, Cameroon CM7, Colombia CO7, Ethiopia ET7, Ghana GH8, Guatemala GU6, India IA7, Jordan JO7, Kenya KE8, Liberia LB7, Myanmar MM7, Nepal NP7, Nigeria NG7, Pakistan PK7, Philippines PH7, Tajikistan TJ7, Tanzania TZ8, Turkey TR7	Ranked features of the experience of emotional violence by Country
Age in 5-year groups	1: 15-19, 2: 20-24, 3: 25-29, 4: 30-34, 5: 35-39, 6: 40-44, 7: 45–49	Controls for age-related variation in GBV exposure
Highest education level	0: No education, 1: Primary, 2: Secondary, 3: Higher, 9: Missing	Key socioeconomic factor; often inversely correlated with GBV
Total children ever born	0–20	Family responsibilities may influence exposure and reporting
Current marital status	0: Never in union, 1: Married, 2: Living with partner, 3: Widowed, 4: Divorced, 5: No longer living together/separated, 9: Missing	Associated with vulnerability to partner-related violence
Type of place of residence	1: Urban, 2: Rural	Captures geographic and cultural context
Respondent's occupation	0: Not working, 1: Professional/technical/managerial, 2: Clerical, 3: Sales, 4: Agricultural self-employed, 5: Agricultural employee, 6: Household and domestic, 7: Services, 8: Skilled manual, 9: Unskilled manual, 98: Don't know, 99: Missing	Economic independence as a protective or risk factor
Experienced any emotional violence	0: No, 1: Yes, 9: Missing	Primary outcome variable
Experienced any severe physical violence by husband/partner	0: No, 1: Yes, 9: Missing	Secondary outcome variable
Experienced any sexual violence by husband/partner	0: No, 1: Yes, 9: Missing	Secondary outcome variable
Respondent's father ever beat her mother	0: No, 1: Yes, 8: Don't know, 9: Missing	Indicator of intergenerational transmission of violence
Respondent earns more than husband/partner	1: More than him, 2: Less than him, 3: About the same, 4: Husband/partner does not bring in money, 8: Don't know	Economic dependence and inequality
Ever been humiliated by husband/partner	0: Never; 1: Often; 2: Sometimes; 3: Yes, but not in the last 12 months; 4: Yes, but frequency in last 12 months missing	Specific and nuanced indicator of emotional abuse
Ever been threatened with harm by husband/partner	0: Never; 1: Often; 2: Sometimes; 3: Yes, but not in the last 12 months; 4: Yes, but frequency in last 12 months missing	Specific and nuanced indicator of emotional abuse
Ever been insulted or made to feel bad by husband/partner	0: Never; 1: Often; 2: Sometimes; 3: Yes, but not in the last 12 months; 4: Yes, but frequency in last 12 months missing	Specific and nuanced indicator of emotional abuse

The independent variables are those that potentially influence or predict the dependent variables. These include a wide range of factors related to the respondents' demographic and socioeconomic context. These include country code and phase, the age of women, their current marital status, their highest educational level and occupation, the type of residence, the total number of children ever born and the whether respondent's father ever beat her mother. Table 2 gives the detailed descriptions of these variables, their coding and their relevance to the study.

Feature importance analysis

We applied feature importance analysis, based on a random forest classifier, in order to identify and rank the most influential variables contributing to different forms of violence. This approach is particularly useful in GBV research where multiple, interrelated social, economic, and cultural variables interact in complex ways. It improves interpretability by quantifying the relative contribution of each input variable to the predictive outcome, thereby facilitating data-driven prioritisation of risk factors. We selected a random forest model as it can seamlessly handle both categorical (e.g. marital status, occupation) and continuous variables (e.g. age, number of children) without requiring complex preprocessing, which aligns well with the structure of DHS data. However, while feature importance provides insight into which variables are most predictive, it does not offer information about causal relationships or interactions between features.

Ethical considerations

The data handling procedures followed strict adherence to the data privacy and sharing policies established by US AID. Data was neither shared in its entirety nor in subsets, encompassing both raw and processed forms. All data processing operations were conducted within a secure environment utilising university credentials, ensuring compliance with institutional security protocols. Additionally, measures were implemented to mask any victim identity data, thereby safeguarding sensitive information. These technical safeguards guaranteed the integrity and confidentiality of the data throughout the processing pipeline, aligning with the established standards for data privacy and security.

