#### RESEARCH ARTICLE



# Analysis of gender-based violence in the context of the sustainable development goals

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#### **Abstract**

Through the 2030 Agenda, international bodies have set out 17 highly interconnected Sustainable Development Goals (SDGs) to set course for the equitable and just development of society. SDG5 seeks to empower women and girls as a way of guaranteeing their fundamental rights, which are sometimes violated by the physical superiority of men who exercise their power by undermining women's freedoms. This study aims to analyse the connection between SDG1, SDG3, SDG8 and SDG11, and the protection of women, identifying the lines of action needed to favour access to justice for victims of gender-based violence. The study was carried out on a panel sample of the 17 Spanish Autonomous Regions over a decade (2012-2021), using the generalised method of moments, specifically the xtabond2 estimator. Development was carried out in two stages: (1) the measures implemented by the Spanish authorities and the quality of life of the population were analysed, (2) six representative dimensions of quality of life associated with different targets of the SDGs were studied. Both scenarios were designed with the common objective of determining their impact on reporting to the police. The results show the need to reinforce protection orders, as well as to put in place the necessary measures to improve women's quality of life in order to attain a violence-free society. Specifically, education, economic stability, mental and physical health, and work must be enhanced. In short, socio-economic policies should be oriented towards the creation of a climate of security that favours access to justice for battered women.

#### **KEYWORDS**

gender-based violence, quality of life, socio-economic policies, sustainable development goals

#### 1 | INTRODUCTION

In 2015, the principal world leaders established 17 Sustainable Development Goals (SDGs) as an action plan aimed at achieving global sustainability, constituting one of the basic pillars of the 2030 Agenda

(United Nations, 2015). The eradication of poverty, the protection of the planet and the prosperity of all nations mark the central thread of the SDGs, which is accompanied by 169 targets to cover each and every one of the aspects contemplated. The signatory countries undertook the introduction of the basic guidelines into their strategic

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agendas in order to achieve full compliance with all of them, establishing the necessary regulations to guide global economic sectors and citizens towards this common goal (Berrone et al., 2023). Having completed over half of the established period, evidence shows that the environmental, economic and social dimensions are being implemented unevenly, leading to notable delays in certain geographical areas (Montesano et al., 2023; Puertas & Marti, 2023). The causes lie primarily in the need to overcome a myriad of obstacles, as well as existing economic and legal constraints that call for prioritising goals and analysing synergies to achieve the best use of allocated resources (Messerli et al., 2019; Plag & Jules-Plag, 2020). Humanity must intensify its awareness and commitment to achieving each and every goal. To date, the political impact of the SDGs is not achieving the pace needed to ensure their fulfilment (Biermann et al., 2022). According to Huang (2023) the removal of barriers together with the empowerment of a favourable organisational climate would facilitate the implementation of the SDGs.

The literature has produced a wealth of evidence for the need to harness synergies between the SDGs, showing linkages and trade-offs to guide the adoption of policies aimed at a wide range of purposes (Boar et al., 2022; Venkatramanan et al., 2021). Specifically, SDG5 (Gender Equality) together with SDG17 (Partnerships for the Goals) allow for more powerful advancement towards progress, while SDG10 and SDG16 (Reduced Inequalities and Peace, Justice and Strong Institutions) may pose strong barriers (Anderson et al., 2022). Tandon et al. (2022) conduct a review of research aimed at determining the connection between SDG6 (Clean Water and Sanitation) and SDG5. showing the absence of specific legislation supporting gender to its full extent. Strong links have also been found between SGD1 (No Poverty), SDG2 (Zero Hunger) and SDG5, manifesting certain signs of success in implementing all the dimensions that define the 2030 Agenda (Kroll et al., 2019). Likewise, Song and Jang (2023) highlight the difficulty of developing policies that require coordination between SDGs, instead recommending cross-sectoral strategies aimed at achieving goals that require coordination based on the interrelationships of territories.

In this struggle for a better world, SDG5 defends gender equality as a way to guarantee the sustainable and equitable development of the planet. It is about empowering women and girls, avoiding any action that could discriminate and/or limit their freedom. This is an enormous obstacle in the development and fair representation of women in society (United Nations, 2015). This SDG is considered a fundamental human right and is the foundation for achieving the other goals aimed at building a prosperous and peaceful world. Its fulfilment would prevent economic and health shocks from hitting women more virulently, as recently reflected in studies on the impact of COVID-19 (Dasgupta, 2023; Eden & Wagstaff, 2021; UNCTAD, 2020).

In this environment of working towards universal sustainability, violence against women (VAW) is present not only in SDG5 (5.2: Eliminate all forms of violence against women and girls including trafficking and sexual and other forms of exploitation, and 5.3: Eliminating all harmful practices such as child, early and forced marriages and female genital

mutilation) but also in some of the targets of SDG16 (16.1: Reducing all forms of violence and related deaths to attain peaceful and inclusive societies, and 16.2: Ending abuse, exploitation, trafficking and all forms of violence against and torture of children). They call for the elimination of violence in all its facets, the origin of which lies primarily in the inequality of power and resources between men and women, sometimes institutionalised in sexist legislation and social norms (García-Moreno et al., 2015). It is a scourge that undermines any possibility of achieving the goals set by international institutions, constituting the greatest obstacle to overcome for all the dimensions implicit in sustainable development (Bhattacharyya, 2022). Furthermore, VAW hinders poverty reduction and sustainable development through its negative impact on women's participation in education, employment and civic life, as recognised by the United Nations (UNCTAD, 2015).

The scientific community has put a lot of effort into trying to contextualise the problem. Thus, for example, the study by Sardinha et al. (2022) concludes that governments are losing the fight against VAW, society is demanding more precise public health-oriented actions for more effective interventions. However, it should be noted that not all regions are evolving in the same way. Lower-income and conflictaffected countries have a higher prevalence than the global average, where economic insecurity, gender inequality, discriminatory family rights and insufficient support services are very present (Grose et al., 2021; Sardinha & Nájera Catalán, 2018). In the specific case of violence against women, there are countries with high levels of economic and human development that nevertheless have high rates of inequality and gender-based violence. According to the Expert Group on Gender and Employment (EGGE), there are several economic risk factors for the pervasiveness of violence against women. One of these is that they have difficulty accessing financial resources, which undermines their economic capacity. Women are also less likely to participate in the labour market, are more likely to work in the informal economy, and are disproportionately more likely than men to be involved in non-standard, precarious work, which typically offers fewer opportunities for training and advancement and in turn increases the risk of segregation (European Commission, 2009).

Furthermore, the confinement policies implemented to combat COVID-19 have been found to further aggravate the situation (Akel et al., 2022; Viero et al., 2021). The key to stopping this stigma is to create a supportive environment for victims, providing them with the safety to encourage them to report their harassers. However, issues such as race, power disparities, fear and even self-blame are some of the barriers that need to be overcome to boost access to justice (Decker et al., 2019).

The objective of the proposed research focuses on analysing the context closest to the victims to detect those items that encourage them to denounce their aggressors to strengthen and implement them in those areas where the protection chains for women are failing. Specifically, the aim is to: (1) the enabling determinants of reporting abuse to the police and (2) the SDGs as an avenue for advancing access to justice. The results will provide valuable quantitative information to guide the authorities in the right direction in order to address this violence that knows no borders. Taking the 17 Spanish Autonomous

Communities, during the period 2012-2021, and using dynamic models to incorporate internally generated causality relations in the estimates, as well as carrying out an adequate treatment of the endogeneity problem.

