


Natural Disasters and Safety of Journalists: An Approach to the Spanish Case


DESASTRES NATURALES Y SEGURIDAD DE PERIODISTAS: UNA APROXIMACIÓN AL CASO ESPAÑOL

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Oiane Díaz-Echarri | Universidad del País Vasco

✉ oiane.diaz@ehu.eus |  <https://orcid.org/0000-0002-7273-7904>

Leire Iturregui-Mardaras | Universidad del País Vasco

✉ leire.iturregui@ehu.eus |  <https://orcid.org/0000-0001-9675-4218>

María José Cantalapiedra-González | Universidad del País Vasco

✉ mariajose.cantalapiedra@ehu.eus |  <https://orcid.org/0000-0003-4961-2326>

Abstract: The link between climate change and the increase in the number and frequency of natural disasters has been verified by various investigations (IPCC, 2023). In order to cover these catastrophes, journalists travel to affected areas risking their lives. The aim of this research is to analyze the safety of journalists covering disasters, identifying the elements that determine their safety conditions and defining the characteristics of the Spanish case. A methodology based on the models by Englund *et al.* (2023) and JOSAFCON is proposed, using in-depth interviews with professionals who have covered from the field to obtain information from a sample of 135 names. The results warn of deficiencies in training, equipment, job insecurity and lack of security awareness, among others. Conclusions highlight the relevance of designing an analysis model that integrates the security elements of disaster coverage, as well as the need for protocols to cover unexpected events such as the DANA in Valencia.

Keywords: Communication; Climate change; Safety of Journalists; Natural disasters.

Resumen: El vínculo entre cambio climático y aumento del número y frecuencia de desastres ha sido verificado por diversas investigaciones (IPCC, 2023). Para cubrir estas catástrofes, los periodistas viajan a zonas afectadas arriesgando sus vidas. El objetivo de la investigación es analizar la seguridad de periodistas que cubren desastres, identificando los elementos que determinan sus condiciones de seguridad y definiendo las características del caso español. Se propone una metodología basada en los modelos de Englund *et al.* (2023) y JOSAFCON, empleando entrevistas en profundidad a profesionales que han cubierto sobre el terreno para obtener información a partir de una muestra de 135 nombres. Los resultados advierten de carencias en formación, equipamiento, precariedad laboral y falta de conciencia en seguridad, entre otros. Como conclusiones, destaca la pertinencia de diseñar un modelo de análisis que integre los elementos de seguridad que afectan a coberturas de desastres, así como la necesidad de protocolos para cubrir sucesos inesperados como la DANA en Valencia.

Palabras clave: comunicación; cambio climático; seguridad de periodistas; desastres naturales.



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1. Introduction

Climate change is becoming an ever more pervasive aspect of daily life, with its increasingly tangible effects sparking widespread concern across global society. Research, such as the 2023 IPCC Synthesis Report, indicates that climate change has caused irreversible damage and losses, with its scope and magnitude greater than in previous assessments (IPCC, 2023: 46).

The report indicates that the link between climate change and the increasing number and frequency of natural disasters has been verified by scientific studies (IPCC, 2023: 51). The adverse effects are expected to intensify, leading to catastrophes at a much faster pace.

This intensification mobilizes a broad network of actors involved in aid, support, and communication efforts. This is where the role of journalists, who travel to affected areas to report, often risking their lives, becomes especially significant. Elbein notes that since 2005, forty journalists around the world have died while covering environmental events, prompting consideration of this form of reporting as a new kind of conflict journalism (Elbein, cited in Warren, 2016: 1).

The objective of this study is to analyze the safety of journalists covering natural disasters. The safety of journalists has become the focus of growing research in recent years, especially since the UNPA (2012). Numerous authors have examined issues such as safety training for journalists (Lisosky & Henrichsen, 2009; Iturregui *et al.*, 2017), the risks these professionals face in conflict zones (Tenore, 2012; Cottle *et al.*, 2016), and the impact of this kind of coverage (Feinstein *et al.*, 2002).

However, no studies specifically analyze the safety of journalists covering catastrophes. This work continues the line of research pioneered by authors in conflict journalism while opening a new avenue, one in which few contributions currently exist. Authors such as Nisbet (2009), Collazos *et al.* (2015), or Muchunku and Ageyo (2022) focus on how the media handle disaster information; others, such as McMahon (2016), approach the issue from a trauma perspective, emphasizing that journalists often lack support after completing their work and highlighting the intrinsic connection between physical and psychological safety. However, no studies address the factors that determine physical and psychological safety.