Results

The analysis of the final data sample, which includes 96,422 women, identifies several critical factors influencing experiences of emotional, severe physical, and sexual violence perpetrated by a husband or partner. The findings are initially presented according to each category of violence, followed by a detailed examination of emotional violence. This latter section first considers a global perspective, examining variations by country, and then explores the intersection of socioeconomic factors with the risk of emotional violence. Specifically, the analysis addresses the influence of occupational, educational, economic, and familial factors on the prevalence of emotional violence.

Key influencers for experience of emotional, severe physical and sexual violence

Feature importance analysis was conducted to identify the variables most strongly associated with each form of violence, with scores reflecting the relative contribution of each factor in predicting whether respondents reported experiencing emotional, severe physical, or sexual abuse. The results are reported below, summarised in Tables 3–5 and visualised in Figure 3.

Table 3 shows the most significant factor influencing emotional violence was whether the respondent's father had ever beaten her mother, showing the highest importance score (0.465) and a strong association with emotional violence. Other influential factors included current marital status (0.167), type of residence (0.132), educational level (0.084), and occupation (0.038), each contributing notably to the risk of experiencing emotional violence. Geographic factors (0.036), number of children born (0.031), age in 5-year groups (0.020), and greater earnings capacity (0.023) had

Table 3. Ranking of factors contributing to experience of emotional violence.

Ranking	Factor	Importance
1	Respondents father ever beat her mother	0.465
2	Current marital status	0.167
3	Type of place of residence	0.132
4	Highest educational level	0.084
5	Respondents occupation	0.038
6	Country	0.036
7	Total children ever born	0.031
8	Respondent earns more than husband/partner	0.023
9	Age in 5-year groups	0.020

Table 4. Ranking of factors contributing to experience of severe physical violence.

Ranking	Factor	Importance
1	Respondents father ever beat her mother	0.533
2	Current marital status	0.166
3	Type of place of residence	0.128
4	Highest educational level	0.080
5	Total children ever born	0.026
6	Respondents occupation	0.017
7	Respondent earns more than husband/partner	0.017
8	Country	0.014
9	Age in 5-year groups	0.012

Table 5. Ranking of factors contributing to experience of sexual violence.

Ranking	Factor	Importance
1	Respondents father ever beat her mother	0.524
2	Current marital status	0.167
3	Type of place of residence	0.129
4	Highest educational level	0.079
5	Respondents occupation	0.033
6	Total children ever born	0.025
7	Respondent earns more than husband/partner	0.017
8	Country	0.012
9	Age in 5-year groups	0.010
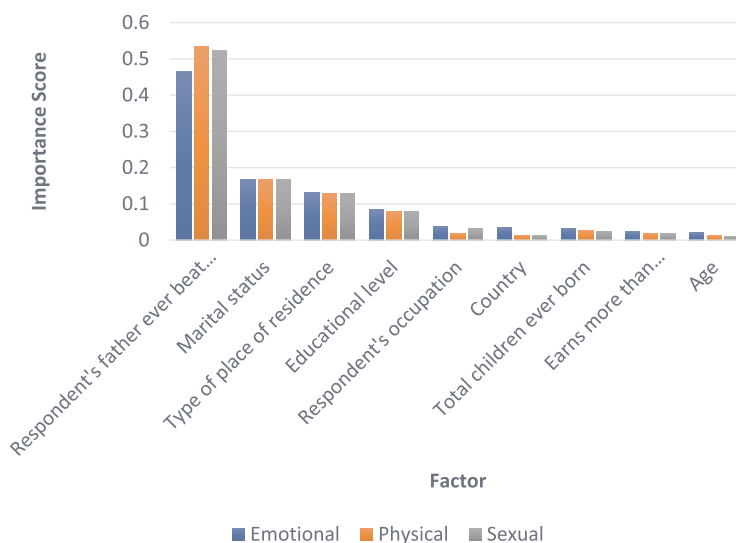
Figure 3. Factors contributing to experience of emotional, physical and sexual violence.

smaller but still relevant impacts. These findings highlight the complex interplay of personal, social, and historical factors that contribute to emotional violence, with childhood exposure to domestic violence emerging as the strongest predictor.