This article addresses the impact of various aspects of SDGs 1, 8, 3, 4, and 11 by broadening the focus of analysis of recent studies focused on more specific issues, usually in developing countries. Thus, for example, Nunbogu and Elliott (2022) analyse the effect of the right to water and sanitation (SDG6) on violence against women and girls in Low-middle-income countries. In this line, Caridade et al. (2022) assess the link between SDG5 and climate change. Vijeyarasa and Liu (2022) argue for interpreting SDGs in the human rights framework to promote gender justice in Bangladesh. The proposed research is a novel analysis, providing quantitative evidence of which aspects need to be strengthened in order to help victims report abuse. The results will serve as a guide for decision-makers in the choice of measures to strengthen those aspects most closely linked to the protection of the women affected. In addition, legislators will have reliable information that will allow them to address the problem in a unified manner in all territories and will be able to propose its escalation to the rest of the Furopean territories.

The article is structured as follows. Section 2 reviews the literature and contextualises the advances made to try to explain the different facets of VAW. Section 3 presents the methodology and variables used. Section 4 analyses the results obtained in the research, as well as a discussion of the existing evidence. Finally, the conclusions, and the study's contribution and limitations are summarised in Section 5.

#### 2 | LITERATURE REVIEW: CONTEXTUALISATION OF GENDER-BASED VIOLENCE

Gender-based violence is widely experienced by women; hence it is mostly labelled as VAW. It is seen in SDG5 as a reflection of the historical inequality between men and women, which still persists in the 21st century. Male domination deprives women of basic freedoms and subordinates them to the authority of their partner, reaching an extreme level of intimidation in any of its manifestations: physical, sexual, verbal, psychological and even socio-economic (Convention, 2011).

Traditionally, the association between inequality and genderbased violence has been widely defended. Feminist movements such as #Metoo and #Not one more demand that governments provide these organisations with resources to fight for women's rights and freedoms (García-Moreno & Amin, 2019). The abusive power of men, a result of existing inequalities, prevents the escalation of genderbased cruelty from being halted (Roggeband, 2021). According to Karlsson et al. (2022) in the EU, awareness and equality would reinforce the perception of the seriousness of the problem. However, other authors such as Gracia et al. (2019), Permanyer and Gomez-Casillas (2020) and Wemrell et al. (2022) question the close relationship defended in the literature between inequality and VAW. Thus, in Sweden, a country characterised as one of the most egalitarian in the world, the so-called Nordic Paradox is found, where high prevalence rates of VAW are found together with similar positions of men and women in all strata of society and the economy. The evidence confirms that the problem is so serious that there is no unanimity even in determining its origin.

Efforts by the scientific community to analyse the causes of this behaviour have identified some habits and situations that exacerbate the problem. Alcohol consumption (Bhatta et al., 2021), lack of economic stability (Cardoso et al., 2016), loss of family values (Tausch, 2019) and poverty (Das & Roy, 2020) are the triggers most frequently repeated in the studies. In parallel, the effects on women are substantial, ranging from mental health problems to physical injuries, where depression is prominent (Ashekenazi et al., 2023; Yuan & Hesketh, 2019) along with suicide (Alonzo & Zubaroglu-loannides, 2022; Dantas et al., 2023). Other authors have focused their research on valuing these consequences in terms of costs, assigning a monetary value to the after-effects produced. Vyas et al. (2023) quantify health care costs, showing a range from \$29.72 (South Africa) to \$156.11 (Romania), plus the loss of productivity due to visits to health care facilities. Chadha et al. (2022) propose increasing occupational health care services by offering counselling to affected employees. These realities justify the urgency of a greater joint involvement of those responsible in companies and public authorities to implement measures to facilitate their visibility and, in this way, to implement the necessary tools for their prevention (Brown et al., 2023; Duvvury et al., 2022).

Another aspect to highlight is the existing attitude towards this problem; the literature reflects the need to offer specific training to all those who define the closest nucleus of action. In this sense. Serrano-Motilla et al. (2023) call for greater preparation of the police system to adequately manage the situation, offering the support and security demanded. Others such as Çelik and Aydin (2019) and Shaqiqi et al. (2022) consider that intensive training for nurses is essential, as they play an essential role in the early detection of conflict. Ferrer-Perez et al. (2020) give attitudes a relevant position, considering them a risk factor associated with public and private responses. According to Mondal and Paul (2021) the justification of spousal violence coupled with controlling behaviour must be eradicated, calling for more education for girls to ensure their autonomy and promote equality. Gracia (2022) points out that the public attitude towards VAW is a reflection of socio-cultural norms, determining the existing social climate. It is considered essential to achieve low tolerance among the population, in order to be able to bring conflict to the surface and contribute to social control.

Given the magnitude and seriousness of the situation, prevention could soften the consequences. Klement et al. (2019) advocate the importance of prevention-focused university education, intensifying the frequency of training sessions to achieve the desired goal. The identification of factors that increase the likelihood of VAW should be the focus of all the measures implemented. This is followed by the need to design a plan for immediate response and long-term care in order to minimise the associated consequences (Sirvent, 2020). In this

scenario, victims must be provided with a favourable climate with support organisations to encourage them to report abuse and to be able to stop the escalation of violence. Statistics show that in Europe only one third of affected women go to the police, with only 26% in countries such as Spain (Bosch-Fiol & Ferrer-Perez, 2020). The Istanbul Convention was drafted with the aim of providing battered women with adequate protection and support services. However, after more than a decade, and based on the real evolution of the problem, its effectiveness is questioned (Westendorp, 2020).

#### 3 | DATA AND METHODS

#### 3.1 | Data

The Spanish government has conferred the responsibility for equality, prevention and the eradication of VAW to the Ministry of Equality, with a budget of almost 575 million Euros in 2023, and organised in various delegations, one of which is aimed at building a society free of gender violence. Under this Ministry, the Government Delegation against Gender Violence (GDGV) is the body in charge of proposing policies to combat the different forms of violence against women by promoting, coordinating, and advising on all measures taken in this area. DGVG has a website where it publishes all the information related to victim support, giving visibility to the problem, and promoting studies and research aimed at its eradication. All this will allow to adequately address the research objective and solve the following research questions:

**Q1.** Do the policies implemented and the quality of life of citizens favour the predisposition of victims to report abuse?

**Q2.** Which dimensions of the SDGs facilitate the fight against gender-based violence?

The statistics used to construct equation 1 to answer the first question posed were obtained from the GDGV website and the National Statistics Institute (NSI) (Table 1). The steps implemented in the 17 Spanish Autonomous Regions during the decade 2012–2021 were analysed. The length of the period considered made it possible to avoid specific issues such as the one caused by COVID-19 that

**TABLE 1** Variables used in Q1.

| Reporting VAW<br>(R)       | Communication of the assault to the prosecutor's office or to the corresponding police station. |
|----------------------------|---|
| MQLI                       | Quality of life measurement index.  |
| Protection orders (PO)     | Legal instrument to protect victims from all types of aggression.                               |
| Residence/<br>permits (RP) | Aimed at foreign women who are not in Spain legally and who have reported suffering from VAW.   |

could distort the results. Protection orders (PO) and residence permits (RP) are policies implemented by the authorities with the aim of making life easier for battered women by offering them the necessary protection. Foreign women have a high incidence of gender violence, which is why Spain has implemented RP to protect them even if they do not have a residence permit. The Multidimensional Quality of Life Indicators (MQLI) models different socio-economic scenarios representative of the quality of life (QL) of the population, which may constitute a trigger for women to accuse their abusers. This is a synthetic index constructed using the Adjusted Mazziotta-Pareto Index (AMPI) methodology provided by the OECD (Organisation for Economic Co-Operation and Development), which aggregates different aspects of the population into a single value based on an arithmetic mean of all of them (NSI, 2021). Reporting abuse to the police is the legal instrument aimed at making it possible to arrest the perpetrators, thus preventing continued aggressions.

In the literature, PO are considered an indicator of the obvious risk of VAW, analysing the triggers that are representative of the population's QL, such as income level, health, and criminality, among others (Gracia et al., 2021; Stambe & Meyer, 2022). However, the aim of this research is to study which measures and socio-economic characteristics of the population are most likely to favour the application for legal aid. Descriptive statistics are given in Table 1A in the Appendix.

