



Regular Article

Trends on Disaster Risk Reduction Research in Gender Perspectives: A Systematic Literature Review

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Abstract DRR (Disaster Risk Reduction) is a preventive effort needed by the community to prepare for unwanted events such as disasters. Gender perspectives provide a deep understanding to explore the needs of a gender-diverse society. For example, women's risk in disaster conditions is different from men's risk, so it is important to look at the relevance between disaster risk reduction and the gender perspective of previous research. The research method used is a qualitative method of meta-synthesis using a systematic literature review with Bibliometric analysis guidelines. The Scopus website is used to view citation metrics, Microsoft Excel and OpenRefine to reduce data, and Biblioshiny to view visualizations with a deadline of 2009-2024. With the keywords "disaster risk reduction" and "gender perspectives" there are 4 coupling clusters, namely 1. gender identity, Indonesia, Philippines, 2. gender, leadership, adult, 3. Community development, disaster management, gender, 4. disaster management, India, natural disaster, with a total of 21 articles. Indonesia, the Philippines, and India are the most discussed countries. The results of the meta-synthesis analysis show that there are 3 common focuses of the 10 most cited articles, namely: 1. Implementation of the Sendai Framework for Disaster Risk Reduction that is gender-sensitive, 2. The importance of community-based capacity building and 3. The importance of an inclusive approach includes paying attention to sexual minorities. It is recommended that previous authors can collaborate to enrich scientific studies in the field of DRR.

Keywords: bibliometric analysis, disaster risk reduction, gender perspectives, Scopus

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1. INTRODUCTION

Research on disaster risk reduction has indeed been extensively researched; it's just that research on disaster risk reduction that focuses on gender perspectives is still limited. Gender issues in disaster events have indeed occurred in the aftermath of disasters, such as inequality of roles in households, unequal power relations between women and men after disasters to sexual violence, domestic violence, financial abuse, physical violence, and psychological violence. Of course, this happens because there are many factors that intersect (*intersection*) so that there are also many causes and effects caused by the issue of gender-based violence in the aftermath of the disaster (Lubis et al., 2023).

From 1929 – 2025, there were 12,163 research documents produced from the Scopus page with keywords "Disaster Risk Reduction", without publication year limits, and limitations in the social sciences, there are 4,919 documents from 1990 to 2025. Disaster risk reduction research was first written by Ralph B. Taylor and Sally A. Shumaker in 1990 under the title *Local crime as a natural hazard: Implications for understanding the relationship between disorder and fear of crime* in their research has not touched on the presence of gender perspectives which are actually very important to be researched. If analysed using the Biblioshiny Application, research on disaster risk reduction is most in demand in 2024, with a total of 557 documents. Of the 557 documents that used Taylor and Shumaker (1990) *gender issues; gender roles, gender, gender disparity* as many as 1 incident each and that touched on the theme of *disaster risk reduction*, there were 1% or 10 occurrences. Although research on disaster risk reduction is very high in 2024, those who talk about gender perspectives are still very limited, even though when disasters occur, the risks of women and men are much different.

In disaster risk reduction research, disasters that are most discussed are *about natural disasters* rather than *man-made disasters*. Natural disasters are indeed the most difficult to predict because natural disasters depend on natural events that cannot be manipulated by humans. *The Sendai Framework for Disaster Risk Reduction (SFDRR)* has launched several indicators to standardize the 187 UN member states that participated in the Disaster Risk Reduction Conference on March 18, 2015, in Sendai, Japan. The indicator is that the SFDRR has several indicators in the disaster management process, namely increasing understanding of disaster risk, strengthening disaster risk implementation procedures in disaster risk management, making investments in disaster risk reduction for resilience, improving disaster preparedness, and building better recovery, rehabilitation, and reconstruction efforts (BNPB, 2015; Stefanie & Puspita, 2021). Therefore, disaster risk reduction is an important discussion among disaster researchers.

One of the most global natural disasters is the tsunami in Aceh, Indonesia, with 277 thousand deaths, 45 thousand people missing, and 280 thousand injured. Material losses reached 51 trillion, damage reached 97 percent of Aceh Province's Gross Regional Domestic Product (GDP), and damage extended along more than 1000 km of coastline. Indonesia is one of the countries with the highest risk in the world. The tsunami disaster in Aceh makes disaster

management important to be studied more deeply, especially in preparing for possible risks that occur or pre-disasters (Lopes Cardozo et al., 2022).