1.1. Increased Study of Journalist Safety

Since the 2012 adoption of the «United Nations Plan of Action on the Safety of Journalists and the Issue of Impunity,» there has been growing scholarly

attention to issues related to journalist safety. Data collected by organizations such as UNESCO highlight the high number of media professionals killed in the line of duty (UNESCO, 2012: 1). The plan calls for the promotion of journalist safety through both prevention measures and strengthened legal frameworks, while also encouraging study and research on the subject.

Since 2012, there has been a noticeable increase in research addressing gender-related risks, threats, emotional well-being, and security in conflict zones (CFOM, 2022). Leman (2017) explored the dimensions that define journalist safety, a topic further developed by Freedman (2020), who emphasized the need for strategies to protect journalists on the job. Englund *et al.* (2023) proposed a system for analyzing the challenges associated with journalist safety. In parallel, academic institutions have designed analytical models to advance this line of inquiry (Slavtcheva *et al.*, 2023).

Slavtcheva *et al.* (2023) propose a conceptual model applicable to journalist safety, structured around physical and infrastructural safety. These are further divided into two dimensions each: physical and psychological, on the one hand, and digital and financial on the other. These four dimensions encompass threats that can cause stress and that necessitate the development of coping strategies. The greater the number of risk factors, the less safe journalists will be in their work, and the more resources they will require to address them (Slavtcheva *et al.*, 2023: 22-23).

Despite efforts to advance the field of journalist safety, there is very little research that delves into the safety of journalists covering disasters. Existing studies are largely limited to experiences of survivors (Englund *et al.*, 2022), PTSD related to disasters (Johannesson *et al.*, 2015), or coping strategies used after traumatic events (Tandoc & Takahashi, 2016).

1.2. Training as a Key Element

Freedman (2020) focuses on the mental well-being of journalists covering disasters, confirming that few studies have addressed this area. Journalists reporting on such events require safety training similar to that provided to war and conflict reporters (Freedman, 2020: 14), with professional organizations playing a key role in delivering this training.

Englund *et al.* (2023) have conducted some of the most comprehensive research on the safety of journalists covering disasters, considering factors that affect them before, during, and after their reporting.

They categorize them into four groups: managing situational challenges, professional challenges, personal challenges, and, finally, managing the

experience. Their research covers aspects such as the importance of having adequate equipment, avoiding isolation, and developing coping strategies. They emphasize the essential role of training, clear guidelines, and leadership from media outlets (Englund *et al.*, 2023: 14).

A lack of training and preparedness is associated with a diminished sense of control and high rates of PTSD. The findings of Englund *et al.* support earlier suggestions by Kroll *et al.* (2021), who identified training as the most consistent protective factor against burnout and PTSD symptoms in humanitarian workers, including journalists covering disasters. Mao *et al.* (2018) further stress the importance of not only initial but also ongoing training for coping with traumatic situations.

Silva (2010) recounts his personal experience covering hurricanes — *Mitch* (1998), *Beta* (2005), *Félix* (2007)— noting the important role NGOs play in supporting journalists. He argues that «the success of journalistic coverage of disasters depends on coordination» (Silva, 2010: 38-39), underscoring the need for prudence and emotional preparedness, much of which stems from prior training. Toledano and Ardèvol-Abreu (2013: 202) echo the importance of such preparation, emphasizing the need for journalist safety. They highlight deficiencies in training, the increasing precariousness of journalistic work, and concerns for both the physical and mental health of reporters.

1.3. Job Precariousness and Lack of Media Awareness

Wadud (2021) argues that job insecurity and precariousness are closely linked, particularly for freelancers. He highlights contributing factors such as low income and economic instability (Wadud, 2021: 274). Unda-Endemaño *et al.* (2022) reinforce this perspective, noting that in Spain, «precariousness has stalked journalism for decades, and conflict journalism is no exception» (Unda-Endemaño *et al.*, 2022: 15). UNESCO's Action Plan (2012) also emphasizes the need to address poor working and economic conditions, including low wages and the improvement of working conditions (UNESCO, 2012: 2). Garcés and Arroyave (2017) provide data on key risk variables among reporters, including aggression, lack of autonomy, and psychological disorders.

1.4. The Psychological Dimension

Psychological and physical safety are inextricably linked. McMahon (2016) asserts that the safety of journalists includes not only physical well-being but also protection from psychological harm resulting from exposure to violence, conflict, disasters, and tragedies (McMahon, 2016: 1). Research by Strom *et al.*

(2012) supports this connection, showing that individuals who experience psychological trauma may suffer impaired decision-making and face greater physical risks than those unaffected.