The second research question was based on the different dimensions that make up the MQLI (Table 2), associated with aspects of the SDGs. The MQLI quantitatively assesses the progress and well-being of society with items that go beyond purely economic ones. The great advantage of this indicator is its capacity to evaluate all Spanish regions in a uniform way, and it can be used to carry out comparative analyses, revealing the patterns of behaviour of each geographical area.

A total of 55 indicators were evaluated, divided into 9 dimensions, obtained from surveys carried out on the population on representative topics of the QL, as well as from statistics published by the NSI. The construction process is as follows: (1) the indicators of each dimension are aggregated using the AMPI method, and (2) the arithmetic mean of all of them is calculated until the MQLI is obtained, leaving free the possibility of associating weights according to the objective of the proposed research. In this analysis, each dimension was associated with an SDG in order to assess its individualised impact on the reporting of gender-based violence. The results reveal the existing connection, guiding decision-makers in the interposition of effective and appropriate measures to confront and reverse the situation. Descriptive statistics are given in Table 2A in the annex.

#### 3.2 | Methods

The empirical analysis was carried out using the generalised method of moments (GMM) proposed by Roodman (2006). This is a dynamic model that has been widely accepted in the scientific community as it offers a suitable treatment for endogeneity, heteroscedasticity and autocorrelation problems, thus facilitating the estimation of the

**TABLE 2** Dimensions of multidimensional quality of life indicator.

Dimension 1. Material living conditions \$\imprec\$ SDG 1

Economic conditions: Average income; population at risk of poverty; inequality; satisfaction with household financial situation.

Material conditions: Difficulties in making ends meet; Material deprivation; Population living in households with certain housing

deficiencies; Population with lack of space in housing; Population with high housing expenditure; Satisfaction

with housing.

Financial security: Inability to cope with unforeseen financial expenses; Delays in payments.

Dimension 2. Work SDG8

Quantity: Employment rate; Unemployment rate; Long-term unemployment rate; Involuntary part-time employment.

Quality: Low wages; Long hours; Temporary work; Job satisfaction.

Dimension 3. Health > SDG3

Results: Life expectancy at birth; Self-perceived health; Chronic morbidity; People with limitations in daily activity.

Access to health care: Unmet health care needs.

Determinants of health: Body mass index; Daily smokers; Regular physical exercise.

Dimension 4. Education - SDG4

Competences and skills: Level of education attained by the total population; Adult population with tertiary level; Level of education

attained by the young population; Early school leavers.

Continuous training: People aged 25–64 who have received training during the last 4 weeks.

Dimension 5. Leisure and social relations \$\impreces \text{SDG3}\$

Leisure: Satisfaction with time available; Attendance at cultural and sporting events.

Social relations: Frequency of meetings with friends, family or colleagues; Satisfaction with personal relationships; Having family,

friends or neighbours to ask for help; Having someone to talk to about personal issues; Trust in others.

Dimension 6. Physical/personal security \$\impreces\$ SDG 11

Physical and personal safety: Homicides; Crime; Crime or vandalism in the area; Perception of safety.

Dimension 7. Governance and basic rights (\*) \$\ightharpoonup SDG16

Public institutions and Trust in the political system; Trust in the judicial system; Trust in politics.

services:

Citizen participation: Participation in political activities.

Dimension 8. Environment and surroundings (\*) SDG11

Pollution and noise: Population suffering from pollution and other environmental problems; Population suffering from noise problems

produced by neighbours or from outside; Urban population exposed to air pollution.

Access to green and

recreational areas: Environmental setting: Satisfaction with green spaces and recreational areas.

Satisfaction with the environment in which they live.

Dimension 9. Overall life experience (\*) 17SDGs

Overall life satisfaction
Feelings and emotions
Feelings and purpose in life

Note: (\*) could not be analysed due to lack of statistical information. They come just from surveys carried out in 3 of the 10 years analysed.

parameters of a regression constructed on a panel sample. Its application covers a wide range of topics related to sustainability, from environmental (Saygin & İskenderoğlu, 2022), to climate policies related to agriculture (Puertas et al., 2023), financial development (Ganda, 2019) and business innovation (Chindasombatcharoen et al., 2022), among others.

In this study, we propose to estimate different models to respond to the stated objective. First, we propose to quantify the impact of the QL and the measures implemented by the authorities on the reports of abuse lodged, in order to assess their potential in the fight against VAW (Equation (1)).

$$R_{it} = \beta_0 + \beta_1 R_{it-1} + \beta_2 MQLI_{it} + \beta_3 PO_{it} + \beta_4 RP_{it} + \varepsilon_{it}. \tag{1}$$

where R represents the volume of police reports filed in the different Autonomous Regions, MQLI the quality of life index, PO the protection orders and RP the residence permits, where t=2012, ..., 2021 and i=1, ..., 17 Autonomous Regions.

Second, 6 models were proposed to contemplate the items of each of the MQLI dimensions associated with different targets pursued by the SDGs. The coefficients obtained show the force that these variables exert on the filing of reports to the police. Thus, for example, for dimension 1 the following equation was constructed

$$\begin{split} R_{it} &= \beta_0 + \beta_1 R_{it-1} + \beta_2 \text{Economic conditions}_{it} \\ &+ \beta_3 \text{Material conditions}_{it} + \beta_4 \text{Economic security} + \varepsilon_{it}. \end{split} \tag{2}$$

This process was repeated for each dimension, taking into account all the items that define them. The variables used were transformed into neperian logarithms, thus avoiding their different units of measurement leading to erroneous conclusions. The trend effect was taken into account by introducing the dependent variable with a lag.

#### 4 | RESULTS AND DISCUSSION

## 4.1 | Q1. Do the policies in place and the quality of life of citizens favour the willingness of victims to make reports to the police?

Reporting to the police is the first step in setting in motion the mechanism of help and protection for victims of gender-based violence. Battered women need a climate of trust that favours this decision, in which police action and support institutions play an essential role. The perception of safety is paramount to taking this step, which could sometimes mean the end of suffering.

The coefficients of Equation (1) estimated by GMM were standardised in order to be able to determine the weight that each measure has on reporting to the police (Table 3). All the necessary tests were carried out to ensure the adequacy of the results: (1) the Hansen test validated the instruments used and the absence of overidentification (Prob>chi2 greater than 0.05); (2) the Arellano-Bond test confirmed the absence of serial autocorrelation of order 2 errors [AR(2)] (Prob>z greater than 0.05); (3) the number of instruments was equal to the number of groups (17 instruments versus 17 groups); and (4) the Wald test, with a Prob>chi2 lower than 0.05, indicates

**TABLE 3** Reporting VAW determinants (2012–2021).

| Reporting <sub>t-1</sub> | .065***           |
|--------------------------|-------------------|
| MQLI                     | .012**            |
| Residence/work permits   | 005**             |
| Protection orders        | .065***           |
| Hansen chi2(Prob>chi²)   | 15.93 (0.190)     |
| AR(1) z(Prob>z)          | -2.56 (0.010)     |
| AR(2) z(Prob>z)          | -0.15 (0.882)     |
| Wald chi <sup>2</sup>    | 486408.49 (0.000) |
| Observations/groups      | 153/17            |
| Instruments              | 17                |

*Note*: GMM panel data-Two Step- Robust standard. \*\*\*p < .01, \*\*p < .05. Hansen and A-Bond test report p-values in parenthesis.

that it was correctly estimated and the set of indicators explained the dependent variable.