An analysis, shown in Table 4, of key influencers for experiencing severe physical violence by a husband or partner identified several significant factors. The most important factor was whether the respondent's father had ever beaten her mother, with the highest importance score (0.533) and a strong association with severe physical violence. Current marital status (0.166), type of residence (0.128), education level (0.080), and occupation (0.017) also played notable roles in the likelihood of experiencing severe physical violence. Other factors, such as country (0.014), number of children born (0.026), age in 5-year groups (0.012), and respondent's higher salary (0.017) had smaller but still relevant impacts. Overall, a history of domestic violence in childhood and current marital status were the most influential, while occupation and family size also contributed to the risk.

The most significant factor, as shown in Table 5, contributing to the experience of sexual violence was whether the respondent's father had ever beaten her mother, showing the highest importance score (0.524) and a substantial link to sexual violence. Other significant factors included current marital status (0.167), type of residence (0.129), and education level (0.079), all contributing notably to the risk. Factors such as occupation (0.033), country (0.012), number of children born (0.025), age in 5-year groups (0.010), and respondents earning capability (0.017) had smaller but still relevant impacts. Overall, a history of domestic violence during childhood emerged as the most influential factor, while marital status and residence also played important roles.

Overall (as depicted in Figure 3), the history of violence in the family (whether the father beat the mother) emerges as the most influential predictor across emotional, severe physical, and sexual violence, reinforcing the idea that intergenerational violence is a critical risk factor. Current marital status and place of residence are also consistently important across all types of violence, showing that a woman's personal relationships and living environment play key roles in her vulnerability to violence. Educational attainment provides some protection, though its effect size varies slightly depending on the type of violence. Other factors such as occupation, number of children, and age feature as relatively less important in comparison.

Key influencers of experience of emotional violence by country

By focusing on the factors that contribute to emotional violence on a national scale, we can gain a global understanding of the key areas that require targeted intervention. Table 6 presents a country-specific analysis of the relative importance of various factors linked to experiences of emotional violence.

On a global scale, factors such as humiliation, insults, and threats from husbands or partners consistently emerge as significant across countries reporting emotional violence. These findings align with previous research highlighting the role of a familial history of domestic violence, particularly where the father perpetrated violence against the mother. This factor is consistently ranked as one of the most influential contributors to the experience of emotional violence.

Further, factors such as the number of children, marital status, and age appear to be the next most significant contributors to emotional violence. However, when examining other factors such as education level, occupation, salary capacity, and type of residence, some variations emerge across countries. For example, in Afghanistan, Guatemala, Jordan, and Pakistan, the type of residence plays a slightly more prominent role, while in Tanzania, education level is less significant compared to other factors.

Intersections of socioeconomic factors and emotional violence risk: occupational, educational, economic, and familial factors and impact on prevalence of emotional violence

Next, we explore the impact of various socioeconomic factors that increase the risk of experiencing emotional violence. Using the data from the DHS datasets, particularly the domestic violence

Table 6. Ranked features and their relative importance for experience of emotional violence by country.

