

Fake news and unfunded beliefs in the post-truth age

*Noticias falsas y creencias infundadas
en la era de la posverdad*

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Abstract

The dissemination of fake news embodies a pressing problem for democracy that is exacerbated by the ubiquity of information available on the Internet and by the exploitation of those who, appealing to the emotionality of audiences, have capitalized on the injection of falsehoods into the social fabric. In this study, through a cross-sectional, correlational and non-experimental design, the relationship between credibility in the face of fake news and some types of dysfunctional thoughts was explored in a sample of Chilean university students. The results reveal that greater credibility in fake news is associated with higher scores of magical, esoteric and naively optimistic thinking, beliefs that would be the meeting point for a series of cognitive biases that operate in the processing of information. The highest correlation is found with the paranormal beliefs facet and, particularly, with ideas about the laws of mental attraction, telepathy and clairvoyance. Significant differences were also found in credibility in fake news as a function of the gender of the participants, with the female gender scoring higher on average than the male gender. These findings highlight the need to promote critical thinking, skepticism and scientific attitude in all segments of society.

Keywords

Mass communication, Communication psychology, democracy, ethics of the press, information dissemination, critical thinking.

Resumen

La difusión de noticias falsas encarna un apremiante problema para la democracia que se ve agudizado por la ubicuidad de la información disponible en el internet y por el aprovechamiento de quienes, apelando a la emocionalidad de las audiencias, han capitalizado a su favor la inyección de falsedades en el entramado social. En este estudio a través de un diseño transversal, correlacional y no experimental se exploró la relación entre credibilidad frente a las noticias falsas y algunos tipos de pensamientos disfuncionales en una muestra de estudiantes universitarios chilenos. Los resultados develan que una mayor credibilidad en noticias falsas va aparejada con mayores puntajes de pensamiento mágico, esotérico e ingenuamente optimista, creencias que serían el punto de encuentro para una serie de sesgos cognitivos que operan en el procesamiento de la información. La correlación más alta se encuentra con la faceta de creencias paranormales y, particularmente, con las ideas acerca de las leyes de atracción mental, la telepatía y la clarividencia. También se hallaron diferencias significativas en la credibilidad en noticias falsas en función del género de los participantes, encontrando que el género femenino puntúa una media más alta que el género masculino. Estos hallazgos ponen en relieve la necesidad de promover el pensamiento crítico, el escepticismo y la actitud científica en todos los segmentos de la sociedad.

Palabras clave

Comunicación de masas, Psicología de la comunicación, democracia, ética de la prensa, difusión de la información, pensamiento crítico.

Fake news as threats to democracy in the post-truth era

The advent of digital society brought with it a profound transformation in the hegemonic narrative of truth, which rested on the possibility of recognizing press institutions as reliable means of production and transmission of information, attached to the ethical and professional exercise of the journalism and open to public scrutiny of the veracity of their sources. As Amoros (2018) points out, the massive irruption of digital platforms produced an information service on-demand, customizable, and more prone to interpellate the journalistic genre. Although there have been many cases of manipulation and censorship by traditional media, it was not until the entry of the digital revolution that the so-called fake news were signaled as an endemic threat to modern societies, undermining the trust in the media and shaking the foundations that sustain democracy.

Fake news can be understood as a deliberate alteration of a real fact or the invention of a fictitious fact in order to misinform or confuse an audience, generally presented in formats that evoke that of a traditional news story. Originally, this fake news can serve multiple purposes, such as promoting political interests and influencing public debate, or obtaining financial gains generated by the traffic of visits to websites. Another distinctive aspect of them is that they lack editorial review and processes that ensure compliance with minimum standards such as the accuracy of the information, the contrasting of its sources, the quality of the argumentation, and the assessment of their impact (Lazer et al., 2018). In essence, the invention or distortion of a news event acquires particularities that distinguish it from the news distributed by television channels and mass newspapers, because, although these can also be questioned) — insofar as they exercise control over the political agenda and construct reality under the lens tinted by typically conservative interests (Gronemeyer & Porath, 2017) — the absence of editorial review is not typical of them and, in cases that fail to correctly filter false news, they tend to rectify the information in official communications.