Preventive measures are carried out by conducting disaster risk assessments in several disaster-prone areas. This is very important, especially in government studies, in an effort to protect citizens. Several studies on disaster risk assessment have also been extensively researched, especially on how to build resilience in a village, city, and province. Resilience is an important concept when it comes to preventive measures. Given that many gender issues intersect with other issues when talking about disaster risk reduction, researchers want to see the trend of previous research that discusses disaster risk reduction from a gender perspective.

RQ1: How have publication outputs evolved across different countries over time?

RQ2: Which publications receive the highest citation impact?

RQ3: How have publishers' publication outputs changed over time?

RQ4: How are research themes interconnected across the articles?

In Section 2, we will explain the literature review on the Bibliometric method used to explain Scopus as the basis for data collection. Section 3 explains the research design and SLR process carried out. Section 4 demonstrates the results and discussion. Section 5 presents the conclusion and recommendations.

2. LITERATURE REVIEW

2.1 Bibliometrics Method

Glanzel and Schoepflin (2001) stated in their discussion paper that Bibliometrics has become a heterogeneous field and sub-disciplines are drifting apart. Consequently, Bibliometrics comprises sub-disciplines with distinctly different communication, citation, and publication characteristics. Some experts state that Bibliometric analysis is an analysis that relies on statistical visualization of the publication of articles, books, or chapters of books to be the main study. This can be a good reference by looking at the influence of the results of previous research on the studies that are now developing. Of course, by conducting research on articles that have been published, researchers will now find it easier to see the pattern of a developing science and, most importantly, the output of a science (Jing et al., 2024).

Various studies with Bibliometric methods have been carried out. Bibliometric analysis is not only looking at statistical data but also the quality of researchers in narrating it (H. P. Singh, 2022). More, Donthu et al. (2021) stated that Bibliometric analysis allows us to reveal the evolution of a field that can be seen as related to each other. Bibliometric indicators can see the progress of science towards progress or regression (Passas, 2024). Indicators in bibliometric analysis analyse patterns in large groups (Russell & Rousseau, 2015).

There are several benefits of bibliometrics as stated by Mejia et al. (2021) that the bibliometric methodology is considered useful as a supporting tool for decision-making in setting research priorities, tracking the evolution of science and technology, allocation of funds, and rewarding scientific excellence, and is a method that is rapidly spreading beyond the information and library science domain from which they started so that they can access to scientists and practitioners at any skill level.

Search for bibliometric data using data, Scopus uniquely combines a comprehensive, expertly curated abstract and citation database with enriched data and linked scholarly literature across a wide variety of disciplines (Baas et al., 2020). Scopus does not easily cover all published sources, although Scopus is one of the comprehensive databases of various kinds of documents that archive all academic research (Ahmi & Mohd Nasir, 2019). The data centre of attention in this bibliometric analysis tends to be massive and objective. However, its interpretation often depends on the objective and subjective evaluation determined through informed procedures and techniques (Donthu et al., 2021). Scopus indexes many different elements of scientific publications, obtained from external publishers, such as publication title, abstract, keywords, author names, and linked affiliations, references, and drug terms (Baas et al., 2020). Besides enriched metadata records of scientific articles, Scopus offers comprehensive author and institution profiles, obtained from advanced profiling algorithms and manual curation, ensuring high precision and recall. The trustworthiness of Scopus has led to its use as a bibliometric data source for large-scale analyses in research assessments, research landscape studies, science policy evaluations, and university rankings (Balahurovska, 2025). Scopus data have been offered for free for selected studies by the academic research community, such as through application programming interfaces, which have led to many publications employing Scopus data to investigate topics such as researcher mobility, network visualizations, and spatial Bibliometrics (Pradana et al., 2022).

3. METHODOLOGY

3.1 Research Design

The qualitative method uses systematic review and Bibliometric analysis, a research approach by evaluating the results of previous research publications. The researcher used the flow of the systematic review process in 21 publications on disaster risk reduction from a gender perspective in social science disciplines. Systematic reviews can help us find out the available evidence, by first knowing what is known, what support is available, and what has not been explained (Maeda et al., 2022; Rachmawati, 2024), and is very dependent on when the measurement is taken and how the stages are (Enang et al., 2022). Bibliometric analysis can explore in more detail the findings of previous research to see the novelty of ideas and knowledge contributions from researchers that have a large impact factor. The bibliometric analysis may better explain the aspects that support research findings, contribute to an investigation, and direct researchers in doing significant research (Norlita et al., 2023; Tedja et al., 2024).

3.2 Data Collection

The method used is a qualitative method with applications including Scopus as a research data bank, Microsoft Excel to clean up empty data, OpenRefine which is used to screen author keywords so that there is no repetition, and the last one uses the Biblioshiny web application that can map the results of research metadata that has been screened before.