The results showed that the trend effect and the PO had a positive and similar impact on the volume of reports filed (0.065 in both cases), constituting the beginning of criminal action against the aggressor. The significance of both variables is decisive to be able to affirm that it is not only a decisive tool to eradicate violence where intervention has taken place more frequently, but also where the safety of the victims is guaranteed. PO prevent physical contact between perpetrator and victim, reducing the risk of further abuse. The literature confirms this positive association between the use of the judicial system and PO (Holmes et al., 2022). However, its concession has sometimes been restricted by racial minorities (Winstead & Stevenson, 2022), limiting the sustainable development enacted in the 2030 Agenda. It has even come to be challenged by a pervasively male-dominated judiciary, lacking the necessary preparedness to respond to victims (Carrington et al., 2022). Recently, García-Cuéllar et al. (2023) found a close association between VAW and disability, in which POs are reduced due to lack of reporting. According to Cordier et al. (2023), violence itself can also cause mental health problems, leading to precarious employment situations. This situation and family responsibilities prevent victims from reintegrating into social life under optimal conditions.

QL in all its dimensions also has a positive impact on reporting to the police (0.012); women with a good socio-economic position are more willing to report the assaults they have suffered. However, VAW sometimes results in irreparable damage to the QL of the victims (Veronese et al., 2023), hence the need for a specific analysis of the different aspects that confer this status, in order to guide the adoption of specific policies in each situation. Authors such as Galiano-Coronil and Ortega-Gil (2021) promote the use of social media tools such as Twitter to combat gender-based violence and increase women's QL, due to its high capacity to raise public awareness.

On the other hand, work and residence permits reduce the initiative to report to the police (-0.005); these measures are mostly granted to immigrant women. The reality reveals that undocumented women in the EU who are victims of gender-based violence can only remain in the country if they win their legal cases, in which case they have the option of residence and work permits (Pérez, 2012). However, the most widespread rule among battered women with insecure immigration status is restricted access to support and protection services, being forced into silence and remaining with their abuser for fear of deportation (Voolma, 2018).

### 4.2 | Q2. Which dimensions of the SDGs facilitate the fight against gender-based violence?

The 2030 Agenda through the SDGs pursues universal sustainable development in all its dimensions: economic growth, social inclusion and environmental protection (Farouk, 2021). All citizens and public and private institutions have the obligation to work in this direction, seeking advances that facilitate the fulfilment of the different targets in which the SDGs are materialised. The different economic, health

and social crises reveal the need to modify the current productive system, orienting the economy towards an ecological transition that works to eradicate poverty and achieve greater equality, seeking to establish a social state based on the rule of law.

In this context, gender-based violence is highly visible as a violation of women's fundamental rights. There are still countries in the world that do not have laws to protect against domestic violence (UN Economic and Social Council, 2017), constituting a difficult

TABLE 4 Components of quality of life as determinants of reporting to the police (2012–2021).

|                                   | D1: Material living conditions SDG1 | D2:<br>Work<br>SDG8 | D3:<br>Health<br>SDG3 | D4:<br>Education<br>SDG4 | D5: Leisure and social relations SDG3 | D6: Physical/personal security SDG 11 |
|-----------------------------------|-------------------------------------|---------------------|-----------------------|--------------------------|---------------------------------------|---------------------------------------|
| Reporting <sub>t-1</sub>          | .928***                             | .948***             | 1.027***              | .499                     | .774***                               | .833***                               |
| Economic conditions               | 107***                              |                     |                       |                          |                                       |                                       |
| Material conditions               | 035                                 |                     |                       |                          |                                       |                                       |
| Economic stability                | .202**                              |                     |                       |                          |                                       |                                       |
| Work quantity                     |                                     | .065***             |                       |                          |                                       |                                       |
| Work quality                      |                                     | 123***              |                       |                          |                                       |                                       |
| Health<br>Outcomes                |                                     |                     | 020                   |                          |                                       |                                       |
| Healthcare access                 |                                     |                     | .034***               |                          |                                       |                                       |
| Health<br>determinants            |                                     |                     | .071***               |                          |                                       |                                       |
| Competences and skills            |                                     |                     |                       | <b>919</b> ***           |                                       |                                       |
| Lifelong learning                 |                                     |                     |                       | .238***                  |                                       |                                       |
| Leisure                           |                                     |                     |                       |                          | .108*                                 |                                       |
| Social relations                  |                                     |                     |                       |                          | .104*                                 |                                       |
| Physical/<br>personal<br>security |                                     |                     |                       |                          |                                       | .128***                               |
| Pollution, noise                  |                                     |                     |                       |                          |                                       |                                       |
| Green and recreation areas        |                                     |                     |                       |                          |                                       |                                       |
| Environmental setting             |                                     |                     |                       |                          |                                       |                                       |
| Hansen chi2<br>(Prob>chi2)        | 10.65 (0.100)                       | 12.41<br>(0.334)    | 16.67<br>(0.163)      | 0.31 (0.575)             | 16.46 (0.171)                         | 16.42 (0.227)                         |
| AR(1) z(Prob>z)                   | -2.56 (0.010)                       | -2.61<br>(0.009)    | -2.97<br>(0.003)      | -0.15<br>(0.878)         | -2.94 (0.003)                         | -3.18 (0.001)                         |
| AR(2) z(Prob>z)                   | -0.26 (0.793)                       | 0.35<br>(0.726)     | -0.11<br>(0.916)      | 1.54 (0.123)             | 0.98 (0.329)                          | 0.58 (0.559)                          |
| Wald chi2<br>(Prob>chi2)          | 82221.31 (0.000)                    | 163809.6<br>(0.000) | 189234.18<br>(0.000)  | 6469.66<br>(0.000)       | 6036.69 (0.000)                       | 10452.29 (0.000)                      |
| Observations/<br>groups           | 153/17                              | 153/17              | 153/17                | 153/17                   | 153/7                                 | 153/7                                 |
| Instruments                       | 11                                  | 15                  | 17                    | 5                        | 16                                    | 16                                    |

Note: GMM panel data-Two Step- Robust standard. \*\*\*p < .01, \*\*p < .05. Hansen and A-Bond test report p-values in parenthesis.

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In the models considered, the volume of complaints in the previous year is the most important factor, except in SDG4. The importance of the trend effect is evident, which sometimes emerges as a reflection of the favourable environment generated in the locations analysed, highlighting, among others, police and health care, victim support institutions, etc., whose work translates into greater confidence in the system on the part of abused women. It has been shown that police discrimination deters women from contacting the police after experiencing an episode of violence, reducing reports to the police and the possibility of preventing their continuation (Decker et al., 2019; Langton et al., 2012). Creating a supportive environment for victims with counselling together with organisations facilitating access to justice is essential to improve the situation (Notko et al., 2022).

SDG1 aims to end poverty in all its forms. Lack of income and resources includes lack of basic rights such as access to decent housing, education (SDG4) and even healthcare, including mental health provided by social relations (SDG3), reflecting the interconnectedness of the different SDGs. The results reveal that good economic and material conditions reduce the volume of reports (-0.107 and -0.035, respectively), while economic stability boosts them (0.202). At first sight, these results seem contradictory; however, they could be explained by the income profile of the battered women. They usually correspond to people with a high level of economic dependence; hence, when society is financially healthy, aggressions are reduced and, consequently, the volume of reports. At the same time, women's economic stability gives them independence, enabling them to seek legal assistance. The scientific community has highlighted the high correlation between SDG1 and SDG5; these are two goals whose associated policies can be developed in parallel (Pakkan et al., 2023). Measures focused on economic growth have the potential to reduce inequality (Hung & Thanh, 2022), reducing the number of victims of gender-based violence and, therefore, reporting. In this sense, Gómez-Casillas et al. (2023) point out that the economic status of women is fundamental in reducing acts of violence, given their greater ease in leaving the relationship.

SDG8 focuses on promoting inclusive, sustainable economic growth to stimulate progress, creating stable, quality employment and improving living standards. Meeting the targets set by this goal would result in not only achieving SDG1 (Zero Hunger), but also greater empowerment for women that would protect them against possible aggression by partners. These are priority goals, where national policies focus their action, with greater intensity in developing countries (Forestier & Kim, 2020). The results show a positive relationship between the employment rate and the number of reports to the police (0.072), but a negative relationship with the quality of work (-0.125). There is some synchrony with SDG1, economic and employment stability are often associated, demonstrating that policies aimed at developing these items would facilitate the eradication of VAW. Similarly, there is some synchrony between poor economic-material conditions and poor quality of work; in both cases women do not feel safe enough to report their abuser.