Elana Newman, Research Director at the Dart Center, alludes to the psychological consequences most commonly associated with disasters, including PTSD, PTS, stress reactions, depression, fear, anxiety, anger, and substance use (Pfefferbaum *et al.*, 2014: 1). Leman (2017) adds emotional health to this discussion, while Freedman (2020), though focused on mental safety, also emphasizes the importance of physical protection and the need for organizational strategies to safeguard professionals.

1.5. Research Objectives

The overall objective of this research is to analyze the safety of journalists covering natural disasters. Two analytical models were used: one derived from the JOSAFCON¹ project, which examines the safety conditions of journalists covering conflicts before, during, and after the event; and the model used by Englund *et al.* (2023) for journalism under extreme conditions.

Building on the main objective, the study also proposes the following secondary objectives:

1. To identify Spanish journalists who cover disasters and analyze their profiles (including gender, sector, the media outlet they work for, experience, and training).
2. To determine the elements that define the safety conditions of journalists covering disasters, based on the model proposed by Englund *et al.*
3. To assess whether there are specific characteristics within the Spanish context that affect the safety of journalists covering catastrophes.

2. Method

A multi-stage methodology was applied. In the first phase, the major global catastrophes of 2022 were selected. In the second phase, Spanish journalists who covered these events in the country's leading print newspapers (*El País* and *El Mundo*), as classified by the General Media Study (EGM), were identified

¹ JOSAFCON (Journalist Safety Research Project) is a research project funded by the Ministry of Science and Innovation of the Government of Spain that analyzes the safety conditions of Spanish journalists covering international conflicts. It proposes the adaptation of the analysis model used to delve into the safety of journalists in conflict zones to study the safety of journalists covering natural disasters, using a diachronic approach.

using a data collection form. From this sample, the snowball technique was used to include additional professionals from other media outlets (20). Finally, a selection was made from the full list of 135 identified journalists to carry out the planned interviews and obtain results.

2.1. Natural Disaster Identification and Database

In order to identify Spanish journalists covering disaster news, a selection of the major global catastrophes of 2022 was conducted. Following an exhaustive analysis of national media (*El Mundo*, *El País*), the ten most notable events were chosen from the 421 events recorded globally. Selection was based on their human and economic impact as well as media coverage, and included events such as droughts, storms, fires, and volcanic eruptions. For each event, several parameters were documented: start and end dates, epicenter of the phenomenon, and statistics on economic and human losses. These criteria made it possible to determine each catastrophe's duration, geographic location, and impact. Table 1 presents the full list of disasters analyzed.

Additionally, due to its proximity, significance, and media coverage in Spain, the 2021 eruption in La Palma was also included.

Table 1. *Main natural disasters identified in 2022*

	Event	Month / Year
1	Eunice Storm	February / 2022
2	Floods (Eastern Australia)	February / 2022
3	Record temperatures (Antarctica)	March / 2022
4	Wave of fires in the Mediterranean	June-August / 2022
5	Heat waves and droughts in Europe	July-August / 2022
6	Monsoon in Pakistan	July-August / 2022
7	Earthquake in Oaxaca 7.6° (Mexico)	September / 2022
8	Ian Hurricane (Florida and rest of USA)	September / 2022
9	La Niña (third consecutive year)	October / 2022
10	Hunga Tonga Eruption	December / 2022
11	La Palma Eruption	Sept.-December / 2021

Source: own elaboration.

After identifying these events, the corresponding time periods were analyzed in *El Mundo* and *El País*. The sample covered a total of fifteen full weeks (105 days), during which all news stories related to the selected phenomena were reviewed. From this review, a list of professionals who

reported on these events was compiled to create a census of Spanish journalists who have covered disasters for the media outlets examined in this study.

A data collection form was created to record information on each professional. For every journalist, the number of published pieces was noted, along with their full name, gender, media outlet, dates of coverage, category, and professional role (e.g., editor, photographer, special correspondent).

As previously mentioned, the two main national print newspapers according to the EGM, *El Mundo* and *El País*, were selected for analysis. The sample was limited to these two outlets due to the large number of news stories reviewed, with the aim of expanding the scope in future research. An initial sample of 115 journalists was obtained. Following the first round of interviews with journalists from these outlets, twenty additional professionals were included using the snowball method, based on suggestions from the interviewees themselves. These recommendations were evaluated and ultimately accepted, based on the duration and volume of their disaster coverage. The additional journalists were affiliated with four other outlets: *EiTB*, *Vocento*, *El Periódico*, and *La Sexta*. This brought the total sample to 135 journalists, all full-time professionals. From this group, a final interview sample was selected based on the number of articles published and the extent of on-the-ground reporting. In total, ten interviews were conducted, representing a variety of media organizations and professional profiles. This approach followed the model used by Freedman (2020) and Tandoc and Takahashi (2016), prioritizing the ten journalists with the highest number of published pieces and on-the-ground coverage. Interviews continued until a saturation point was reached, where responses became repetitive and ceased to provide new insights relevant to the research.

