

RESEARCH ARTICLE

Social representations hydric resources and services in the COVID-19 era

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Abstract: Water problems focused on scarcity, shortages, unhealthiness and high cost have been addressed from the social representations of users of the public drinking water service, although such studies have avoided the incidence of print media on readers. The objective of the present work was to specify a model for the study of the phenomenon, considering a review of press releases of national circulation during the period from 2015 to 2022, as well as the inclusion of frames in the disseminated information. A prevalence of the data was observed towards an intermediate frame of the problems, although the research design limited the results to the study scenario, suggesting the extension of the work to other scenarios such as the contamination of the aquifers and their effects on health Environmental public.

Keywords: hydric resources, social representations, COVID-19, policy criteria, supply rate

1 Introduction

Until March 2022, the pandemic has killed eight million directly and 20 million indirectly [1]. Anti-COVID-19 policies stand out for offering a residential water volume that exceeds basic hygiene and sanitation needs [2]. The anti-COVID-19 policies materialized in forgiveness, subsidies and rate increases in accordance with the political and economic demarcations of central Mexico [3]. The epidemiological traffic light determines economic, political and social activities [4]. The red traffic light suggests the restriction of all activities [5]. The green traffic light allows the flow of all activities [6]. A greater volume of water demand is generated with deconfinement and significant savings with confinement [7]. In this way, 20% of user income is allocated to the purchase of water in areas of low availability. In areas with high availability, rates have increased up to 200% [8].

The importance of the quality of the drinking water service lies in the treatment of wastewater by means of aqueous ions of light rare earths, allowing an efficient absorption column [9]. Alternatively, the treatment using absorbents (SIO2-BT, SIO2-BWT, SIO-BT and BWT) in a period of 60 minutes reaches Pr3 and Nd3 elimination values in aqueous solutions [10]. That is, the water quality depends on the technology of treatment and added to the austerity policies it reaches its sustainable efficiency [11].

The relationship between authorities and users of public services has been a central issue on the agenda of the media. In the case of water as a strategic resource for local development, quality of life and subjective well-being, in recent years it has been widely reported by the media [12]. Particularly the print media with national circulation has included reports about the imbalance posed by water scarcity and water shortages associated with the corruption of local authorities and increased rates deregulated [13]. The impact of media coverage regarding the shortage and poor health has been a central issue in the public health agenda [14]. It is estimated that about six million children die from diseases hydro-transmissions in countries with high rate of water shortages, but this means not only disseminate information but also associate the performance of the authorities in terms of management [15].

Thus, in the suburbs of large cities the problem of water supply has been addressed by a system of tandem in which increasingly restricted water consumption and substantially increase rates [16]. Approximately 20% of incomes in vulnerable or water exclusion situation, is assigned

to the purchase of water products, but print media rather highlight the lack of infrastructure and attention to contingencies such as drought or frost [17]. Thus, the media have a particular view of the problem of water scarcity and shortages of attributing responsibility to the authorities and exonerating users who have regular access to drinking water or justifying the soft drink consumption or pharmaceutical industry [18].

It is a process in which the systematic dissemination of biased information regarding the relationship between availability and management of water resources is known as agenda setting [19]. An agenda is a result of information exchange between the agents involved, but the differences between them generates information biases that are spread in the media and the information is used to justify rate increases by the authorities, waste by users, conflicts among actors or, tandem or policies restricting water [20].

However, the agenda is also historic, as it involves the reaction of organized civil society groups regarding the performance of its authorities on quality public services [21]. It is power relations that have grown and are activities to the less informative provocation, but in the case of the print media is a process more complex elaboration that this letter sets as an overview of water availability in reference to consumption human [22]. If the media presented the conflict as central themes of water problems because the authorities responsible for the inefficiency of rates and expose closures avenues, boycotts pipe facilities or kidnappings as evidence of governability that inhibit local sustainable development [23].

Social representations are visions of the everyday world that is historically constructed alongside the dissemination of media intensifies their audiences [24]. In this sense, the printed media availability and water policy has not only been systematically reduced to opinions by the press, but also two logics have been grown on the credibility of the information and the verifiability of it [25]. Consider the following premises for addressing administrative corruption on supply and collection of public drinking water: The availability of resources to be scarce generates an administration of austerity and shortages financed by a steady increase in the unit price of water in terms of political relations between local governments and civil society organizations [26].

The rates reflect political negotiations between members and militants with regard to election time and the proximity of local elections, but also in terms of management capabilities of civil society organizations [27]. Conflicts between civil society and local government in the field of municipal water services are a reflection of systematic dissemination of shortage and quality of drinking water in the media with particular emphasis on national newspapers [28].

What is the proposed media for the sustainability of supply and collection system considering his framing of the facts?

The journalistic framing printed media around scarcity, and water management is established from the systematic diffusion of responsibility of local officials [29].