	Experienced humiliation Importance and [Ranking]	Experienced insults Importance and [Ranking]	Experienced threats Importance and [Ranking]	Father ever beat mother Importance and [Ranking]	Total children ever born Importance and [Ranking]	Current marital status Importance and [Ranking]	Age Importance and [Ranking]	Educational level Importance and [Ranking]	Respondent's occupation Importance and [Ranking]	Salary Importance and [Ranking]	Type of residence Importance and [Ranking]
Afghanistan (n = 348)	0.412 [1]	0.273 [2]	0.134 [4]	0.160 [3]	0.007 [5]	0.001 [11]	0.003 [6]	0.001 [10]	0.002 [7]	0.001 [9]	0.002 [8]
Armenia (n = 4)	0.401 [1]	0.231 [2]	0.148 [3]	0.042 [5]	0.103 [4]	0.035 [6]	0.011 [8]	0.001 [10]	0.015 [7]	0.007 [9]	0.001 [11]
Cameroon (n = 002)	0.340 [1]	0.268 [2]	0.227 [3]	0.107 [4]	0.013 [6]	0.018 [5]	0.006 [7]	0.003 [10]	0.004 [9]	0.005 [8]	0.001 [11]
Ethiopia (n = 3992)	0.361 [1]	0.330 [2]	0.153 [3]	0.112 [4]	0.019 [5]	0.011 [6]	0.004 [7]	0.002 [8]	0.002 [9]	0.001 [10]	0.001 [11]
Ghana (n = 337)	0.314 [2]	0.344 [1]	0.147 [4]	0.152 [3]	0.008 [6]	0.003 [10]	0.014 [5]	0.003 [9]	0.004 [8]	0.005 [7]	0.001 [11]
Guatemala (n = 639)	0.309 [2]	0.313 [1]	0.178 [3]	0.121 [4]	0.039 [5]	0.013 [6]	0.007 [7]	0.003 [10]	0.005 [8]	0.002 [11]	0.004 [9]
India (n = 56250)	0.369 [1]	0.259 [2]	0.149 [4]	0.179 [3]	0.003 [7]	0.003 [8]	0.001 [9]	0.001 [10]	0.019 [5]	0.014 [6]	0.001 [11]
Jordan (n = 418)	0.297 [2]	0.331 [1]	0.137 [4]	0.190 [3]	0.013 [5]	0.005 [8]	0.008 [6]	0.008 [7]	0.001 [11]	0.002 [10]	0.003 [9]
Kenya (n = 2156)	0.318 [2]	0.352 [1]	0.155 [3]	0.114 [4]	0.014 [5]	0.012 [7]	0.013 [6]	0.005 [9]	0.007 [8]	0.003 [10]	0.002 [11]
Liberia (n = 203)	0.357 [1]	0.289 [2]	0.135 [3]	0.113 [4]	0.022 [5]	0.017 [7]	0.022 [5]	0.014 [9]	0.013 [9]	0.011 [10]	0.003 [11]
Myanmar (n = 2073)	0.367 [1]	0.286 [2]	0.152 [3]	0.136 [4]	0.018 [5]	0.016 [6]	0.004 [8]	0.002 [10]	0.004 [9]	0.007 [7]	0.001 [11]
Nepal (n = 03)	0.350 [1]	0.268 [2]	0.162 [3]	0.160 [4]	0.020 [5]	0.012 [6]	0.011 [7]	0.003 [10]	0.004 [9]	0.005 [8]	0.002 [11]
Nigeria (n = 7928)	0.349 [2]	0.349 [1]	0.157 [3]	0.138 [4]	0.010 [6]	0.010 [5]	0.002 [8]	0.001 [10]	0.001 [9]	0.002 [7]	0.001 [11]
Pakistan (n = 5426)	0.374 [1]	0.323 [2]	0.119 [4]	0.171 [3]	0.003 [5]	0.001 [11]	0.001 [6]	0.001 [7]	0.001 [8]	0.001 [10]	0.001 [9]
Philippines (n = 4265)	0.327 [1]	0.255 [2]	0.153 [3]	0.054 [5]	0.092 [4]	0.028 [6]	0.028 [7]	0.011 [10]	0.023 [8]	0.015 [9]	0.007 [11]
Tajikistan (n = 356)	0.371 [1]	0.302 [2]	0.147 [3]	0.111 [4]	0.026 [5]	0.022 [6]	0.008 [7]	0.003 [9]	0.004 [8]	0.001 [11]	0.001 [10]
Tanzania (n = 2617)	0.345 [1]	0.330 [2]	0.137 [4]	0.140 [3]	0.016 [5]	0.014 [6]	0.005 [7]	0.001 [11]	0.004 [8]	0.003 [9]	0.001 [10]

module, we examine the respondents' occupation, education level, earning potential, and family history of violence.