3.3 Data Analysis

First, the data source is taken from the Scopus database for 2009-2024 with the disaster risk reduction article in the gender perspectives category. The search terms were "[disaster risk reduction]" and "[gender perspectives]". Then use the data to be analysed by the Biblioshiny Web Application. It is hoped that the map obtained can show the relationship between authors and each other, seeing the frequency of the most article citations. Second, the formulation of the SLR process summary that explains the data screening process. Third, meta-synthesis, using the evaluative content analysis (qualitative method), this study analysed and evaluated their purposes, methods, findings, and future research questions. This qualitative method has been used by previous studies and allowed the study to yield more richness in its discussion (Aspfors & Fransson, 2015; Maeda et al., 2021). The SLR Process is shown in Figure 1.

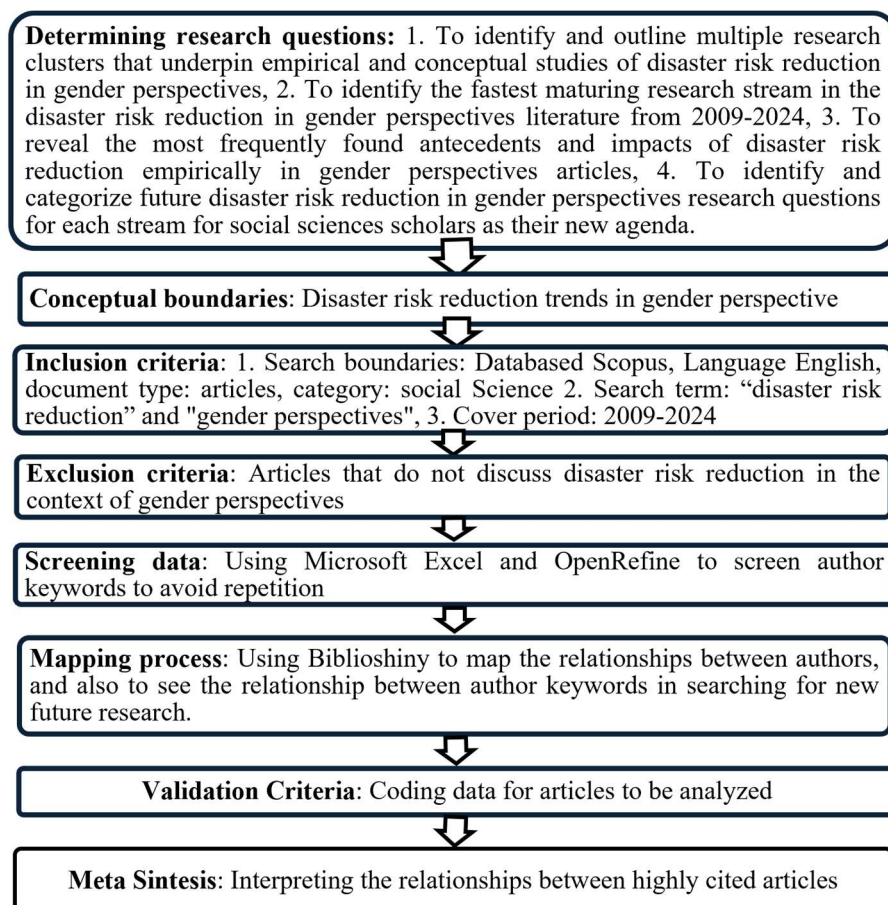


Figure 1. SLR Process

4. RESULT AND DISCUSSION

4.1 Bibliometric Analysis

Bibliometric analysis shows the overall distribution of data by presenting 6 parts of the data, namely: 1. Main information about data, 2. Document contents, 3. Authors, 4. Authors Collaboration and 6. Typical documents. This study selected a Scopus database with a total of 21 documents. The main data are shown in Figure 2 below.

Description	Results
MAIN INFORMATION ABOUT DATA	
Timespan	2009:2024
Sources (Journals, Books, etc)	14
Documents	21
Annual Growth Rate %	-2.67
Document Average Age	5.9
Average citations per doc	18.62
References	1123
DOCUMENT CONTENTS	
Keywords Plus (ID)	87
Author's Keywords (DE)	101
AUTHORS	
Authors	45
Authors of single-authored docs	8
AUTHORS COLLABORATION	
Single-authored docs	9
Co-Authors per Doc	2.24
International co-authorships %	33.33
DOCUMENT TYPES	
article	21

Figure 2. Main data

There were 45 authors who spoke on this theme in the field of social sciences of 44.7%, further detailed in Figure 3.