2.2. In-depth Interviews

Three axes were established, corresponding to elements before, during, and after coverage. The goal was to achieve the greatest possible diversity in terms of age (ranging from 25 to 65 years), gender, experience (ranging from 5 to 35 years in journalism), education, professional background, and types of events covered.

In-depth interviews were chosen as the most suitable method for obtaining results in this study. In qualitative research, «an *N* of 1 can be as illuminating as a large sample (and very often more so)» (Taylor & Bogdan, 1984: 106). Strauss and Corbin (1990) also highlight the advantages of this approach, as it enables researchers to uncover complex details of phenomena

that are difficult to access through other methods (Strauss & Corbin, 1990: 20-21). Tandoc and Takahashi (2016) and Freedman (2020) employed this technique in similar studies with objectives closely aligned to those of the present research. Their interviews lasted between 30 and 90 minutes, consistent with the duration established in this study.

The interviewees' responses were anonymized in accordance with Table 4, following the methodology employed by Iturregui *et al.* (2020: 6). This research was approved by the Ethics Committee (CEISH), the collegiate body responsible for evaluating research and teaching activities at the University of the Basque Country (NoRefCEID M10/2023/198).

The methodology of JOSAFCON project on journalist safety served as a primary reference, along with the model proposed by Englund *et al.* (2023) in their study of coverage under extreme conditions. To prepare the interview script, the JOSAFCON questionnaire was used as a model, incorporating factors related to the periods before, during, and after coverage.

The interviews gathered information about several key aspects of disaster coverage: who selects the journalists assigned to these events, whether they receive training (beforehand); working conditions in the field, access to protective equipment, and the existence of support from the media outlet (during); and finally, whether any reception or reintegration protocols are in place (after).

To systematize and organize the results, several models were reviewed (Leman, 2007; Freedman, 2020; Slavtcheva *et al.*, 2023) in addition to JOSAFCON. Ultimately, the framework proposed by Englund *et al.* (2023) was adopted, as it is one of the most recent models and best aligned with the data collected, both in terms of responses and thematic discussions, and is specifically focused on journalist safety in disaster contexts.

3. Results and Discussion

The analysis highlights a strong similarity between the factors that determine the safety of journalists covering natural disasters and those operating in conflict zones. Both the literature reviewed and data collected in the interviews point to comparable results, revealing the common challenges and needs these professionals face in their work.

3.1. Identification and Profile of Journalist Covering Disasters

The total number of journalists identified as covering news during the analyzed period was 115, of which 84 were men (73%) and 31 were women (27%). *El*

País had a greater number of reporters covering disasters (70) than *El Mundo* (45 journalists). Specifically, *El País* also assigned more journalists to cover the La Palma eruption, with 20 journalists compared to 13 from *El Mundo*. These figures support the statement made by Díaz-Echarri *et al.* (2023: 56), who stated that «*El País* generally offers considerably more coverage than *El Mundo*» on climate change. This trend appears to extend to disaster coverage as well, suggesting possible patterns in the newspaper’s approach to environmental reporting.

Table 2. Journalists initially identified (*El Mundo, El País*)

	Men	Women	Event (Media Coverage)
EL PAÍS (Printed newspaper)	13	7	La Palma Eruption (20)
	36	14	Other phenomena (50)
	49	21	Total (70)
EL MUNDO (Printed newspaper)	8	5	La Palma Eruption (13)
	27	5	Other phenomena (32)
	35	10	Total (45)
	84 (73%)	31 (27%)	115

Source: own elaboration.

Following the first interviews conducted with the identified professionals, the initial sample was expanded to include additional reporters and photographers from other media outlets, thanks to the use of the snowball technique.

Table 3. Final sample of journalists using the snowball technique

	Men	Women
EL PAÍS	49	21
EL MUNDO	35	10
OTHER MEDIA	16	4
	100 (74%)	35 (26%)

Source: own elaboration.

The final sample consisted of 135 journalists, 100 of whom were men (74%) and 35 women (26%), maintaining the same gender distribution as the initial sample, which included only journalists from the newspapers *El Mundo* and *El País*.