Firstly, the analysis of the respondent's occupational status and its impact on emotional violence (Table 7) shows a significant variation in the prevalence across occupational groups. Household and domestic workers experience the highest prevalence (18.39%), indicating a substantial risk within this sector, even at the lower CI range. Agricultural employees (11.87%) and unskilled manual workers (10.23%) show considerable risks, while those in agricultural self-employment report a slightly lower prevalence (9.54%). In contrast, individuals in services, professional, and technical occupations display lower prevalence rates (8.07% to 8.41%), suggesting that better working conditions may correlate with reduced risk. Clerical workers, with the lowest prevalence (4.65%), further highlight how occupational status and working conditions may influence vulnerability to emotional violence. Individuals uncertain of their occupational status exhibit a high prevalence (16.67%), although this result has high variability due to a small sample size.

The data in Table 8 reveals a strong correlation between educational attainment and the prevalence of emotional violence. Individuals with no education experience the highest prevalence (10.72%), suggesting that lack of education is a significant risk factor. This prevalence decreases among those with primary education (8.23%) and drops further for individuals with secondary education (6.20%), indicating a potential protective effect as educational levels increase. Those with higher education report the lowest prevalence (4.74%), underscoring the idea that education may empower individuals and reduce their vulnerability to emotional violence.

Economic factors demonstrate a clear relationship with the prevalence of emotional violence, as shown in Table 9. Respondents whose partners do not contribute financially report the highest prevalence (14.62%), indicating a significant risk associated with financial dependency. Interestingly, individuals who earn more than their partners also experience a high prevalence (12.07%), suggesting that financial imbalances, whether in terms of dependency or dominance, may contribute to emotional violence risk. This prevalence decreases for those earning less than their partners

Table 7. Occupational impact on emotional violence prevalence.

Respondent's occupation	n	Total	Prevalence rate (%)	95% CI
Household and domestic	48	261	18.39	[13.69–23.09]
Agricultural – employee	212	1,786	11.87	[10.37–13.37]
Unskilled manual	162	1,583	10.23	[8.74–11.72]
Agricultural – self employed	171	1,792	9.54	[8.18–10.90]
Not working	1241	14,725	8.42	[7.97–8.87]
Services	233	2,769	8.41	[7.38–9.44]
Professional/technical/managerial	199	2,467	8.06	[6.99–9.14]
Sales	405	5,169	7.83	[7.10–8.56]
Skilled manual	106	1,490	7.11	[5.80–8.41]
Clerical	29	623	4.65	[3.00–6.30]
Don't know	3	18	16.66	[0.10–33.88]

n: number of individuals within each category who reported experiencing emotional violence. For example, in the 'Household and domestic' occupation category, 48 individuals reported emotional violence.
Total: number of respondents in each category, regardless of whether they experienced emotional violence or not. For instance, there were 261 respondents working in 'Household and domestic' roles.

Table 8. Educational impact on emotional violence prevalence.

Highest educational level	n	total	Prevalence rate (%)	95% CI
No education	1106	10,320	10.71	[10.12–11.31]
Primary	776	9,430	8.22	[7.67–8.7]
Secondary	885	14,277	6.19	[5.80–6.5]
Higher	291	6,145	4.73	[4.20–5.26]

Table 9. Economic empowerment and emotional violence prevalence.

Respondent earns more than husband/partner	N	total	Prevalence rate (%)	95% CI
Husband/partner doesn't bring in money	31	212	14.62	[9.86–19.37]
More than him	133	1102	12.06	[10.14–13.99]
Less than him	699	7033	9.93	[9.23–10.63]
Don't know	19	203	9.35	[5.35–13.36]
About the same	129	1505	8.57	[7.15–9.98]

Table 10. Parental violence impact on emotional violence prevalence.

Respondent's father ever beat her mother	n	Total	Prevalence rate (%)	95% CI
Yes	1027	3,082	33.32	[31.65–34.98]
Don't know	233	859	27.12	[24.15–30.09]
No	1795	11,193	16.03	[15.35–16.71]

(9.94%) and is lowest among those with similar earnings (8.57%), indicating that financial parity may foster a more stable environment and potentially reduce the risk of emotional violence.

A significant association is observed (Table 10) between parental violence and the prevalence of emotional violence among respondents. Those who report a history of their fathers beating their mothers show the highest prevalence (33.32%), indicating a strong intergenerational transmission of violence and emphasising the impact of familial violence on future generations. Respondents uncertain of their family history also experience a high prevalence (27.12%), suggesting that ambiguity regarding familial violence may still elevate risk. Conversely, those from non-violent family backgrounds report the lowest prevalence (16.04%), suggesting that a stable, non-violent upbringing may reduce susceptibility to emotional violence.