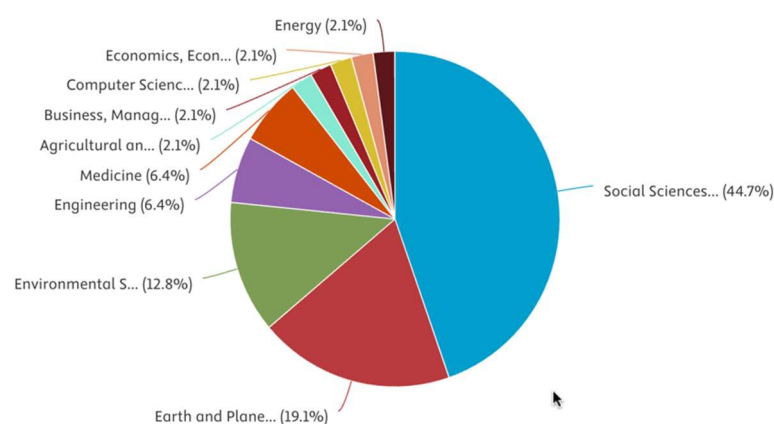


Figure 3. Documents by subject area

The themes presented based on Biblioshiny visualization have 4 coupling clusters, namely: 1. Gender identity with 100% configuration, Indonesia with 100% configuration, Philippines with 100% configuration; 2. Gender with a configuration of 66.7%, Leadership with a configuration of 100%, Adult with a configuration of 100%; 3. Community development with 100% configuration, Disaster management with 20% configuration, Gender with 33.3% configuration; 4. Disaster management with 40% configuration, India with 100% configuration, Natural disaster with 100% configuration. Themes with 100% configuration in each cluster show a lot of occurrences regarding the issue. The Biblioshiny visualization is as follows.

label	group	freq
gender identity - conf 100% indonesia - conf 100% philippines - conf 100%	1	4
gender - conf 66.7% leadership - conf 100% adult - conf 100%	2	3
community development - conf 100% disaster management - conf 20% gender - conf 33.3%	3	2
disaster management - conf 40% india - conf 100% natural disaster - conf 100%	4	2

Figure 4. Clustering by coupling

Research trends related to disaster risk reduction in gender perspective from 2009 to 2024 in the Scopus database are still limited. Of the keywords that have been used, there are only 21 documents. Here is the visualization in Figure 5.

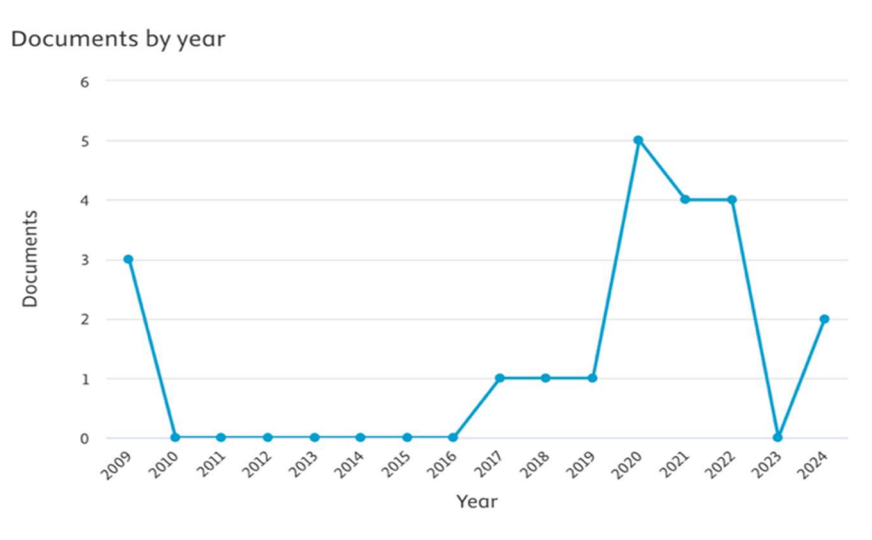


Figure 5. Article publication trends in 2009-2024

In 2009, there were only 3 publications; in 2010-2016 and 2023, there were no publications on this subject. Although in 2017-2018 there was 1 article published each, the researcher stated that publications with this theme were very limited. Meanwhile, the most publication data in 2020 are 5 documents as follows in Table 1 (Hou & Wu, 2020; Pozzo & Virgili, 2020; Ramalho, 2020; Ritu, 2020; D. Singh, 2020).