Although fake news is not a recent phenomenon, its proliferation has been favored by the accelerated growth rate of the internet and, particularly, by the unusual adherence of audiences to virtual social networks, spaces that enable and promote viralization in real-time of the information. These platforms constitute one of the main sources of information for Chileans and

their open access has been the main catalyst for the rapid and uncontrolled distribution of news content. According to Vosoughi et al. (2018), fake news spreads on social media significantly faster than verified news, and news that deals with politics spread more frequently and quickly than other topics.

The great scope of fake news is partly explained by the appeal to the reader's emotions, which is why no citizen would be completely exempted from believing in them. These are constructions that exalt the audiences' sense of amazement and that, at the same time, reaffirm certain ideological biases, thus meeting emotional needs for approval that the traditional press often leaves unsatisfied. In this sense, fake news converges with the concept of post-truth, understood as a scenario in which the influence of objective facts on the configuration of public opinion receives a lower weight than personal beliefs and emotional reactions. For these purposes, post-truth capitalizes on the need for self-defense of the belief system, whose actions in the individual are articulated from cognitive strategies that reinterpret the facts that refute a belief in favor of safeguarding it (Flichtentrei, 2018). This is how fake news can contribute to the difficulty of people to subject the information they receive to critical scrutiny, convoking them to be convinced of its truthfulness and persistently reaffirming their biased beliefs. Empirically it has been shown that social network users prefer to select news publications that coincide with their previous opinions (Sülflow et al., 2019), however, the widespread dissemination of fake news has the potential to penetrate the belief system even when they are inconsistent with the reader's political ideology (Pennycook & Rand, 2019). Conclusions that are congruent with the idea that the repetition of fake news increases the perceived legitimacy of it, since beliefs tend to be updated as dishonest behavior becomes more frequent (Garrett et al., 2016).

Although fake news can be considered a problem per se, its consequences in the field of action can be even more worrisome. Following the famous Thomas theorem, the veracity of a fact may be less relevant than the interpretation that people make of it. This implies that to the extent that a news item is judged to be true, regardless of its true status of truth, the consequences that it invokes will certainly be real. In this sense, the spread of falsehoods and rumors can generate panic in the population, increase mistrust towards institutions, polarize public debate or even put people's lives and integrity at risk. For example, the belief that certain vaccines can cause autism in children had a deterrent effect that has even motivated anti-vac-

cination movements, putting the individual and collective health of people at risk (Domínguez et al., 2019). Similarly, the news that assured that in Chile's presidential elections some ballots were previously marked to favor certain candidates, had an immediate effect on the polarization of public debate and on the perception of the functioning of democracy. According to the research by Halpern et al. (2019), 36.4% of the Chilean population considered this news as very credible or extremely credible.

With an audience that is especially permeable to falsehood, it is foreseeable that trust - the act by which attributions and responsibilities are delegated - will be seriously compromised. This is because what to believe? and who to believe? are direct interpellations to the prevailing way of understanding the truth and to the sources that support it. Fake news and alternative events understood as selective versions of reality, contribute to sowing a climate of uncertainty, also enhanced by the inability of the press to connect with new audiences and defend their professional heritage (Nigro, 2018). In general, the crisis in journalism has moved together with the displacement of trust towards social networks, and paradoxically, the more credibility in the press decreases, the more citizens are exposed to false content. As a corollary, in Chile, 55% of the population indicates that they have little or no trust in the traditional media, a figure that is an expression of a generalized trend in Latin America (Latinobarómetro, 2018).