Discussion

Understanding the multifaceted nature of violence against women requires a nuanced exploration of the intersecting factors that contribute to this pervasive issue. This study considers the complex interplay of individual, familial, societal, and economic determinants that shape women's experiences with emotional, physical, and sexual violence. Our study indicates that women who witnessed their fathers beating their mothers are at the highest risk of experiencing emotional, physical, or sexual violence themselves. This aligns with findings that childhood exposure to violence normalises abuse, perpetuating cycles of intergenerational violence (Capaldi et al., 2012; Jewkes, 2002; Kitzmann et al., 2003). Such experiences profoundly shape attitudes towards violence, fostering either acceptance or victimisation in adulthood. Factors such as marital status and place of residence also play significant roles. Women in rural areas or unstable marriages are more vulnerable, reflecting findings from studies that link these conditions to higher violence exposure (Abramsky et al., 2014; Heise, 1998). Education offers protection; higher educational attainment equips women with knowledge and confidence to resist oppressive norms (Koenig et al., 2006). Economic independence has mixed effects. Women in professional roles often face reduced risks but earning more than male partners can heighten tensions in some patriarchal settings (Eswaran & Malhotra, 2011; Vyas & Watts, 2009). Smaller factors, such as family size and age, subtly influence household stress dynamics (Ellsberg & Heise, 2005). Targeted interventions such as SASA! demonstrate the importance of addressing cultural norms and supporting communities to reduce violence (Abramsky et al., 2014). Tackling these intertwined factors requires policies that empower women and break the cycle of violence.

The analysis of key features influencing the experience of emotional violence across 19 countries reveals that the experience of humiliation, insults, and threats consistently ranks as the most important factors. In Afghanistan, Armenia, and India, humiliation stands out as the top contributor,

with its relative importance consistently above 0.4. Other significant factors include father's history of violence and the total number of children ever born, though their influence varies by country. In countries such as Tanzania and the Philippines, occupation and education rank lower in comparison, highlighting the country-specific variability in key influencers of emotional violence (García-Moreno et al., 2015b).

Our study observed the varying prevalence of emotional violence across different occupations, with certain groups, particularly household and domestic workers, facing the highest risks. The prevalence of emotional violence among household and domestic workers (18.39%) reflects the vulnerabilities of this sector, often due to isolated working conditions and a lack of support (Devries et al., 2013). Agricultural employees and unskilled manual workers also experienced high rates of emotional violence (11.87% and 10.23%, respectively), most likely due to precarious working conditions and low job security. These findings align with research showing that poor working conditions contribute to an increased risk of emotional violence in such sectors. On the other hand, professional and technical workers had lower prevalence rates, suggesting that better job security and working conditions may provide some protection (Devries et al., 2013).

Further highlighted is the significant relationship between education and the prevalence of emotional violence. Individuals with no education exhibit the highest prevalence (10.71%), suggesting that lack of education may increase susceptibility to emotional violence. As educational attainment rises, the prevalence of emotional violence decreases: primary education (8.22%), secondary education (6.19%), and the lowest prevalence among those with higher education (4.73%). This trend aligns with previous studies showing that education empowers individuals, promotes awareness, and strengthens resilience against violence. Additionally, education is linked to greater economic independence and social mobility, both of which contribute to reducing vulnerability to abuse (Ackerson et al., 2008; Oluwagbemiga et al., 2023).

Our study illustrates a clear link between economic factors and the prevalence of emotional violence. Respondents whose partners do not contribute financially report the highest prevalence (14.62%), suggesting that financial dependence may increase vulnerability to emotional violence. Interestingly, individuals who earn more than their partners also experience a high prevalence (12.06%), indicating that financial imbalances, whether based on dependence or dominance, can contribute to emotional violence risk. Conversely, those earning less than their partners (9.93%) and those with similar earnings (8.57%) report lower prevalence rates. This suggests that financial parity may promote more balanced relationships, reducing the risk of emotional violence. These results support the notion that economic empowerment and financial balance are key factors in mitigating emotional violence risk, as seen in similar studies (Abramsky et al., 2011; García-Moreno et al., 2006; Heise, 2011). Addressing economic imbalances can be a crucial strategy in efforts to prevent intimate partner violence.