Table 1. Most publications in 2020

No.	Writer	Heading	Publisher
1	Jordan Ramalho	Engendering disaster risk management and resilience-building: The significance of the everyday in evolutions of the exceptional	International Journal of Disaster Risk Reduction, Vol. 50
2	Rite	Living with and responding to risk in the Uttarakhand Himalayas: A call for prioritizing lived experiences in research policy praxis	International Journal of Disaster Risk Reduction, Vol. 48
3	Deepshikha Singh	Gender relations, urban flooding, and the lived experiences of women in informal urban spaces	Asian Journal of Women's Studies, Vol 26, Issue 3, Pages 326-346
4	Chaoping Hou & Haorui Wu	Rescuer, decision maker, and breadwinner: Women's predominant leadership across the Post-Wenchun earthquake efforts in rural areas, Sichuan, China	Safety Science, Vol. 125
5	Riccardo Pozzo & Vania Virgili	Community readiness for local Covid-19 management	Frontiers in Research Metrics and Analytics, Vo. 5

Further, this article analyses co-occurrence based on document titles. There are 3 large clusters in which they show the themes in the previous research; here is the co-occurrences network in Figure 6. Cluster 1 consists of the disaster management, Philippines, vulnerability, women's status, gender role, India, natural disaster, risk factor, and socioeconomic conditions. Cluster 2 consists of gender and risk assessment. Cluster 3 consists of female, male, disasters, and human.

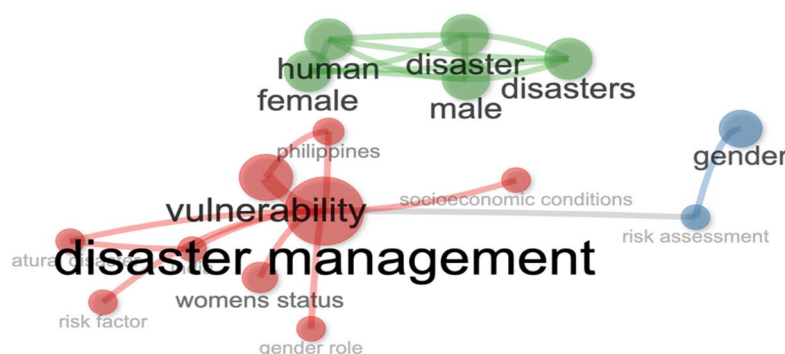


Figure 6. Co-Occurrence network

These clusters have a tendency to still be developed in future research, as shown in the following visualization in Figure 7.

The theme of disaster management appeared 7 times, vulnerability 4 times, women's status 3 times, India 2 times, natural disaster 2 times, risk factor 2 times, risk assessment 3 times, socioeconomic conditions 2 times, gender role 2 times, gender 3 times, female 2 times, male 2 times, decision making 2 times, disaster 2 times, disasters 2 times, Human 2 times and Philippines 2 times. From Figure 7, it can be seen that the themes of gender role, risk assessment, and socioeconomic conditions are themes that can still be developed. Meanwhile, the themes of gender, female and male have high relevance in disaster risk reduction research in gender perspectives.