SDG3 (Ensure healthy lives and promote well-being for all) whose targets are associated with dimensions 3 and 5, and SDG11 (Make cities and human settlements, safe, reliant and sustainable) referred to in dimension 6, are directly related to the volume of reports to the police. Ultimately, access and health determinants (0.034 and 0.071, respectively), leisure and social relations (0.108 and 0.104), as well as physical and personal safety (0.128) are shown to encourage seeking help from the justice system. All of these are closely related to inclusive and sustainable economic growth. Policies that promote wellbeing address both SDG3 and SDG11, both of which improve the QL of the population, where there is no room for unequal treatment based on gender or VAW. On the other hand, crime rates are higher in large cities and, consequently, there is easier access to justice. According to Diaz-Sarachaga et al. (2018) the reading of the level of development achieved in terms of SDGs should be carried out with some caution as they are focused on giving prevalence to social and economic issues over other environmental aspects. Authors such as Vaidya and Chatterji (2020) see SDG 11 as an opportunity and a challenge to achieve other SDGs such as SDG1, SDG8, SDG4 and, of course, SDG5. In this regard, Dabaghi et al. (2023) found that women from low socioeconomic backgrounds are more vulnerable to violence. Governments should expand counselling and health centres and promote education and skills training to reduce this social phenomenon.

Finally, education under SDG4 has the opposite effect on reporting to the police. While the level of competences and skills has a negative effect (-0.901), continuing education favours access to justice (0.237). The distortion may be due to the fact that the first item covers a very wide range of training, from early education, which is far removed from the subject under analysis, to adult education. Continuing education, on the other hand, focuses on the population aged 25-64, and it is here where its weight on reporting to the police can be appreciated. Jiménez-Picón et al. (2022) consider education to be a basic instrument for achieving healthy and egalitarian relationships free of violence. Again, Roy and Xiaoling (2022) obtain evidence on the role played by education, health care and economic and political participation, advising a more intense dedication to soften gender inequality.

#### **CONCLUSIONS**

The evolution of society is marked by the need to achieve the sustainable development of the planet, contemplating the three basic pillars: economic, social and environmental. Within the framework of the 2030 Agenda, the United Nations established 17 SDGs to facilitate the design of policies aimed at achieving them. However, after almost a decade, the reality is that the achievements are far from what was initially desired. In this environment, statistics reveal that genderbased violence is perpetuated, even acquiring a certain degree of normalisation by society, underestimating the multiple consequences it entails for humanity. Achieving a world free of gender-based violence should be a priority in the strategic agendas of all governments. It is a fundamental right of women, the violation of which hinders the rest of the SDGs and, ultimately, the sustainable development of the planet.

Regions during the period 2012-2021.

In this research, an exhaustive analysis was made of the favourable conditions that encourage victims to denounce their aggressors. Access to justice through reporting to the police must be seen as the basic tool to put an end to continued abuse. Hence the need to obtain evidence of those measures and socio-economic situations capable of creating the right climate of security to favour legal aid. The GMM was used on a balanced sample of the policies implemented and the

QL of the population corresponding to 17 Spanish Autonomous

The results reveal that PO and QL are two key elements in generating the desired climate of trust. Policies aimed at facilitating economic and employment stability, where victims find support and independence from the abuser, should be strengthened. These should be combined with measures aimed at guaranteeing the physical and mental health of the population, which, together with education and physical safety, will facilitate gender equality and sufficient freedom. In short, it is a question of strengthening the targets defined in some of the SDGs, specifically in SDG1, SDG3, SDG4, SDG8 and SDG11, where evidence of their close linkage has been obtained.

This research is a novel contribution to the literature and is of great help for decision-makers to direct the necessary and effective efforts in the fight against VAW. However, despite the valuable results obtained, this study is not without its limitations. The lack of unified statistical information at a global level prevents its translation to other territories, making it difficult to obtain homogeneous evidence of the progress made in this area. There is a demand for a global web that guarantees the appropriate treatment of this data, which is of the utmost sensitivity. Humanity is facing a public health problem and must use all the necessary tools to reach a solution. The continuity of this article would require a survey process in several European countries to analyse the different ways governments act and establish synergies to move forward in an orderly and definitive manner.

#### CONFLICT OF INTEREST STATEMENT

The authors declare no conflicts of interest.

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#### REFERENCES

- Akel, M., Berro, J., Rahmen, C., Haddad, C., Obeid, S., & Hallit, S. (2022). Violence against women during COVID-19 pandemic. Journal of Interpersonal Violence, 37, 13-14. https://doi.org/10.1177/08862605219 97953
- Alonzo, D., & Zubaroglu-Ioannides, P. (2022). Suicide and violence against women in Azerbaijan: Risk factors and barriers for seeking mental healthcare. Psychiatry and Behavioral Health, 1(2), 1-9.
- Anderson, C. C., Denich, M., Warchold, A., Kropp, J. P., & Pradhan, P. (2022). A systems model of SDG target influence on the 2030 agenda for sustainable development. Sustainability Science, 17, 1459-1472. https://doi.org/10.1007/s11625-021-01040-8

- Sustainable Development WILEY Ashkenazi, I., Givon, A., Hershkovitz, Y., Bodas, M., Jeroukhimov, I., & Israel Trauma Group. (2023). Violence against women in Israel: Injury mech-
- 1007/s00068-022-02117-4 Berrone, P., Rousseau, H. E., Ricart, J. E., Brito, E., & Giuliodori, A. (2023). How can research contribute to the implementation of sustainable development goals? An interpretive review of SDG literature in management. International Journal of Management Reviews, 25(2), 318-

anisms and clinical outcomes following hospitalization. European Jour-

nal Trauma and Emergency Surgery, 49, 973-979. https://doi.org/10.