Table 4. *Interviewed journalists. Coverage of climate change and disasters*

Code	Sector	Entity	Category	Years (Experience)	Gender
P1.1	Mass Media	Private	Area Manager	20	Woman
P1.2	Mass Media	Public	Journalist, Special Correspondent	5	Woman
P1.3	Mass Media	Private	Journalist, Correspondent	35	Man
P1.4	Mass Media	Private	Director	15	Man
P1.5	Mass Media	Private	Journalist	10	Man
P1.6	Mass Media	Private	Area Coordinator	20	Man
P1.7	Mass Media	Private	Journalist, Local Area Manager	32	Man
P1.8	Mass Media	Private	Journalist	28	Man
P1.9	Mass Media	Private	Journalist, Expert	20	Man
P1.10	Media / Association	Private	Director	25	Woman

Source: own elaboration.

The results allow us to develop a general profile of journalists covering disasters in Spain. Seventy percent of the interviewees are between 45 and 55 years old, with careers spanning between 20 and 30 years. The majority are men —seven out of ten— and in virtually all cases, their training is related to communications. Some hold master's degrees and doctorates, and a third of the sample has received various awards in recognition of their work in the fields of outreach or research (communications or climate change).

This profile has another striking characteristic: a career spanning multiple media outlets or sections, often with a specialization in environmental issues. These are full-time professionals who, in many cases, have training in fields outside the Social Sciences (oceanography or environmental management) and engage in additional activities alongside their journalistic work. These include contributing to scientific journals and radio programs, developing specialized blogs, authoring books, etc.

3.2. Defining Elements on Disaster Safety

The model proposed by Englund *et al.* (2023) was used to systematize the interview results. Disaster coverage management is structured into four blocks, which the authors define as follows: situational challenges (technical, practical, and collaborative), professional challenges (purpose, approach, and acquired role), personal challenges (qualities, emotions, and coping), and experience management, which includes learning and personal growth.

3.2.1. Situational Challenges

Among the situational challenges —technical, practical, and collaborative— the most notable are those related to equipment, improvisation, 24-hour shifts, and the need for teamwork to avoid isolation. Most participants reported working long, exhausting days with little support, insufficient equipment, and no clear instructions for carrying out their tasks.

«My media didn't provide any equipment; I got it from other media outlets that were already on site.» (P1.2)

The interviewees consistently stated that they had not received any equipment from their media outlets. Protective vests, helmets, and smoke masks are rarely used, and as a result, most media organizations do not supply them. Journalists are often forced to obtain this equipment themselves or rely on other entities that provide it.

«They don't provide you with equipment or insurance.» (P1.3)

Having safety equipment is a key area for improvement in media organizations. It is closely linked to the need for clear protocols and the avoidance of improvisation, another factor that Englund *et al.* include under technical situational challenges, and one that appeared consistently across all cases analyzed.

«You feel lost. I didn't have a strategy or a protocol for action, both for working and for protecting myself.» (P1.2)

None of the interviewees reported having a guide for disaster coverage. As a result, they were forced to improvise and find their own solutions to the challenges that arose. The study by Englund *et al.* (2023: 7) reported similar findings, confirming the need to address these gaps through structured protocols rather than relying on individual improvisation.

«It's a feeling of total survival. Years ago, there were many communication problems. Nowadays, things have improved, but there is still a huge lack of knowledge about the areas in which they work.» (P1.3)

A lack of knowledge about the environment in which reporters must operate has been widely documented (Silva, 2010; Collazos *et al.*, 2015; Freedman, 2020), and was clearly confirmed by the interviewees.

Freedman (2020: 14) emphasizes that press rights groups must develop strategies to protect environmental journalists and prevent future abuses, reducing their exposure to insecurity and reinforcing the need for clear guidelines to ensure safe and effective coverage.

Wadud (2021) addresses insecurity by referring to the decline in the number of journalists covering the news. These specialists «are expensive» (Tejedor *et al.*, 2022), which is why, since 2008, the network of correspondents has shrunk, a reduction that is particularly evident in climate and environmental journalism, and one that continues to grow (Wadud, 2021: 266).

During the interviews, one recurring theme across all cases was the long working hours and the constant need to improvise due to the absence of a defined coverage plan.

«There were many hours of work every day, whatever came up.» (P1.4)

«The first day I did about 25 live broadcasts between radio and television —18 hours of work. During the following days, it was common to work 15 to 16 hours. You didn't know if you would be able to eat, if you would have time, or if there would be anything open or food available.» (P1.2)

Exposure to long working hours is currently the occupational risk factor associated with the highest number of illnesses according to the Global Comparative Risk Assessment (Pega *et al.*, 2021: 13).

Another situational challenge in collaborative contexts is avoiding isolation by building a support network. Obermaier (2023) emphasizes the importance of solidarity and cooperation among colleagues.