Understood in this way, the spread of fake news embodies a ubiquitous problem for democracy, since the functioning of the political system demands an informed citizenry capable of intelligently influencing public decision-making. As Habermas (1991) already anticipated, the growth of the cultural industry is, to some extent, responsible for the fact that the public sphere has moved away from its original meaning, in terms of constituting a space for opinion and public debate. In this way, the archetype of the modern citizen is forced to transmute towards an increasingly demanding version of himself, not only aware of his rights and duties but also competent in the use and management of the information that surrounds him. The responsibility of a citizen in the digital age consists precisely in avoiding within this ocean of information superficial, spurious, and false data, a filter that is achieved only to the extent that critical skills allow it. Additionally, because the search for truth is a virtue that goes beyond intellectual competence, the presence of fake news also poses challenges for the ethical-moral dimension of citizenship education. Consequently, the configuration of a digital scena-

rio that overflows content of different quality and nature requires sustaining a well-founded, prudent and reflective judgment that establishes the bases for the optimal performance of citizens.

Credibility in fake news, cognitive biases and dysfunctional beliefs

Fake news doesn't impact all of the audiences evenly. The credibility in them will depend on the content of the information, on the circumstances that contribute to give truth to the argument, and on the cognitive responses with which a certain individual manages to encode the information received and judge its coherence. Some media outlets resort to sensationalism and the banalization of discourse to take advantage of a niche of viewers who are less willing to make cognitive efforts to process information, directing their attention to peripheral factors that do not require greater rationality or are less strenuous to process. (Sobrado et al., Ruz, 2018). People can judge the plausibility of a fact based on heuristic rules based on the source, the images, and the broadcast medium, but even though the source that produces the news manages to transfer different levels of coercion based on trust, expertise, and reputation that it has (Metzger et al., 2010), credibility is ultimately an attribute of individual character (Tseng & Fogg, 1999). As suggested by theories on the effects of persuasion, some stimuli associated with the source, the channel, and the context could be capable of increasing the credibility of the messages, but with differentiated effects due to the interaction of these elements with the individual characteristics of the recipients (Moya, 1999).

Certain personality traits could explain part of the interpersonal variations of credibility in fake news. Certain psychological profiles linked to dogmatism, fundamentalism, and delusional thinking are more likely to be deceived by erroneous content (Bronstein et al., 2019). Following this line, it has been suggested that credibility in fake news could be related to the skeptical thinking of the recipients, who, in the absence of a reasoned examination of the content, are often seduced by ideas —although occasionally comfortable— distanced from the facts that they claim to represent (Pennycook & Rand, 2019). The ability of people to discern the truth in the media and, by default, to discard epistemically doubtful and inconsistent beliefs has a close correlation with the analytical skills that the reader has

cultivated in their training as a citizen. In this sense, the absence of analysis turned into custom ends up giving up intellectual tutelage to people and corporations with their own interests, capable of injecting falsehoods into the social body to take advantage of the most unwary (Sagan, 2000), a credulity that carries the cost of autonomy on any plane of human existence.

The willingness to believe in implausible statements finds its anchor point in the cognitive distortions that operate in the processing of information. These biases are systematic errors of reasoning that result in a deviation of inferential judgment, based on a hasty and subjective selection of the information. In scenarios of uncertainty, it is common for people to judge the plausibility of events based on mental shortcuts that do not always lead to reasonable results, filtering the stimuli that best fit with their cognitive schemes and with the preconceptions they have of the phenomenon. For example, incomplete information can offer the illusion of causality in situations where only the temporal contiguity of two events has mediated, a bias that otherwise would be the explanatory basis for certain superstitious beliefs, such as when a person attributes success from a lottery to the immediately preceding action (closing the eyes, shaking a limb, rubbing an amulet, etc.), becoming a cabal for future attempts. Understood in this way, biases promote a simplification and categorization of reality, frequently being related to rigid visions to interpret the world, as well as to dysfunctional behaviors (David et al., 2010).

