

Gender matters in disasters: a literature review on women's disaster information behavior



Çiçek Doğu

PhD candidate

EBSI – University of Montreal



Table of contents

- Introduction
- Method
- Results
- Model
- Recommendations
- Conclusion



Introduction

Natural disasters: "events resulting from an abnormal intensity of a natural agent" (Schwarze & Wagner, 2004).

- ✓ Acute
- ✓ Life-threatening
- ✓ Safety concerning events

earthquakes, floods, hurricanes, typhoons, fires, tsunamis, volcanic eruptions etc.



Crisis: "a catchall concept encompassing all types of un-ness events", which are described as events or situations that are unwanted, unexpected, and almost unmanageable (Boin, Kofman-Bos & Overdijk).

Method

Databases & Search engines

- ✓ Web of Science
- ✓ PubMed
- ✓ Eric
- ✓ Doaj
- ✓ SSRN
- ✓ Science Direct
- ✓ Sage
- ✓ Google Scholar
- ✓ Sofia

years, English articles **Exclusion criteria**: No

COVID

Selection criteria: titles +

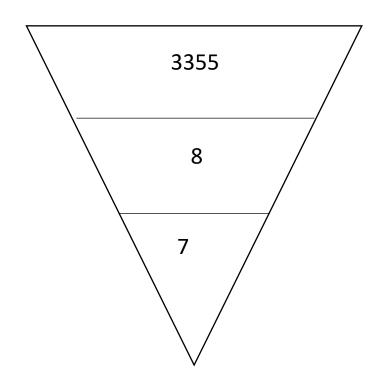
abstract

			umontréal		
Database	Limits	Query	Retrieved	Relevant	
			res.	res.	
Google Scholar	2013-2023, English	"information seeking behavior" disaster -covid women	905	6	
		gender sex			
		information seeking behavior earthquake -covid women	119	0	
		gender sex			
		"information needs" earthquake -covid women gender sex	817	0	
Sofia	2013-2023, article English, in	kw:("information seeking") ET kw:(disaster) ET kw:(women)	5	0	
	"University of Montreal" option	SAUF kw:(covid)			
		kw:("information behavior") ET kw:(disaster) ET kw:(women)	0	0	
		SAUF kw:(covid)			
		kw:("information need") ET kw:(disaster) ET kw:(women)	5	0	
		SAUF kw:(covid)			
Web of	2013-2023, English, article	information seeking and disaster and women not covid	9	0	
Science	(abstract metadata field)				
PubMed	2013-2023, English	PMC	1297	1	
		Search term			
		(((information seeking) AND earthquake) AND women) AND			
		gender NOT covid			
		Clear inputSearch			
Eric	2013-2023, English	abstract(Information) AND abstract(disaster) AND	13	0	
		abstract(gender)			
Doaj	2013-2023, English	disaster information women	2	0	
SSRN	English, "Title, Abstract &	information disaster gender	21	1	
	Keywords" option	information disaster women	14	0	
Science	2013-2023, English, "Title,	information disaster women	51	0	
Direct	abstract or author-specified	information disaster gender	37	0	
	keywords" option				
Sage	2013-2023, English, "abstract"	information disaster women	24	0	
	option				
TOTAL			3355	8	
				_	