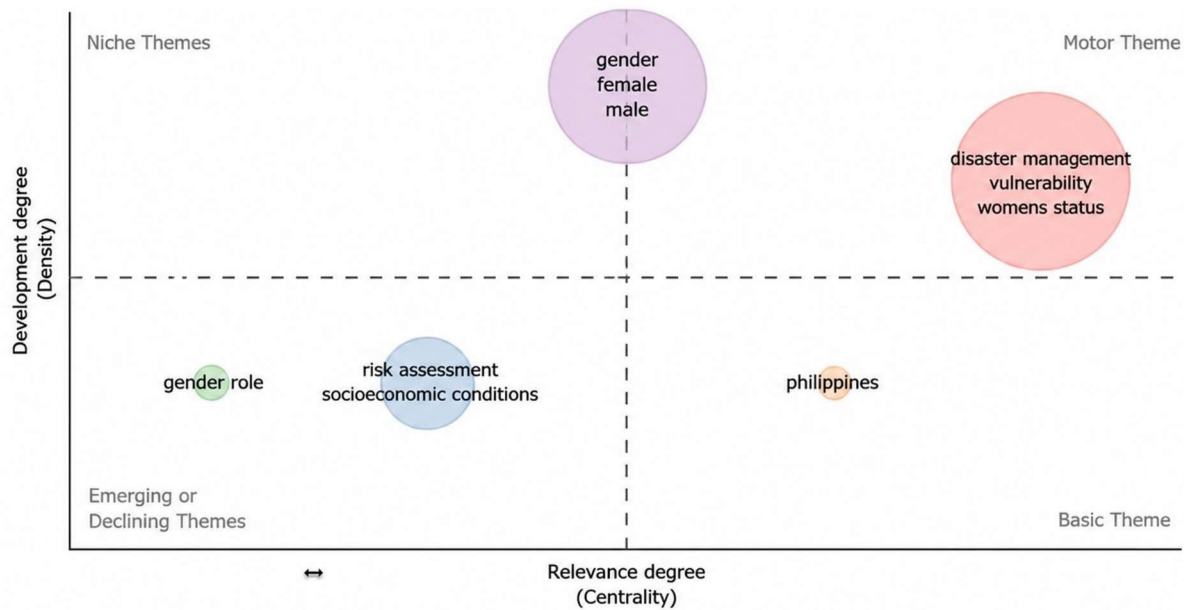


Figure 7. Thematic map

4.2 Meta-Synthesis Analysis

The most cited article by author Gaillard et al. (2017) in the journal *Disasters* had 95 citations. Publishers who display the most publications in the field of disaster risk reduction from a gender perspective are important to see the trend of interest in the study. The publisher that publishes the most on this theme is the *International Journal of Disaster Risk Reduction*. Table 2, in detail describes the documents that are most often used as reference materials (Agrawal et al., 2021; Gaillard et al., 2017; Hou & Wu, 2020; Petraroli & Baars, 2022; Pill, 2022; Pozzo & Virgili, 2020; Ramalho, 2020; Ritu, 2020; Sattar & Cheung, 2019; D. Singh, 2020; Yadav et al., 2021; Zaidi & Fordham, 2021).

The reviewed literature applies three main theoretical frameworks: feminist and gender-critical disaster theory, social vulnerability and risk perception frameworks, and governance and political economy approaches to disaster risk reduction. Methodologically, the studies demonstrate strong contextual and qualitative depth through case-based, ethnographic, and interview-based analyses, complemented by quantitative approaches such as surveys and factor analysis. However, methodological fragmentation persists, as quantitative studies often treat gender as a descriptive variable, while feminist studies prioritize structural critique with limited generalizability. A key tension in the literature lies between technocratic interpretations of the Sendai Framework and transformative feminist perspectives, particularly regarding the integration of gender justice into risk governance and investment priorities. In this section, we discuss the most widely cited articles in the current literature. Through this discussion, the study seeks to identify emerging patterns and highlight the urgency of disaster risk reduction research from a gender perspective, as presented below:

1. Beyond men and women: a critical perspective on gender and disaster

This article agrees with the concept of disaster risk reduction that is inclusive and gender-sensitive. The case studies presented are of minority groups in the Philippines, Indonesia, and Samoa. Minority groups in these countries make use of existing resources and build their own patterns according to the needs of their groups in reducing disaster risk.

2. The missing half of the Sendai framework: Gender and women in the implementation of global disaster risk reduction policy

This article criticizes the Sendai Framework for Disaster Risk Reduction (2015-2030), SFDRR, which, in its implementation, shows a missed opportunity for addressing fundamental gender based issues in DRR. The framework has made progress in promoting the involvement of women and girls in disaster policies and programs. Therefore, it is necessary to redefine the concept of gender, increase the inclusivity of women and sexual minorities in its indicators, and re-implement.

3. Tropical cyclone risk perception and risk reduction analysis for coastal Bangladesh: Household and expert perspectives

The study concluded that the risk of cyclones is felt by all levels of society. Women and men on the coast of Bangladesh are at much different risks. The risk reduction strategy needs to be built through the assessment of risk perception as a prerequisite. It is critical to integrate bottom-up and top-down approaches to cyclone risk reduction plans and actions.

4. A feminist vision for transformative change to disaster risk reduction policies and practices

This study states that the importance of feminist vision and transformative vision, a vision that allows us to see biases and problems in current DRR policies and practices. The policies and practices of DRR in Nepal that have occurred so far do not help to challenge the existing social and institutional structures.

5. Rescuer, decision maker, and breadwinner: Women's predominant leadership across The Post-Wenchun earthquake efforts in rural areas, Sichuan, China

Case studies were processed during 10 years of research using qualitative methods in Sichuan Countryside, China. The study highlights the importance of the involvement, leadership, and resilience capacity of women of all ages before, during and after The Wenchun Earthquake. The paper found that (1) during the emergency rescue phase, women became lifeguards who augmented and supported the urgent response; (2) during the short-term reconstruction phase, women play a role as decision-makers who guide housing and community reconstruction; and (3) during the long-term recovery and mitigation phase, many women take on the role of breadwinners, managing family livelihoods and long-term development.