2 Methods

2.1 Design

Non-experimental, retrospective, documentary and exploratory study.

2.2 Sample

Notes the daily newspaper of national circulation during the period from 2015-2022. (see in Table 1)

Table 1 Sample descriptive

	2019	2020	2021	2022
Universal	6	5	9	4
Jornada	4	7	8	3
Pais	5	6	7	2
Reforma	7	8	8	1

Source: Elaborated with data study

2.3 Instrument

Matrix analysis of content including references consulted and processed information as shown, instruments and results. (see in Table 2)

Table 2 Anti-COVID-19 policy criteria

	Traffic light in red	Yellow traffic light	Green traffic light
Shortage	Forgiveness for high consumption	Subsidy for moderate consumption	Sanction for high consumption
Insalubrity	Forgiveness for high consumption	Subsidy for moderate consumption	Sanction for high consumption
Famine	Forgiveness for high consumption	Subsidy for moderate consumption	Sanction for high consumption

Source: Elaborated with data study

2.4 Procedure

Estimated impact of press releases considering its content and frequency of keywords or indicators of scarcity, shortage and cost of drinking water.

2.5 Analysis

Based on the anti-COVID-19 policy criteria for health and hygiene, the press releases were coded, considering: -1 for the reverse application of the policy reported in the press releases, 0 for the non-implementation of the policy and +1 for the implementation of the policy. The data was captured in excel and processed in JASP version 15. Non-parametric statistics, frequencies and semantic networks were estimated.

3 Results

The results show frames from newspaper audiences are considered promoters of a relative deprivation that is the conformism of the service quality of public water supplies. (see in Figure 1)

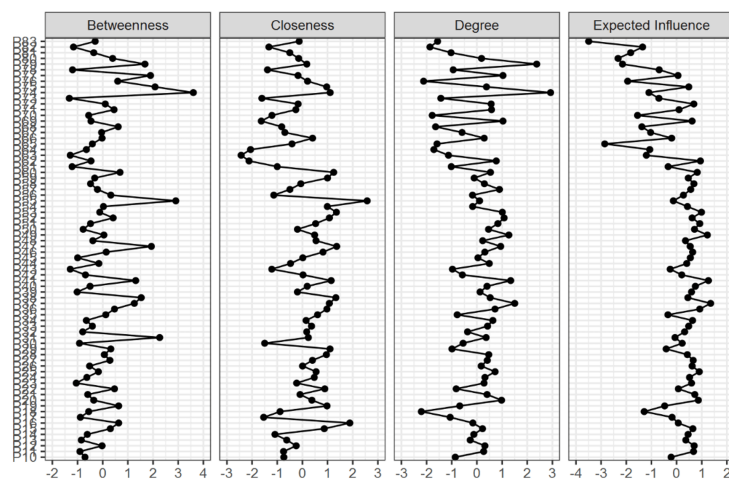


Figure 1 Centrality (Source: Elaborated with data study)

The weights of notes and images as well as their mutual correspondence concerning the coverage of water leaks Iztapalapa. The indices show that the items appear to be biased as they reached a total value of 4 points of 44 possible. Only in notes III (Enlist constitution water Iztapalapa) and V (is lost in leaks 35% water) reporters tried to externalize their opinion on the issue. The note V journalist quotes two officers: David Robles and Hector Reyes to support the header of your report regarding the volume is wasted by visible and invisible leaks without establishing a percentage distinction between the two issues and link it with 35% announcing at the top of the note. (see in Figure 2)

Regarding framed pictures, media coverage seems to be high since it reached a total of 36 points of 44 possible. A quarter of the selected notes reached the maximum weighting relative to framing. IX and X notes included images out of context without any connection with the note. Such notes did not try to influence or confuse readers. (see in Figure 3)

However, the notes I, II, III, IV, V, VI, VII, VIII and XI included images that seems evident extreme shortages: public service users storing water in drums, jars and buckets. Or images where principal photography leaks seem to be uncontrollable. In the case of the relationship between discourses and images, the index was 22 Framed Hybrid which was considered moderate as only the notes III, VI, IX and X included images that did not correspond to the briefing notes.