Cognitive biases are incorporated into the mental schemas that influence the selectivity of memory and attention. These schemas constitute the framework of the subject's personality and can remain impervious to reasoning due to the need to preserve their coherence with the most unconditional beliefs, therefore offering greater resistance to change. In this way, certain automatic thoughts are presented involuntarily that shape the interpretation of life experiences, impacting a wide spectrum of emotional and behavioral reactions, whether they are considered adaptive or not. Epstein (1998) has considered within his cognitive-experiential theory the existence of two types of automatic thoughts, understood as fleeting and concrete expressions of the unconditional ideas of the subject (Beck & Clark, 1997). On the one hand, it lists a series of dimensions in which thoughts of a constructive nature are grouped, which are associated with the ability to successfully face life events, while, on the other, it identifies dimensions that contribute to basic forms of destructive thinking, that line up in a direction opposite to that required for a good psychological adjustment. Magical thinking, esoteric

thinking, and naive optimism would be clear examples of schemes that contribute dysfunctional beliefs for the development of the personality and that could eventually be correlated with other equally implausible beliefs.

- a. **Magical thinking:** Seen from an anthropological framework, magical thinking represents an archaic and culturally typical category of the primitive stages of societies. On the other hand, for evolutionary psychology, it constitutes a child thinking scheme that fades as children are exposed to educational influence and acquire more knowledge of natural laws (Brashier & Multhaup, 2017). Although the conceptualization of these thoughts is interspersed with the definitions of esoteric, mystical, paranormal, and superstitious beliefs, Epstein (2012) proposes its distinction based on the idiosyncratic character that these beliefs acquire in the individual and due to their connection with pessimism and hopelessness. Thus understood, magical thinking operates on the basis of private superstitions to which the subject clings to defend himself from threats and accept unfavorable results in advance.
- b. **Esoteric thinking:** Esoteric thinking brings together a series of beliefs that have overcome the project of cultural secularization and that have their roots in a dreamlike reality immune to the physical laws that govern the real world. Supernatural and scientifically questionable explanations abound in this category of thought, supported only by continual exposure to unfounded ideas and by the singularity of experience that has probative value for the individual. According to Epstein (2012), esoteric thinking includes beliefs of the paranormal domain and beliefs in common superstitions that, under certain limits, represent only a propensity towards unproven phenomena, but that at higher levels would reveal deficits in probabilistic reasoning (Leonard & Williams, 2019), a propensity for intuitive thinking style (Rogers et al., 2018), and lower fluent intelligence (Stuart-Hamilton et al., 2006). Similarly, beliefs in strange phenomena are concatenated with dissociative experiences and with psychopathological structures with a schizotypal trait (Dagnall et al., 2016).
- c. **Naive optimism:** Although optimism, in general, is often considered a favorable personality trait, if positive thoughts act as a barely realistic and unfounded response they can be considered dysfunctio-

nal. In this sense, the childish exaggeration of optimism plunges the individual into a fantasy, raising a feeling of naivety that keeps him from the consequences that objectively adverse events tend to provoke. It is then a simplistic and childish vision that hides negative or unpleasant events under myopia, even when they represent a relevant threat to the individual. The naive optimist overestimates the probabilities of the occurrence of favorable outcomes compared to equiprobable random alternatives and tends to generalize the successes at his convenience with no other basis than an uncritical confidence in himself and others. This voluntarism represents a break with reality that is porous to the desirable expectations of the world, but impervious to the facts that oppose it.

Consequently, there are psychological characteristics that, apart from the editorial demands that could be attributed to the press, make audiences a more suggestible actor for the purposes of the rhetorical and logical fallacies that nest in the post-truth era; making their uprooting more complex in precisely those who are less capable of protecting themselves against the interests of charlatans and greedy politicians. This research seeks to determine the existence of relationships between the credibility of fake news and the dysfunctional beliefs that individuals adopt regarding the world around them. It is hypothesized that greater credibility in fake news is coupled with a propensity towards magical, esoteric, and naively optimistic thinking, where the common denominator of these relationships would be anchored in the cognitive biases that operate in information processing.

Method

Design

An investigation was carried out with a non-experimental design, of correlational scope and quantitative nature, whose data collection was limited in time to the months of June and July 2020. Due to the unusual conditions of the confinement and health crisis context, the modality we used a computer-assisted self-administered questionnaire. This study was approved under the internal code No. 14-2 by the scientific ethics committee of the Universidad Santo Tomás, Chile.