- 339. https://doi.org/10.1111/ijmr.12331 Bhatta, N., Assanangkornchai, S., & Rajbhandari, I. (2021). Does husband's alcohol consumption increase the risk of domestic violence during the pregnancy and postpartum periods in Nepalese women? BMC Public Health, 21, 5. https://doi.org/10.1186/s12889-020-10021-y
- Bhattacharyya, M. (2022). Understanding costs of violence against women and the need for contextualisation. In B. Dasgupta, P. Sarkhel, A. Ghosh, & B. Ghosh (Eds.), Quest of humane development. India studies in business and economics. Springer. https://doi.org/10.1007/978-981-16-9579-7 12
- Biermann, F., Hickmann, T., Sénit, C. A., Beisheim, M., Bernstein, S., Chasek, P., Grob, L., Kim, R. E., Kotzé, L. J., Nilsson, M., Ordóñez Llanos, A., Okereke, C., Pradhan, P., Raven, R., Sun, Y., Vijge, M. J., van Vuuren, D., & Wicke, B. (2022). Scientific evidence on the political impact of the sustainable development goals. Nature Sustainability, 5, 795-800. https://doi.org/10.1038/s41893-022-00909-5
- Boar, A., Palau Pinyana, E., & Oliveras-Villanueva, M. (2022). Alternatives to solve SDG trade-offs and to enforce SDG synergies: A systematic literature review. Management of Environmental Quality, 33(2), 478-493. https://doi.org/10.1108/MEQ-07-2021-0181
- Bosch-Fiol, E., & Ferrer-Perez, V. A. (2020). Femicide, intimate partner violence and legal complaints in Spain. Journal of Gender Studies, 29(2), 187-201. https://doi.org/10.1080/09589236.2019.1616537
- Brown, D., Meinhart, M., Poulton, C., & Stark, L. (2023). The economic burden of intimate partner violence in Colombia: Estimated health costs among females aged 13-24. Journal of Interpersonal Violence, 38(3-4), 3215-3243. https://doi.org/10.1177/08862605221104531
- Cardoso, L. F., Gupta, J., Shuman, S., Cole, H., Kpebo, D., & Falb, K. L. (2016). What factors contribute to intimate partner violence against women in urban, conflict-affected settings? Qualitative findings from Abidjan, Côte D'ivoire. Journal of Urban Health, 93, 364-378. https:// doi.org/10.1007/s11524-016-0029-x
- Caridade, S. M. M., Vidal, D. G., & Dinis, M. A. P. (2022). Climate change and gender-based violence: Outcomes, challenges and future perspectives. In W. Leal Filho, D. G. Vidal, M. A. P. Dinis, & R. C. Dias (Eds.), Sustainable policies and practices in energy, environment and health research. World Sustainability Series. Springer. https://doi.org/10.1007/ 978-3-030-86304-3\_10
- Carrington, K., Sozzo, M., Ryan, V., & Rodgers, J. (2022). Women-led police stations: Reimagining the policing of gender violence in the twentyfirst century. Policing and Society, 32(5), 577-597. https://doi.org/10. 1080/10439463.2021.1956925
- Çelik, A. S., & Aydin, A. (2019). The effect of a course on violence against women on the attitudes of student midwives and nurses towards domestic violence against women, their occupational roles in addressing violence, and their abilities to recognize the signs of violence. Perspectives in Psychiatric Care, 55(2), 210-217. https://doi.org/10.1111/ ppc.12333
- Chadha, M., Kennedy, J., & Duvvury, N. (2022). Economic costs of violence against women and girls in low-and middle-income countries. Workplace Health & Safety, 70(9), 405-411. https://doi.org/10.1177/ 21650799221081262
- Chindasombatcharoen, P., Chatjuthamard, P., Jiraporn, P., Treepongkaruna, S. (2022). Achieving sustainable development goals through board size and innovation. Sustainable Development, 30(4), 664-677. https://doi.org/10.1002/sd.2264

- Convention, I. (2011). Council of Europe Convention on preventing and combating violence against women and domestic violence. https://www.coe.int/en/web/conventions/full-list?module=treaty-detail&treatynum=210
- Cordier, R., Chen, Y.-W., Chung, D., Mahoney, N., Martin, R., Dorozenko, K., Franzway, S., Moulding, N., Wendt, S., & Zufferey, C. (2023). The long shadow of intimate partner violence: Associations of mental and physical health with employment. In *Housing, and demographic factors. Violence against women.* SAGE Publications. https://doi.org/10.1177/10778012231181044
- Dabaghi, N., Amini-Rarani, M., & Nosratabadi, M. (2023). Investigating the relationship between socioeconomic status and domestic violence against women in Isfahan, Iran in 2021: A cross-sectional study. *Health Science Reports*, 6, e1277, https://doi.org/10.1002/hsr2.1277
- Dantas, E. S. O., Meira, K. C., Bredemeier, J., & Amorim, K. P. C. (2023). Suicide among women in Brazil: A necessary discussion from a gender perspective. Ciênc saúde coletiva, 28(5), 1469–1477. https://doi.org/ 10.1590/1413-81232023285.16212022
- Das, T., & Roy, T. B. (2020). More than individual factors; is there any contextual effect of unemployment, poverty and literacy on the domestic spousal violence against women? A multilevel analysis on Indian context. SSM-Population Health, 12, 100691. https://doi.org/10.1016/j.ssmph.2020.100691
- Dasgupta, S. (2023). COVID-19, intimate partner violence, and immigrant women: SDG 18 and overcoming communication barriers to attain goal 5. In J. Servaes & M. J. Yusha'u (Eds.), SDG18 communication for all. Sustainable Development Goals Series (Vol. 2). Palgrave Macmillan. https://doi.org/10.1007/978-3-031-19459-7 8
- Decker, M. R., Holliday, C. N., Hameeduddin, Z., Shah, R., Miller, J., Dantzler, J., & Goodmark, L. (2019). "You do not think of me as a human being": Race and gender inequities intersect to discourage police reporting of violence against women. *Journal of Urban Health*, 96, 772–783. https://doi.org/10.1007/s11524-019-00359-z
- Diaz-Sarachaga, J. M., Jato-Espino, D., & Castro-Fresno, D. (2018). Is the sustainable development goals (SDG) index an adequate framework to measure the progress of the 2030 agenda? Sustainable Development, 26(6), 663–671. https://doi.org/10.1002/sd.1735
- Duvvury, N., Vara-Horna, A., & Chadha, M. (2022). Development and validation of lost days of labor productivity scale to evaluate the business cost of intimate partner violence. *Journal of Interpersonal Violence*, 37(5–6), NP2912-NP2943. https://doi.org/10.1177/0886260520944532
- Eden, L., & Wagstaff, M. F. (2021). Evidence-based policymaking and the wicked problem of SDG 5 gender equality. *Journal of International Busi*ness Policy, 4, 28–57. https://doi.org/10.1057/s42214-020-00054-w
- European Commission, Luxembourg. (2009). Expert group on gender and employment—EGGE (2009). Gender Segregation in the Labour Market—Root Causes, Implications and Policy Responses in the EU.
- Farouk, A. D. (2021). The role of sustainable development goals (SDGs) in social inclusion. https://doi.org/10.2139/ssrn.3984863
- Ferrer-Perez, V., Sánchez-Prada, A., Delgado-Álvarez, C., & Bosch-Fiol, E. (2020). The gender violence implicit association test to measure attitudes toward intimate partner violence against women. *Psicologia: Reflexão e Crítica*, 33, 27. https://doi.org/10.1186/s41155-020
- Forestier, O., & Kim, R. (2020). Cherry-picking the sustainable development goals: Goal prioritization by national governments and implications for global governance. Sustainable Development, 28(2), 1269–1278. https://doi.org/10.1002/sd.2082
- Galiano-Coronil, A., & Ortega-Gil, M. (2021). Social marketing, quality of life, well-being, and violence against women: Analysis of the hashtag #MeToo. In M. M. Galan-Ladero & R. G. Rivera (Eds.), *Applied social marketing and quality of life. Applying quality of life research.* Springer. https://doi.org/10.1007/978-3-030-83286-5\_9
- Ganda, F. (2019). The environmental impacts of financial development in OECD countries: A panel GMM approach. *Environmental Science and*