6. Disasters, Death, and the Sendai Goal One: Lessons from Odisha, India

This study investigated gender-disaggregated mortality data from 1999-2013. The results of his research show that the current disaster management system in Odisha, India is not

accountable and the reporting and recording of deaths needs to be changed to be consistent with the Sendai Goals to reduce deaths.

7. Assessment of the socioeconomic vulnerability to seismic hazards in the national capital region of India using factor analysis

The study used quantitative methods and revealed that Indian capital areas with low community literacy, high unemployment, and poor housing conditions showed moderate to high vulnerability. The southeastern region of the study area was assessed as a high-risk zone by the integrated socioeconomic vulnerability – seismic hazard risk matrix. The results of this study emphasize the importance of the socioeconomic vulnerability component of disaster risk reduction programs, from a holistic perspective, for areas with high seismic rates.

8. Towards a funding mechanism for loss and damage from climate change impacts

In the framework of climate change, this paper states that it is important for environmental polluters to pay a certain amount of money for the environmental losses they cause. The qualitative method was used by interviewing a number of stakeholders in climate change. In fact, the payment of compensation is rejected by developed countries and is not desired by developing countries.

9. To be a woman in Japan: Disaster vulnerabilities and gendered discourses in disaster preparedness in Japan

Using a grounded theory strategy in the qualitative research method, this study states that the main factors of gendered disaster vulnerability are inadequate disaster education, lack of protection measures, and cultural problems. In addition, public discourse on gender is evidently not only shaping these factors but also embedded in Japan's disaster preparedness strategy, broadly affecting the quality and quantity of disaster information available.

10. Engendering disaster risk management and resilience-building: The significance of the everyday in evolutions of the exceptional

Using ethnographic research conducted from 2016 to 2017 in disaster-prone informal settlements in the Philippines, researchers use everyday analysis to reveal the importance of looking at the work of social reproduction and the hierarchy of power embedded in society. In addition, it is important to make the program resilient; insights that are essential to advancing a more inclusive, sustainable, and socially just approach to disaster risk governance and climate change adaptation.

From all the articles presented below, it is illustrated that all articles call for: 1. The importance of implementing gender-sensitive SFDRR (The Sendai Framework for Disaster Risk Reduction) because of the needs of women and men when they occur, before and after different disasters; 2. The concept based on community capacity development is an important factor in disaster risk reduction and; 3. The importance of disaster risk reduction with an inclusive approach includes paying attention to sexual minorities.

Table 2. Cited documents

No.	Cities	Authors	Title	Publisher, Year
1	95	Gaillard J.C., Sanz, K., Balgos, B.C., Smith, F., Toelupe, V.	Beyond men and women: a critical perspective on gender and disaster	Disasters, 2017
2	47	Zaidi RZ. & Fordham, M.	The missing half of the Sendai framework: Gender and women in the implementation of global disaster risk reduction policy	Disaster Science Program, 2021
3	41	Sattar M.A., & Chaeung, K. K. W.	Tropical cyclone risk perception and risk reduction analysis for coastal Bangladesh: Household and expert perspectives	International Journal Disaster Risk Reduction, 2019
4	37	Yadav P., Saville, N., Arjyal, A., Kostkova, P., & Fordham, M.	A feminist vision for transformative change to disaster risk reduction policies and practices.	International Journal Disaster Risk Reduction, 2021
5	33	Hou, C., & Wu, H.	Rescuer, decision maker, and breadwinner: Women's predominant leadership across the Post-Wenchun earthquake efforts in rural areas, Sichuan, China	Safety Science, 2020
6	22	Ray-Bannet NS.	Disasters, Death and the Sendai Goal One: Lessons from Odisha, India	World Development, 2018
7	20	Agrawal N., Gupta L. & Dixit, J.	Assessment of the socioeconomic vulnerability to seismic hazards in the national capital region of India using factor analysis	Sustainability, 2021
8	15	Pill M.	Towards a funding mechanism for loss and damage from climate change impacts	Climate Risk Management, 2022
9	12	Petraroli I. & Baars R.	To be a woman in Japan: Disaster vulnerabilities and gendered discourses in disaster preparedness in Japan	International Journal Disaster Risk Reduction, 2022
10	12	Ramalho J.	Engendering disaster risk management and resilience-building: The significance of the everyday in evolutions of the exceptional	International Journal Disaster Risk Reduction, 2020