«After a few days, you create a support network among those displaced from different media, in collaboration with the police, firefighters, NGOs, etc.» (P1.2)

A natural sense of community often emerges among reporters deployed to the area, as well as with local authorities and NGO workers. Support is reciprocal —not only do journalists receive help from these groups, but they also set aside their reporting duties to assist wherever needed.

«In addition to your work as a journalist, you continually help with rescuing people and with whatever tasks arise.» (P1.3)

3.2.2. Professional Challenges

This section, which brings together professional challenges —purpose, focus, and roles— is related to elements such as journalistic duty, media mission,

reporting focus, and the role of the journalist, as well as potential conflicts related to the latter (Englund *et al.*, 2023: 8).

Vocation is what drives the interviewees to complete their coverage. On more than one occasion, they describe a sense of duty when entering a disaster area; they feel compelled to report.

«These cases must be covered by a professional. You have to go; it's like going to war; someone has to report it.» (P1.3)

In addition to their sense of vocation, once on site, respondents emphasized fulfilling their professional role and doing their job to the best of their ability. As Englund *et al.* (2023: 8) note, the simultaneous activation of personal and professional roles can lead to internal conflict —a point emphasized by all interviewees in this study— which generates emotional strain and the need to develop coping strategies. Blackholm and Idås (2015) also state that journalists in crisis situations often face moral dilemmas: «I considered leaving several times because of the dangers I saw. You wanted to help all the time. We're journalists, but we're also people.» (P1.2)

3.2.3. Personal Challenges

Personal challenges are closely linked to professional ones. Reporters covering disasters are not only journalists —they are people. Balancing these two roles, which must coexist, is difficult. This section explores challenges related to personal qualities, emotions, and coping strategies. In the absence of formal guidelines, participants developed these strategies spontaneously.

The importance of relying on others, sharing spaces, and managing the situation as best as possible emerged as a key theme.

«Under these conditions, it's important to work with other colleagues, help each other, whatever it takes. Standing together is key.» (P1.3)

Some participants reported crying, while others described being too shocked to react. Improvised coping strategies were common.

«You cry. But after the initial shock, you become dehumanized, you become tougher. It's a bit like putting on armor.» (P1.2)

Obermaier (2023) notes that journalists often adopt emotion-focused coping strategies, seeking support from colleagues and family, or distracting themselves from traumatic situations by engaging in other activities, a pattern also observed by Aoki *et al.* (2013). The value of peer support, both giving and receiving help, was widely emphasized.

«You meet with colleagues to eat, have therapy, and disconnect from what you're experiencing. Talking to them helps you cope.» (P1.2)



Similar responses appear in Englund *et al.* (2023: 7), where professionals described gathering for dinner and conversation as a way to decompress. Informal meetings with colleagues were seen as an effective means of resolving challenges.

3.2.4. Experience Management

Improvisation is a constant throughout disaster coverage —both in terms of carrying out the work and ensuring personal safety. When it comes to managing and coping with the experience, this need for improvisation remains.

«I didn't have any strategy or action protocol, either for work or for protecting myself. It was always a case of every man for himself.» (P1.2)

Interviewees reported having no protocols to guide them, no advice or support, and being forced to develop coping strategies on the spot.

«[Covering a catastrophe] is the closest thing to a feeling of extreme climate change. There is still no awareness [of protocols or guidelines] in the field of climate change.» (P1.3)

«At first, it's very hard. It's an experience that changes the way you see life. It was a very positive, albeit very difficult, experience.» (P1.2)

In terms of learning and personal growth, interviewees describe it as a complex but highly formative experience. Many identified it as a turning point in both their professional and personal lives, one that allowed them to acquire valuable knowledge and coping tools for the future.

«What they experienced there was natural, interesting, and personally valuable.» (P1.4)

3.3. Specific Features of the Spanish Case

Several elements characterizing the Spanish case were identified through the interviews conducted. One of the most significant findings is the media's lack of awareness, which results in a neglect of responsibilities regarding journalist safety. This gap often leads other actors to assume roles that should fall to media organizations: NGOs step in to address physical security needs —such as equipment, transportation, and support— while colleagues provide psychological security through solidarity, support, and a sense of unity.

3.3.1. Safety Conditions: Precariousness

Environmental journalism is currently one of the most dangerous fields in the news industry (Freedman, 2020). Between 2005 and 2016, 40 environmental journalists were killed for their work, a higher number than the total killed covering the war in Afghanistan (Warren, 2016). Reporting on climate change

and environmental issues, in particular, is increasingly recognized as a high-risk activity (Wadud, 2021: 263).