- Pollution Research, 26, 6758-6772. https://doi.org/10.1007/s11356-019-04143-z
- García-Cuéllar, M. M., Pastor-Moreno, G., Ruiz-Pérez, I., & Henares-Montiel, J. (2023). The prevalence of intimate partner violence against women with disabilities: A systematic review of the literature. *Disability and Rehabilitation*, 45(1), 1–8. https://doi.org/10.1080/09638288. 2022 2025927
- García-Moreno, C., Zimmerman, C., Morris-Gehring, A., Heise, L., Amin, A., Abrahams, N., Montoya, O., Bhate-Deosthali, P., Kilonzo, N., & Watts, C. (2015). Addressing violence against women: A call to action. *The Lancet*, 385(9978), 1685–1695. https://doi.org/10.1016/S0140-6736(14)61830-4
- Gómez-Casillas, A., van Damme, M., & Permanyer, I. (2023). Women's and men's status: Revisiting the relationship between gender equality and intimate partner violence against women in Europe. *Journal of Interpersonal Violence*, 38(15–16), 8755–8784. https://doi.org/10.1177/08862605231158760
- Gracia, E. (2022). Public attitudes toward partner violence against women.
  In F. Magginno (Ed.), Encyclopedia of quality of life and well-being research. Springer Nature. https://doi.org/10.1007/978-3-319-69909-7 2317-2
- Gracia, E., Marco, M., López-Quílez, A., & Lila, M. (2021). Chronic high risk of intimate partner violence against women in disadvantaged neighborhoods: An eight-year space-time analysis. *Preventive Medicine*, 148, 106550. https://doi.org/10.1016/j.ypmed.2021.106550
- Gracia, E., Martín-Fernández, M., Lila, M., Merlo, J., & Ivert, A.-K. (2019).
  Prevalence of intimate partner violence against women in Sweden and Spain: A psychometric study of the 'Nordic paradox'. PLoS One, 14(5), e0217015. https://doi.org/10.1371/journal.pone.0217015
- Grose, R. G., Chen, J. S., Roof, K. A., Rachel, S., & Yount, K. M. (2021). Sexual and reproductive health outcomes of violence against women and girls in lower-income countries: A review of reviews. *The Journal of Sex Research*, 58(1), 1–20. https://doi.org/10.1080/00224499.2019. 1707466
- Holmes, S. C., Maxwell, C. D., Cattaneo, L. B., Bellucci, B. A., & Sullivan, T. P. (2022). Criminal protection orders among women victims of intimate partner violence: Women's experiences of court decision, processes and their willingness to engage with the system in the future. *Journal of Interpersonal Violence*, 37(17–18), NP16253–NP16276. https://doi.org/10.1177/08862605211021965
- Huang, S. Z. (2023). Removing barriers to a sharing economy helps attain sustainable development goals in ASEAN countries. *Journal of Innova*tion & *Knowledge*, 8(1), 100300. https://doi.org/10.1016/j.jik.2022. 100300
- Hung, N. T., & Thanh, S. D. (2022). Fiscal decentralization, economic growth, and human development: Empirical evidence. *Cogent Economics & Finance*, 10(1), 2109279. https://doi.org/10.1080/23322039. 2022.2109279
- Jiménez-Picón, N., Romero-Martín, M., Romero-Castillo, R., Palomo-Lara, J. C., & Alonso-Ruíz, M. (2022). Internalization of the romantic love myths as a risk factor for gender violence: A systematic review and meta-analysis. Sexuality Research and Social Policy, 20, 837–854. https://doi.org/10.1007/s13178-022-00747-2
- Karlsson, M., Wemrell, M., Merlo, J., & Ivert, A. K. (2022). Intimate partner violence against women in the EU: A multilevel analysis of the contextual and individual impact on public perceptions. Women & Criminal Justice, 32(5), 417–430. https://doi.org/10.1080/08974454.2020. 1835792
- Klement, K. R., Sagarin, B. J., & Skowronski, J. J. (2019). Accusers lie and other myths: Rape myth acceptance predicts judgments made about accusers and accused perpetrators in a rape case. Sex Roles, 81, 16– 33. https://doi.org/10.1007/s11199-018-0950-4
- Kroll, C., Warchold, A., & Pradhan, P. (2019). Sustainable development goals (SDGs): Are we successful in turning trade-offs into synergies?

- Palgrave Communications, 5, 140. https://doi.org/10.1057/s41599-019-0335-5
- Langton, L., Berzofsky, M., Krebs, C., & Smiley-McDonald, H. (2012). National crime victimization survey: Victimizations not reported to police, 2006–2010. Washington, DC: Bureau of Justice Statistics, Office of Justice Programs, US Department of Justice.
- Messerli, P., Kim, E. M., Lutz, W., Moatti, J. P., Richardson, K., Saidam, M., Smith, D., Eloundou-Enyegue, P., Foli, E., Glassman, A., Hernandez Licona, G., Murniningtyas, E., Staniškis, J. K., van Ypersele, J. P., & Furman, E. (2019). Expansion of sustainability science needed for the SDGs. Nature Sustainability, 2, 892–894. https://doi.org/10.1038/s41893-019-0394-z
- Mondal, D., & Paul, P. (2021). Associations of power relations, wife-beating attitudes, and controlling behavior of husband with domestic violence against women in India: Insights from the National Family Health Survey-4. Violence against Women, 27(14), 2530-2551. https://doi.org/10.1177/1077801220978794
- Montesano, F. S., Biermann, F., Kalfagianni, A., & Vijge, M. J. (2023). Balancing or prioritising for sustainable development? Perceptions of sustainability integration among professional. Sustainable Development. https://doi.org/10.1002/sd.2493
- Notko, M., Husso, M., Piippo, S., Monica Fagerlund, M., & Jarmo Houtsonen, J. (2022). Intervening in domestic violence: Interprofessional collaboration among social and health care professionals and the police. *Journal of Interprofessional Care*, 36(1), 15–23. https://doi. org/10.1080/13561820.2021.1876645
- NSI. (2021). Indicador multidimensional de calidad de vida. Proyecto técnico. Subdirección General de Estadísticas Sociodemográficas. https://www.ine.es/experimental/imcv/exp calidad vida multi.pdf
- Nunbogu, A. M., & Elliott, S. J. (2022). Characterizing gender-based violence in the context of water, sanitation, and hygiene: A scoping review of evidence in low- and middle-income countries. Water Security, 15, 100113. https://doi.org/10.1016/j.wasec.2022.100113
- Pakkan, S., Sudhakar, C., Tripathi, S., & Rao, M. (2023). A correlation study of sustainable development goal (SDG) interactions. *Quality & Quantity*, 57, 1937–1956. https://doi.org/10.1007/s11135-022-01443-4
- Pérez, M. (2012). Emergency frames: Gender violence and immigration status in Spain. Feminist Economics, 18(2), 265–290. https://doi.org/ 10.1080/13545701.2012.704147
- Permanyer, I., & Gomez-Casillas, A. (2020). Is the 'nordic paradox' an illusion? Measuring intimate partner violence against women in Europe. International Journal of Public Health, 65, 1169–1179. https://doi.org/10.1007/s00038-020-01457-5
- Plag, H. P., & Jules-Plag, S. A. (2020). A goal-based approach to the identification of essential transformation variables in support of the implementation of the 2030 agenda for sustainable development. International Journal of Digital Earth, 13(2), 166–187. https://doi.org/10.1080/17538947.2018.1561761
- Puertas, R., & Marti, L. (2023). Regional analysis of the sustainable development of two Mediterranean countries: Spain and Italy. *Sustainable Development*, 31(2), 797–811. https://doi.org/10.1002/sd.2420
- Puertas, R., Marti, L., & Calafat, C. (2023). Agricultural and innovation policies aimed at mitigating climate change. Environmental Science and Pollution Research, 30, 47299–47310. https://doi.org/10.1007/ s11356-023-25663-9
- Roggeband, C. (2021). Violence against women and gender-based violence. In G. Abels, A. Krizsán, H. MacRae, & A. van der Vleuten (Eds.), *The Routledge handbook of gender and EU politics*. Routledge.
- Roodman, D. (2006). How to do xtabond2: An introduction to difference and system GMM in Stata. Center for Global Development Working Paper, 103.
- Roy, C. K., & Xiaoling, H. (2022). Achieving SDG 5, gender equality and empower all women and girls, in developing countries: How aid for trade can help? *International Journal of Social Economics*, 49(6), 930– 959. https://doi.org/10.1108/IJSE-12-2020-0813