ebsi

Method







Method

Wiethou		eps
year	ref	umor
2020	Hapsari, E. D., Jayanti, R. D., Nugraheni, D., & Panuntun, R. A. (2020). Information needs in pregnant womer living in disaster prone area. Enfermería Clínica, 30, 80–86. https://doi.org/10.1016/j.enfcli.2019.12.032	1
2021a	Lachlan, K. A., Hutter, E., Gilbert, C., & Spence, P. R. (2021a). Need for cognition and rumination: Alternate explanations for sex differences in disaster information seeking. In Progress in Disaster Science (Vol. 11, p. 100180). Elsevier BV. https://doi.org/10.1016/j.pdisas.2021.100180	
2021b	Lachlan, PhD, K. A., Spence, PhD, P., Hutter, MA, E., & Gilbert, MA, C. (2021b). Exploring sex differences in information needs, media dependencies, and attention allocation during Hurricane Dorian. In Journal of Emergency Management (Vol. 19, Issue 5, pp. 439–449). Weston Medical Publishing. https://doi.org/10.5055/jem.0652	
2022	Lachlan, PhD, K. A., Gilbert, MA, C., Hutter, PhD, E., Rainear, PhD, A., & Spence, PhD, P. R. (2022). Sex different in informational needs and media dependencies during the 2018 California wildfires. In Journal of Emergent Management (Vol. 20, Issue 4, pp. 341–350). Weston Medical Publishing. https://doi.org/10.5055/jem.0588	су
2023	Lachlan, K. A., Gilbert, C., Hutter, E., & Spence, P. R. (2023). The 2018 California wildfires: examining sex differences in response to crisis communication and underlying processes. In Atlantic Journal of Communication (Vol. 31, Issue 2, pp. 85–96). Informa UK Limited. https://doi.org/10.1080/15456870.2023.2173363	ation
2020	Setyastuti, Y., Hanief, L & Mahmudi, N. (2021). Disaster Communication and Information Literacy of Mother Facing Flood Disasters in Banjar Regency. Library Philosophy and Practice (ejournal). 6559. https://digitalcommons.unl.edu/libphilprac/6559	rs in
2018	Samouei, R., & Hajari, S. (2018). Women's information needs in mental health in disasters. <i>Journ of education and health promotion</i> , 7, 170. https://doi.org/10.4103/jehp.jehp_103_18	nal

ebsi umontréal

Context

- √ 4 studies : comparative (men / women)
- ✓ Information science concepts: Secondary function
- ✓ NO information science perspective or model

3 main informational dimensions are explored:

- o information seeking
- information needs
- information literacy



Demographic structure of research participants

- ✓ Lachlan et al.(2021a, 2021b, 2022, 2023): People whose residence is affected by Hurricane Dorian, the Camp Wildfire and Woolsey Wildfire.
- ✓ Samouei & Hajari (2018): managers, planers, and faculty members of psychology or psychotherapy departments who worked with Irani women after earthquake in Iran in 2018
- ✓ Setyastuti et al. (2020): Mothers. "Key informant in this study were a mother whose house was affected by floods ... (...) In addition, observations were made to observe the communication behavior of mothers (...)"
- ✓ Hapsari et al. (2020): Pregnant women living in disaster prone area in Indonesia (2010 2015 → 56 disasters occurred in Bantul district)



Disaster information needs of women

- ✓ Primary needs: physiological needs → information about food, hygiene, hormonal health
 → non-physiological needs which cover information about cloths and shelter.
- ✓ Secondary needs: psychological needs. ALSO information about education, consultation, culture (i.e. spiritual, value-respecting), support-relief, policymaking (i.e. legislation, planning), media-informing (i.e. news about the disaster) and environment (i.e. ecology and geography).



Disaster information seeking

- ✓ higher levels of information seeking
- √ higher levels of rumination tendency
- ✓ higher levels of cognition
- ✓ BUT also non-seeking

regardless of its ineffectiveness in reducing their anxiety



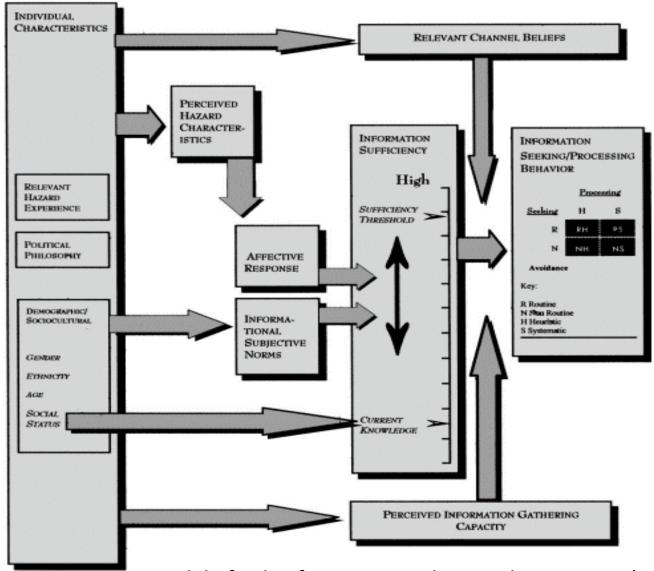
Information use and information sources

- ✓ Television
- √ face-to-face communication
- ✓ Radio
- ✓ phone
- ✓ Newspaper
- ✓ personal observation
- ✓ official communication