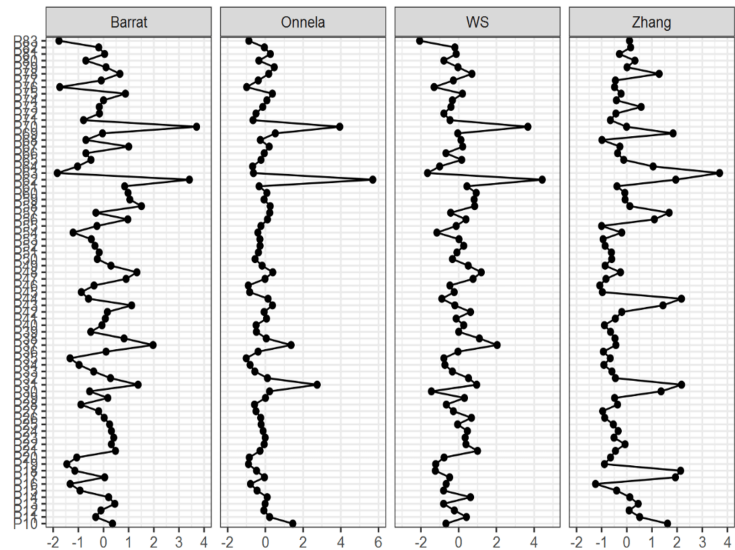


Figure 2 Clustering (Source: Elaborated with data study)

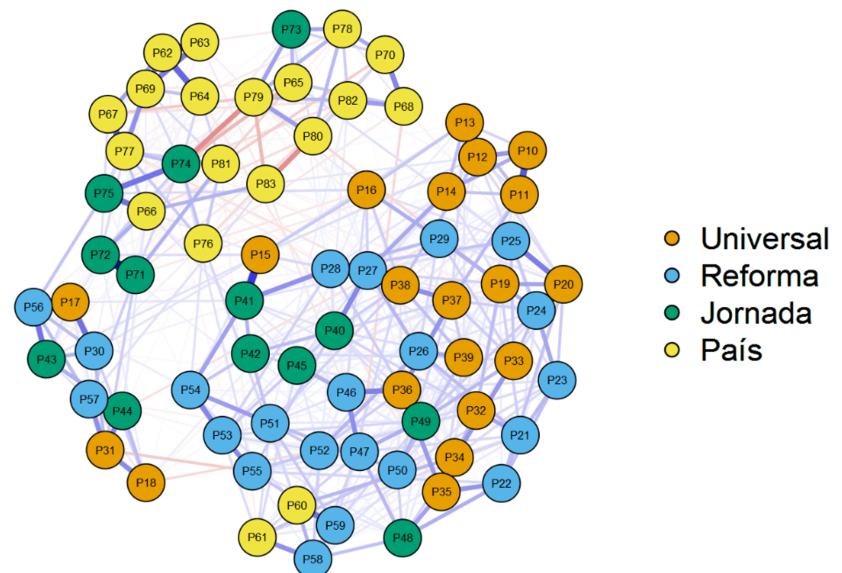


Figure 3 Network (Source: Elaborated with data study)

However, if the note III who headed: “ready incorporation of water in Iztapalapa” included images of water users away. That is, “El Universal” describes a leak to argue the need for a legal agreement and illustrates his message with images relating to a possible consequence: the improvised water storage. Finally, the index Mediatization Leak scored a total of 62 of 132 possible to settle at a moderate level. That is, the press coverage about the shortage prompted by leaks seems to have an unusual bias in relation to the description and illustration of the water situation is diffused.

4 Discussion

The contribution of the present work to the state of the matter lies in the establishment of a mediation index of the representations of water problems, considering the framing effects in which shortages, shortages, unhealthiness and shortages prevail as central categories of the public agenda, although the design of the research limited the results to the research scenario, suggesting the extension of the work towards scanners of contamination of the aquifers due to the fact that the agenda is established according to the interests of the political, social actors and economic, as well as the public and private sectors [30].

The results showed a moderate mediation except Framed Images Index (IEI), which was close to a very high degree of media coverage [31]. Such findings are consistent with those found

moderate levels of media coverage regarding the participation of users in situations of scarcity and shortage [32]. The plausibility frames of the press regarding the future water supply due to the discovery of aquifers and basins in Mexico City, but the established agenda focused on the increase of rates for the financing of pumping and purification of water resources [33]. In the present study, the likelihood frame was observed with respect to the general problems of water based on political corruption and the dependence of the sectors affected by the political system.

The relationship between plausibility and civil confidence with respect to the local administration of water resources and services [34]. To the extent that distrust deepens, conflicts emerge, but when the print media mitigates the likelihood frame and orient it towards water availability, per capita consumption intensifies without an increase in rates and payment of services. In the present work, there was a tendency of the likelihood framework towards the establishment of an agenda focused on scarcity, shortages, unsanitary conditions and shortages as an explanation of the conflicts before the public administration of water services, suggesting the extension of work towards the self-management of the excluded and dependent sectors of the political system that conditions the subsidy and the remission of the payment of the potable water service in exchange for the proselytizing support, the militancy and the vote in favor of the party in power.

5 Conclusion

The objective of this paper was to specify a model for the study of the social representations of water resources and services, although the study design limited the results to the research scenario, suggesting the construction of an index related to the mediation of pollution aquifer. In this sense, this study exposes the lines of discussion for the analysis of tandem policies and agenda setting in the availability and supply of water.

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