- Sardinha, L., Maheu-Giroux, M., Stöckl, H., Meyer, S. R., & García-Moreno, C. (2022). Global, regional, and national prevalence estimates of physical or sexual, or both, intimate partner violence against women in 2018. *The Lancet*, 399(10327), 803–813. https://doi.org/10.1016/S0140-6736(21)02664-7
- Sardinha, L., & Nájera Catalán, H. E. (2018). Attitudes towards domestic violence in 49 low- and middle-income countries: A gendered analysis of prevalence and country-level correlates. *PLoS One*, 13, e0206101. https://doi.org/10.1371/journal.pone.0206101
- Saygin, O., & İskenderoğlu, Ö. (2022). Does the level of financial development affect renewable energy? Evidence from developed countries with system generalized method of moments (system-GMM) and cross-sectionally augmented autoregressive distributed lag (CS-ARDL). Sustainable Development, 30(5), 1326–1342. https://doi.org/10.1002/sd.2319
- Serrano-Motilla, C., Lozano, L. M., Alonso-Ferres, M., Valor-Segura, I., & Padilla, J. L. (2023). Understanding the components and determinants of police attitudes toward intervention in intimate partner violence against women: A systematic review. *Trauma, Violence, & Abuse, 24*(1), 245–260. https://doi.org/10.1177/15248380211029398
- Shaqiqi, W., Cuthill, F., & Brennan, G. (2022). Nursing students' knowledge, attitudes, preparedness and practice towards intimate partner violence against women: A scoping review and thematic synthesis. Nurse Education Today, 116, 105452. https://doi.org/10.1016/j.nedt.2022.105452
- Sirvent, E. (2020). Acceptability of sexual violence against women in Spain:

  Demographic, behavioral, and attitudinal correlates. *Violence against Women*, 26(10), 1080–1100. https://doi.org/10.1177/10778012198 54536
- Song, J., & Jang, C. H. (2023). Unpacking the sustainable development goals (SDGs) interlinkages: A semantic network analysis of the SDGs targets. Sustainable Development. Available Online., 31, 2784–2796. https://doi.org/10.1002/sd.2547
- Stambe, R. M., & Meyer, S. (2022). Police and duty lawyer perceptions of domestic violence protection order proceedings involving parents: Towards greater system accountability and family-centred decision-making. *Journal of Family Violence*, 38, 1405–1417. https://doi.org/10.1007/s10896-022-00449-8
- Tandon, I., Wallace, C., Caretta, M. A., Vij, S., & Irvine, A. (2022). Urban water insecurity and its gendered impacts: On the gaps in climate change adaptation and sustainable development goals. Climate and Development, 1–12. https://doi.org/10.1080/17565529.2022. 2051418
- Tausch, A. (2019). Multivariate analyses of the global acceptability rates of male intimate partner violence (IPV) against women based on world values survey data. *International Journal of Health Planning and Management*, 34(4), 1155–1194. https://doi.org/10.1002/hpm.2781
- UN Economic and Social Council. (2017). Progress towards the Sustainable Development Goals: Report of the Secretary-General (E/2017/66). https://www.unwomen.org/en/node/36060
- UNCTAD. (2015). Conferencia de las Naciones Unidas sobre Comercio y Desarrollo—La Agenda 2030 para el Desarrollo Sostenible.
- UNCTAD. (2020). COVID-19 requires gender-equal responses to save economies, April 1. https://unctad.org/en/pages/newsdetails.aspx? OriginalVersionID=2319
- United Nations. (2015). Transforming our world: The 2030 agenda for sustainable development. Resolution adopted by the general assembly on 25 September 2015. In A/RES/70/1. UN general assembly, seventieth session. Agenda items 15 and 116. United Nations.
- Vaidya, H., & Chatterji, T. (2020). SDG 11 Sustainable cities and communities. In I. Franco, T. Chatterji, E. Derbyshire, & J. Tracey (Eds.), Actioning the global goals for local impact. Science for Sustainable Societies. Springer. https://doi.org/10.1007/978-981-32-9927-6\_12
- Venkatramanan, V., Shah, S., & Prasad, R. (2021). Exploring synergies and trade-offs between climate change and the sustainable development goals. Springer.

- Veronese, G., Mahmid, F. A., & Bdier, D. (2023). Gender-based violence, subjetive quality life, and mental health outcomes among Palestian women: The mediating role of social support and agency. *Violence Against Women*, 29(5), 925–948. https://doi.org/10.1177/10778012221099988
- Viero, A., Barbara, G., Montisci, M., Kustermann, K., & Cattaneo, C. (2021).
  Violence against women in the COVID-19 pandemic: A review of the literature and a call for shared strategies to tackle health and social emergencies. Forensic Science International, 319, 110650. https://doi.org/10.1016/j.forsciint.2020.110650
- Vijeyarasa, R., & Liu, M. (2022). Fast fashion for 2030: Using the pattern of the sustainable development goals (SDGs) to cut a more gender-just fashion sector. *Business and Human Rights Journal*, 7(1), 45-66. https://doi.org/10.1017/bhj.2021.29
- Voolma, H. (2018). "I must be silent because of residency": Barriers to escaping domestic violence in the context of insecure immigration status in England and Sweden. Violence against Women, 24(15), 1830– 1850. https://doi.org/10.1177/1077801218755974
- Vyas, S., Meinhart, M., Troy, K., Brumbaum, H., Poulton, C., & Stark, L. (2023). The economic cost of violence against women and girls in low and middle-income countries: A systematic review of the evidence. Trauma, Violence, & Abuse, 24(1), 44–55. https://doi.org/10.1177/15248380211016
- Wemrell, M., Stjernlöf, S., Lila, M., Gracia, E., & Ivert, A. K. (2022). The Nordic paradox. Professionals' discussions about gender equality and intimate

- partner violence against women in Sweden. Women & Criminal Justice, 32(5), 431–453. https://doi.org/10.1080/08974454.2021.1905588
- Westendorp, I. (2020). The right to adequate housing of battered woman. The added value of the Istanbul Convention? In J. Niemi, L. Peroni, & V. Stoyanova (Eds.), *International law and violence against women*. Routledge.
- Winstead, A., & Stevenson, M. C. (2022). Effects of intimate partner violence perpetrator and victim race on protective order determinations. *Journal of Interpersonal Violence*, 37(19–20), NP17454–NP17472. https://doi.org/10.1177/08862605211028164
- Yuan, W., & Hesketh, T. (2019). Intimate partner violence against women and its association with depression in three regions of China: A crosssectional study. *The Lancet*, 394(1), S5. https://doi.org/10.1016/ S0140-6736(19)32341-4

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#### **APPENDIX A**

**TABLE 1A** Descriptive statistics of the variables Q1.

|      | Reporting VAW | MQLI   | Residence/permits | Protection orders |
|------|---------------|--------|-------------------|-------------------|
| Mean | 8630.32       | 101.60 | 91.12             | 2146.04           |
| SD   | 8879.03       | 2.35   | 112.57            | 2164.64           |
| Max  | 35,398        | 106.53 | 601               | 8605              |
| Min  | 548           | 96.11  | 1                 | 162               |

**TABLE 2A** Descriptive statistics of the variables Q2.

|                              | Mean        | SD   | Max    | Min   |
|------------------------------|-------------|------|--------|-------|
|                              | Dimensio    | n 1  |        |       |
| Economic conditions          | 102         | 5.06 | 112    | 92    |
| Material conditions          | 101         | 3.09 | 109    | 92    |
| Economic security            | 98          | 4.71 | 107    | 85    |
|                              | Dimensio    | on 2 |        |       |
| Quantity                     | 92.16       | 4.8  | 99.85  | 80.01 |
| Quality                      | 103.43      | 3.16 | 110.55 | 97.19 |
|                              | Dimensio    | on 3 |        |       |
| Health results:              | 101.26      | 3.45 | 110.14 | 92.86 |
| Access to health care:       | 105.13      | 4.97 | 112.37 | 78.53 |
| Determinants of health:      | 102.54      | 3.34 | 111.17 | 95.18 |
|                              | Dimension 4 |      |        |       |
| Competences and abilities    | 105.68      | 4.81 | 119.42 | 96.69 |
| Continuous training          | 100.88      | 5.12 | 118    | 91    |
|                              | Dimension 5 |      |        |       |
| Leisure                      | 102.31      | 3.85 | 109.49 | 91.98 |
| Social relationships         | 99.76       | 3.50 | 105.37 | 90.26 |
|                              | Dimension 6 |      |        |       |
| Physical and personal safety | 103.63      | 2.86 | 108.19 | 95.84 |