Model





Model of risk information seeking and processing (Griffin et al., 1999)



Recommendations for information professionals

- ✓ More studies are needed
- ✓ Comparative studies on information seeking behavior / disaster types & stages
- ✓ More theoretical basis on information science
- ✓ Other telecommunication possibilities should be considered (due to potential damage on infrastructure)



Conclusion

Although the information seeking studies that exist in this area are not based on a theoretical framework:

Women have higher information seeking behavior + rumination & cognition tendency

Women need information about food, hygiene, hormonal health, cloths and shelter.
+ information about education, consultation, culture

More studies are needed

References

Boin A., Kofman-Bos C. & Overdijk W. (2004). Crisis Simulations: Exploring Tomorrow's Vulnerabilities and Threats. Simulation & Gaming, 35(3) pp:378–392. https://journals.sagepub.com/doi/10.1177/1046878104266220

Griffin, R. J., Dunwoody, S., & Neuwirth, K. (1999). Proposed model of the relationship of risk information seeking and processing to the development of preventive behaviors. Environmental research, 80(2 Pt 2), S230–S245. https://doi.org/10.1006/enrs.1998.3940

Griffin, R. J., Neuwirth, K., Dunwoody, S. & Giese, J. (2004). Information Sufficiency and Risk Communication. Media Psychology, 6(1), 23-61. doi: 10.1207/s1532785xmep0601_2

Lachlan, PhD, K. A., Spence, PhD, P., Hutter, MA, E., & Gilbert, MA, C. (2021b). Exploring sex differences in information needs, media dependencies, and attention allocation during Hurricane Dorian. In Journal of Emergency Management (Vol. 19, Issue 5, pp. 439–449). Weston Medical Publishing. https://doi.org/10.5055/jem.0652

Lachlan, PhD, K. A., Gilbert, MA, C., Hutter, PhD, E., Rainear, PhD, A., & Spence, PhD, P. R. (2022). Sex differences in informational needs and media dependencies during the 2018 California wildfires. In Journal of Emergency Management (Vol. 20, Issue 4, pp. 341–350). Weston Medical Publishing. https://doi.org/10.5055/jem.0588

Lachlan, K. A., Gilbert, C., Hutter, E., & Spence, P. R. (2023). The 2018 California wildfires: examining sex differences in response to crisis communication and underlying processes. In Atlantic Journal of Communication (Vol. 31, Issue 2, pp. 85–96). Informa UK Limited. https://doi.org/10.1080/15456870.2023.2173363

Ryan, B. (2018). A model to explain information seeking behaviour by individuals in the response phase of a disaster. Library & Information Science Research, 40(2), pp. 73–85. https://doi.org/10.1016/j.lisr.2018.05.001

Samouei, R., & Hajari, S. (2018). Women's information needs in mental health in disasters. *Journal of education and health promotion*, 7, 170. https://doi.org/10.4103/jehp.jehp_103_18 Setyastuti, Yuanita; Hanief, Lalita; and Mahmudi, Nur, "Disaster Communication and Information Literacy of Mothers in Facing Flood Disasters in Banjar Regency" (2021). Library Philosophy and Practice (ejournal). 6559. https://digitalcommons.unl.edu/libphilprac/6559

Schwarze, R., & Wagner, G. G. (2004). In the Aftermath of Dresden: New Directions in German Flood Insurance. In The Geneva Papers on Risk and Insurance - Issues and Practice (Vol. 29, Issue 2, pp. 154–168). Springer Science and Business Media LLC. https://doi.org/10.1111/j.1468-0440.2004.00279.x

Setyastuti, Y., Hanief, L.. & Mahmudi, N. (2021). Disaster Communication and Information Literacy of Mothers in Facing Flood Disasters in Banjar Regency. Library Philosophy and Practice (ejournal). 6559. https://digitalcommons.unl.edu/libphilprac/6559