Toledano and Ardèvol-Abreu (2013: 206) highlight the precarious nature of journalists' employment conditions, sometimes to the detriment of content quality. Iturregui *et al.* (2020: 3) describe precariousness as «an endemic evil of the profession,» noting that economic conditions often take precedence over journalistic ones (Iturregui *et al.*, 2017: 263). These concerns are echoed by Unda-Endemaño *et al.* (2022: 15), who report that «the situation has worsened significantly» in recent years and stress the urgent need for journalists to «receive training, safety equipment, and fair agreements.»

The professionals who cover these catastrophes often do not have permanent contracts and frequently work as freelancers: «The availability is total, with full dedication and no knowledge of the amount of work or how to do it. I was not offered equipment or insurance.» (P1.3)

The information provided by interviewees aligns with key characteristics of precarious work, such as the absence of insurance and adequate equipment. These findings are consistent with the poor working conditions described by previous authors, particularly in relation to employment contracts. Gutiérrez-Cuesta *et al.* (2022: 119) note that veteran journalists are sometimes replaced «by young people with lower salaries.»

They allege long hours of coverage and the absence of a permanent contract, in addition to generally poor working conditions: lack of resources, limited support, insufficient equipment, etc. The insecurity inherent in disaster coverage —combined with limited knowledge of the environment, improvisation, and the absence of guidelines— make the work more complex and riskier. All of this is compounded by low wages and unstable, sometimes intermittent, income, factors that clearly reflect their precarious employment situation.

3.3.2. Lack of Safety Awareness on the Part of the Media

The lack of media awareness is evident in the statements collected. There are no established protocols or guidelines to protect these professionals; there is no culture of security.

«There is a complete lack of awareness on the part of the media. They are not concerned about the safety of journalists covering natural disasters.» (P1.3)

No prior risk assessments (physical and/or psychological) are conducted, nor do media outlets have personnel specialized in disaster coverage.



«There should always be someone prepared to go to where a disaster has occurred. Media outlets don't have anyone.» (P1.3)

Little attention is given to the selection of personnel deployed to the field. In none of the cases within the study sample were there formal guidelines for this process.

«There are no criteria for selecting who covers a catastrophe.» (P1.3)

«The criterion was availability. In these cases, you have to decide quickly. It wasn't a random decision, but we did what we could. We chose someone with previous experience in reporting, human stories, etc.» (P1.4)

A real and urgent need is identified for newsrooms to have a trained professional ready to respond when a disaster occurs.

In the Spanish context, one of the most striking aspects is the lack of media awareness regarding journalist safety. Unlike countries such as Belgium, Finland, the Netherlands, or Sweden, examples of best practices in safety awareness and journalist protection (Žuffová & Carlini, 2021: 14), this gap stands out as a differentiating factor. The neglect by Spanish media often results in other actors assuming roles that should fall to news organizations.

The lack of awareness is evident in both psychological and physical dimensions. In the field, the absence of physical safety measures —such as equipment, insurance, transportation, or assistance— means that NGOs often step in to fulfill these needs.

In terms of psychological safety and coping strategies for trauma, it is primarily professional colleagues who provide support, although NGOs may supplement this role when necessary and when they have the capacity.

3.3.3. The Need for Specific Training

The need for prior training is fundamental. It is the most frequently cited issue in the interviews and, as in conflict coverage, plays a key role in disaster reporting. The lack of training is one of the most significant challenges for journalists in conflict zones (McGoldrick & Lynch, 2000: 25-26), a difficulty that is similarly present in disaster contexts.

«The journalists who covered the disaster were not prepared in advance; they had not received any training or guidance.» (P1.4)

Most authors agree on the importance of receiving safety training (Silva, 2010; Toledano & Ardèvol-Abreu, 2013; Muchunku & Ageyo, 2022), a point clearly echoed by the interviewees.

3.3.4. Deficiencies in Physical and Psychological Security

In the context of journalist safety during disaster coverage, both physical and psychological health are key factors (Leman, 2017; Freedman, 2020). Although these dimensions are intrinsically linked, they are scarcely valued by media organizations. A lack of physical and psychological support is evident, both during coverage and upon return, as media outlets typically offer little more than a few days off.

«Psychological support is now being offered after returning from wars [October 2023], it's pioneering. This doesn't happen with disaster coverage.» (P1.3).