The Sendai Framework for Disaster Risk Reduction 2015–2030 outlines four priority areas that implicitly emphasize gender equality and inclusive participation. Although gender is not positioned as a standalone priority, it is embedded across the framework through its guiding principles and targets, particularly those addressing vulnerability, participation, and resilience. **Priority 1 (P1): Understanding Disaster Risk** highlights the importance of risk assessments that account for differential vulnerability, exposure, and capacity. From a gender perspective, this priority underscores the need for sex-disaggregated data and gender-sensitive risk analysis, as women and men experience disaster risks differently due to social roles, access to resources, and structural inequalities. **Priority 2 (P2): Strengthening Disaster Risk Governance** emphasizes inclusive and coordinated decision-making across sectors and governance levels. Gender relevance under this priority lies in ensuring women’s meaningful participation in disaster risk governance, policy formulation, and institutional leadership. **Priority 3 (P3): Investing in Disaster Risk Reduction for Resilience** focuses on financial, structural, and social investments to reduce vulnerability. This priority is highly relevant to gender, as women are disproportionately represented in informal economies and unpaid care work, making them more vulnerable to disaster-induced economic shocks. **Priority 4 (P4): Enhancing Disaster Preparedness for Effective Response and to “Build Back Better”** stresses preparedness, recovery, and reconstruction processes. From a gender perspective, this priority recognizes

women's central roles in household and community recovery while highlighting the risk of reinforcing pre-existing inequalities during post-disaster reconstruction. The following Table 3 presents the mapping of articles that contribute to the Sendai Framework priorities.

Table 3. The mapping of articles that contribute to the Sendai Framework priorities

No	Authors (Year)	Title (Shortened)	Main Thematic Focus	P1	P2	P3	P4
1	Gaillard et al. (2017)	Beyond men and women	Critical gender perspectives on disaster risk	✓	✓	○	○
2	Zaidi & Fordham (2021)	Gender gap in Sendai implementation	Gender in global DRR policy implementation	○	✓	○	✓
3	Sattar & Chaeung (2019)	Cyclone risk perception in Bangladesh	Risk perception and reduction at household and expert levels	✓	○	○	✓
4	Yadav et al. (2021)	Feminist vision for DRR	Transformative feminist approaches to DRR policy	○	✓	✓	○
5	Hou & Wu (2020)	Women's leadership post-Wenchuan	Gendered leadership in post-disaster recovery	○	✓	○	✓
6	Ray-Bennett (2018)	Sendai Goal One and disaster mortality	Social vulnerability and disaster-related deaths	✓	○	○	✓
7	Agrawal et al. (2021)	Socioeconomic vulnerability to seismic risk	Quantitative assessment of social vulnerability	✓	○	✓	○
8	Pill (2022)	Funding mechanisms for loss and damage	Climate risk financing and investment mechanisms	○	✓	✓	○
9	Petraroli & Baars (2022)	Gendered disaster preparedness in Japan	Gendered discourses in disaster preparedness	✓	○	○	✓
10	Ramalho (2020)	Everyday practices in gendered DRM	Everyday gender dynamics in disaster risk management	○	✓	○	✓

Legend
 ✓ = Primary contribution
 ○ = Secondary or supporting contribution

5. CONCLUSIONS AND RECOMMENDATIONS

Disaster risk reduction research from a gender perspective is still very limited. There are only 21 high-quality articles taken from the Scopus database from 2009 to 2024. Of the 21 articles, only 10 articles were used as the most references. After the meta-synthesis analysis was carried out, there were 3 important things stated by the researchers, including 1. Implementation of gender-sensitive SFDRR, 2. Community-based capacity building and, 3. The importance of an inclusive approach includes paying attention to sexual minorities. Thus, collaboration from the authors is needed to have a wider impact on science, especially in calling for gender movements in the field of DRR and concern for minorities. All articles presented contribute to the four priorities of the Sendai Framework and simultaneously provide a mapping of both primary and supporting contributions to the implementation of the Sendai Framework.

This study has limitations as it relies exclusively on the Scopus database and includes a relatively limited number of articles. These constraints may affect the generalizability of the

findings and introduce potential regional bias. Therefore, future research should adopt alternative methodological approaches or incorporate additional data sources to generate more practical and contextually relevant recommendations for disaster risk reduction from a gender perspective.

CONFLICT OF INTEREST

Authors have no personal interests or relationships that could affect the objectivity, integrity, or neutrality in the process of writing, assessing, or publishing an article.

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