Instruments

To measure the variables of magical thinking, naive optimism and esoteric thinking, the homonymous scales of the Epstein Constructive Thought Inventory (2012) were used, an instrument widely used for various purposes and populations, previously showing adequate psychometric characteristics of reliability and validity.

The *Magical Thinking Scale* consists of a one-dimensional battery of seven graded response items that indicates the degree to which people cling to private superstitions such as the idea that if something good happens it will be quickly offset by something bad. *Esoteric thought*, on the other hand, is made up of a battery of thirteen items grouped into two specific facets related to the belief in strange phenomena. The paranormal beliefs facet includes phenomena such as clairvoyance, phantasmagoria, eschatology, and telepathy, while the *superstitious thinking* facet is oriented towards conventional superstitions, such as astrology, tarot, amulets, and good or bad omens.

The *naive optimism* scale measures the degree to which a person is optimistic without a foundation, such as the idea of being able to make something happen if you want it badly enough. This scale has a factorial structure of three facets that together group fifteen items. The facet of *exaggerated optimism* is related to the generalization of favorable events to all situations, while the facet of naivety is related to positive, although unreal, expectations about the future and about other people. The *stereotyped* facet of *thinking* measures simplistic and little elaborate ways of thinking that, unlike suspicion, are represented by prejudices with a positive bias. All the items on the scales have five response options in Likert format, ranging from “strongly disagree” to “strongly agree”.

On the other hand, a screening scale was constructed to quantify the degree of credibility in fake news related to the political, social, international, and health contingency of the 2019-2020 period. For this, the same measurement strategy reported by previous investigations that use the headline of a news item as a reagent was replicated with credibility responses graded in six alternatives ranging from “not at all credible” to “absolutely credible” (Valenzuela et al., 2019; Halpern et al., 2019; Pennycook & Rand, 2019).

Figure 1
Example of an item from
the fake news credibility questionnaire

14. Respuesta de Metro ante manifestaciones no deja conforme a los santiaguinos: "Sólo cambiaron de lugar los 30 pesos".



Participants

The sample consisted of 171 higher education students from the Bío-Bío region, Chile, of which 75% were female, whose age range ranged from 18 to 46 years, with an mean of 22.24 and a standard deviation of 3.32 years. The sample consisted mainly of Psychology students (49.1%), followed by Occupational Therapy students (18.1%) and Social Work (11.7%). The recruitment of the participants was carried out on the basis of a sample by cluster, taking the subjects and levels of the training programs as the sampling unit. The only exclusion criterion was to present a situation of visual impairment that was disabling to answer the online form.

Procedures

Fake news that circulated on social networks during the years 2019 and 2020 were compiled for the construction of the credibility questionnaire. Mainly news related to the social unrest that occurred in October 2019 in Chile and the social and health crisis of COVID-19 were chosen. In order to include the news

in the screening instrument, their falsity was corroborated from fact checking services and the mainstream press. The preliminary version of the instrument was presented to a committee of experts for review based on criteria of relevance and quality of the items. Subsequently, a pilot test was carried out on a sample of 59 people who were contacted through personal networks. The final version of the instrument featured twelve fake news stories plus two verified news items that were used to control for acquiescence bias.

The participants answered the surveys through their asynchronous application through Google Forms, after accepting informed consent. It was omitted to report that the news presented in the questionnaire was fake to ensure that the responses did not conform to social desirability. Similarly, the magical, superstitious and naive optimism thinking scales were described only as scales to measure general personality attributes.

The data analysis resorted to the calculation of univariate frequency statistics for the description of the individual credibility of the news and the calculation of correlation measures between all facets of dysfunctional beliefs with the fake news credibility questionnaire. For data analysis and hypothesis testing, the computer program was used SPSS and R-Studio was used for graphing.

Results

According to Table 1, a great heterogeneity is observed in the credibility of fake news, concentrating higher scores in the headlines related to the functioning of public institutions that operate in the national territory. Three out of four participants claim to believe that during the 2019 protest events a carabineer policeman ran over a protester in Valparaíso and more than 70% say that the price of metro tickets was only redistributed at different times, thus denying the fact that the rate increase was suspended a week after the protests began. On the other hand, the news with the lowest credibility scores were related to international events that mainly allude to conspiracies, such as the anti-vaccine movement and the Stop 5G movement.