McMahon (2016) notes that journalists do not receive assistance after covering a tragedy. Editors and press managers are responsible for ensuring the physical safety of those they dispatch (Silva, 2010: 46), especially given that psychological risks in this field may be greater than in other areas of journalism (McMahon, 2016; Garcés & Arroyave, 2017). For this reason, safety must be guaranteed across both dimensions. While no formal return protocols exist, media outlets do offer some flexibility regarding the timing of a journalist's return.

«When I returned, I took a few days off.» (P1.4)

«When I returned, my news organization told me to take the time I needed to reflect and recover from the situation.» (P1.2)

At a psychological level, there is some recognition of the impact by journalists and media outlets. However, it remains a taboo subject in most cases, something also observed in conflict journalism (Hilsum, 2018). Some professionals who have covered disasters fear losing their jobs or future opportunities if they disclose suffering from post-traumatic stress caused by these experiences. Despite generally positive attitudes toward managing and coping among reporters, there are perceived disincentives within newsrooms to openly acknowledge fears or mental health challenges.

Currently, no evaluation or check-up is provided upon return from disaster coverage. In this study, only one interviewee (P1.2) reported receiving a physical and psychological assessment. This practice is not integrated into media routines and serves as further evidence of the lack of awareness regarding the safety of journalists covering disasters.

3.3.5. The Role Played by the NGOs

Among the forms of support most frequently mentioned by interviewees is the role of NGOs (Schäfer, 2012), which are considered essential during disasters.

NGOs provide significant assistance to journalists on the ground (Toledano & Ardèvol-Abreu, 2013: 203-204), often more than the media organizations themselves.

«The support from NGOs is very strong, more so than that of the media.» (P1.3)

Muchunku and Ageyo (2022) highlight the value of information provided by NGOs to journalists, an observation also supported by Silva (2010), who adds that NGOs often assist with transportation and equipment.

«The NGOs offered psychological help to affected families. As journalists, they offered help if we needed it.» (P1.2)

«I met people from the media, NGOs, local authorities... There was collaboration between everyone to exchange equipment, support, etc.» (P1.4)

The support work that media organizations fail to provide for journalists covering disasters is often taken on by NGOs, which meet many of the on-site needs and offer direct assistance to reporters.

4. Conclusions

The growing risk of climate-related catastrophes calls for increased research attention within journalism studies, specifically, research that examines the conditions under which journalists report on these events. This is essential in the face of an emerging scenario marked by the increasing frequency and intensity of natural disasters (IPCC, 2023: 51).

The paucity of studies on the safety of journalists in general is notable, particularly in the context of natural disaster coverage. This study applies the Englund *et al.* (2023) model to analyze and compare professional conditions in disaster reporting. A recurring and critical issue, highlighted in both previous studies and the Spanish case, is the lack of training, which is considered fundamental to ensuring journalist safety in these high-risk situations. Such training is necessary so that professionals deployed to disaster zones can work under optimal conditions and minimize their exposure to risk, a point strongly emphasized by authors such as Leman (2017) and Freedman (2020). However, to fully validate the analytical model, the Spanish case study —perhaps along with other national contexts— would benefit from the inclusion of working conditions as a central analytical factor. This is essential, as working conditions fundamentally affect the quality of journalistic output and the practice of the profession. In Spain, the media outlets represented by the interviewees demonstrate a near-total lack of safety awareness, with limited attention paid

to basic issues such as prior risk assessments, insurance, protective equipment, or psychological support.

The role that universities and other institutions with responsibilities in this field should play is another important area for future focus, as a significant gap remains in this regard.

It is also important to note that this is not a debate limited to journalists covering international disasters, such as the 2021 La Palma volcano eruption. These situations also affect local journalists, as seen in the case of the DANA in Valencia in October 2024. Sudden and unexpected events are often covered without guidance or support, relying instead on common sense and improvisation, as all interviewees in this study indicated in their responses. From a research perspective, it would be pertinent to develop an analytical model that integrates all security-related factors affecting disaster coverage. While the model proposed by Englund *et al.* (2023) is robust and covers a wide range of relevant dimensions, certain gaps remain. These include working conditions, training in both physical and psychological safety, and the broader issue of precarious employment.

Ethics and Transparency

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Conflict of Interest

The authors declare that there are no conflicts of interest.

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Author Contributions

Contribution	Author 1	Author 2	Author 3	Author 4
Conceptualization	X	X	X	
Data curation	X			
Formal Analysis	X	X	X	
Funding acquisition	X	X	X	
Investigation	X	X	X	
Methodology	X	X	X	
Project administración	X	X	X	
Resources	X	X	X	
Software				
Supervision		X	X	
Validation				
Visualization	X			
Writing - original draft	X			
Writing - review & editing	X	X	X	

Data Availability Statement

The data can be requested directly from the authors.

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