Moreover, the significant association between parental violence and the prevalence of emotional violence is highlighted in our study. Respondents who reported a history of their fathers beating their mothers have the highest prevalence (33.32%), emphasising the intergenerational nature of violence. This suggests that individuals exposed to familial violence are at a greater risk of experiencing emotional violence in adulthood, reinforcing findings from other studies on the transmission of violence across generations (Dragovich & Borinskaya, 2019; García-Moreno et al., 2006). Interestingly, respondents who were uncertain about their family history also reported a high prevalence (27.12%), indicating that even uncertainty regarding family violence may elevate the risk of emotional violence. In contrast, those from non-violent family backgrounds had a significantly lower prevalence (16.03%), suggesting that a stable, non-violent upbringing may act as a protective factor. These findings underscore the critical role of early family dynamics in shaping vulnerability to emotional violence and highlight the need for targeted interventions aimed at addressing family violence histories.

Overall, while physical and sexual violence have been the subject of extensive research, emotional and psychological violence has received comparatively little scholarly attention. Some

researchers (Winstok & Sowan-Basheer, 2015) contend that 'psychological partner violence is still a vague, unclear, and controversial concept', and as a result, its contribution to the field of partner violence research remains uncertain. In contrast, others (Alvarez et al., 2015; Park et al., 2017) emphasise the significance of psychological violence, highlighting its profound effects on mental health and its influence on cultural perceptions of the acceptability and seriousness of emotional violence. Recent studies (Clark et al., 2023) have sought to analyse patterns of psychological abuse to facilitate cross-country comparability, particularly in low- and middle-income countries (LMICs). These ongoing efforts underscore the need for a more nuanced understanding of psychological violence and its definitions.

These findings can be interpreted within the broader structural context of patriarchy and entrenched gender norms that shape women's roles, opportunities, and their susceptibility to abuse. Emotional violence often flourishes in patriarchal societies where male dominance is institutionalised and normalised through cultural norms (Gupta et al., 2023; Javed & Chattu, 2020). Normative beliefs around masculinity, authority, and family honour further legitimize emotionally abusive behaviours, framing them as acceptable forms of discipline rather than violence (Jewkes et al., 2015). Emotional violence is thus not merely an interpersonal issue, but a reflection of deeply embedded cultural norms and structural inequalities. Recognising this broader context is essential for developing multisectoral responses that challenge the cultural, economic, and institutional systems sustaining gender inequality and abuse (Heise & Kotsadam, 2015).

Furthermore, in the study of emotional and psychological violence, understanding causal relationships, rather than simple associations, can yield deeper insights, such as estimating the impact of childhood exposure to violence on the risk of experiencing emotional abuse later in life. However, establishing causal inference in observational data presents significant challenges (Rose, 2019). In population health research, these limitations are compounded by the complexity and diversity of available datasets, necessitating a more rigorous evaluation of different causal inference methods (Matthay et al., 2020). By complementing machine learning techniques with causal inference frameworks in future studies, researchers can build on predictive insights to explore the pathways and mechanisms underlying emotional violence.

Conclusion

This study provides critical new evidence on the prevalence and drivers of emotional violence, an often invisible yet deeply harmful form of gender-based abuse. Whereas most global analyses focus narrowly on physical or sexual violence, our research highlights emotional violence as a standalone category, revealing its strong association with mental health issues, diminished agency, and intergenerational cycles of harm.

We strongly recommend that national and international monitoring frameworks, including the DHS and other population-level surveys, expand their instruments to more comprehensively capture emotional violence. This includes incorporating validated, in-depth measures of psychological abuse – such as sustained humiliation, coercion, and emotional neglect – which remain under-reported and under-acknowledged. Prioritising emotional violence is essential for achieving SDG 5.2, while also contributing to broader development goals such as SDG 3 (health and well-being) and SDG 10 (reducing inequalities). Governments and development partners should seek to close this critical gap in data, services, and protection, as what remains unmeasured remains unaddressed.

Disclosure statement

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