When disaggregating the analysis based on the gender of the participants, it was found that in nine of the twelve fake news, women reported greater credibility than men, thus, for example, while 26% of men considered very or totally credible that Donald Trump mocked the death of citizen George Floyd, in women this figure rose to 45%. In the same way, it was ob-

served that the in the news that affirmed the presence of external agents in the burning of the Santiago subway the of credibility group of women was three times the credibility granted by men.

Table 1
Credibility of the fake news selected
in the fake news credibility questionnaire

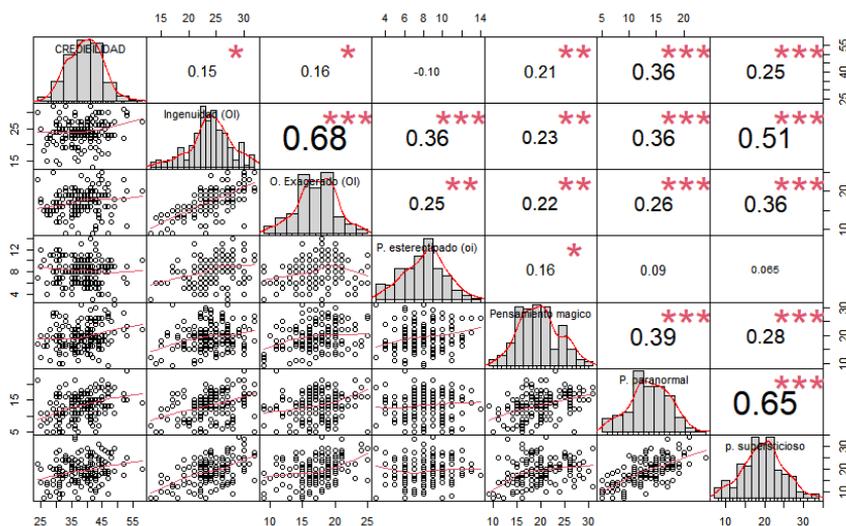
News	Credible or absolutely credible (%)		
	Male	Female	Total
Carabineer in civilian clothes runs over protesters who were forming a barricade in Valparaíso.	66,7	77,5	74,9
Metro's response to demonstrations does not satisfy the people of Santiago: "Only the 30 pesos changed places."	59,5	75,2	71,3
Precariousness and lack of resources in the Santiago hospital forces the use of chairs as stretchers in the pediatric waiting room [<i>image of a baby connected to a probe from a plastic chair</i>].	64,3	72,9	70,8
A kindergarten educator is beaten by the Carabineers for trying to help a minor who was being detained.	50,0	61,2	58,5
Trump mocks during a live broadcast of George Floyd's death, saying, "I can't breathe!"	26,2	45,0	40,4
The scientific community assures that the SARS-CoV-2 virus, given its complexity and characteristics, was created in a laboratory in China.	35,7	37,2	36,8
Experts say that prolonged use of disposable masks causes lack of brain oxygenation and respiratory problems.	21,4	39,5	35,1
Protesters force a priest to leave the Cathedral of Santiago amid protests against the Government.	23,8	20,2	21,1
Ecuadorians throw deaths from COVID-19 into the sea due to the saturation of funeral services.	26,2	17,1	19,3
5G antennas demolished during demonstrations in Hong Kong claiming that cause the weakening the immune system in the face of COVID-19.	21,4	16,3	17,5
Investigative Police confirmed the presence of Cuban and Venezuelan agents involved in the burning of the Santiago metro.	7,1	19,4	16,4
Bill Gates on the spotlight due to statements regarding the testing of his funded vaccine: "The COVID-19 vaccine will cause more than 700 thousand deaths."	9,5	16,3	14,6

As can be seen in Figure 2, at a bivariate level, it is found that credibility in fake news correlates significantly with the facets of Ingenuity [$r = 0.15$ (169), $p = 0.049$], Exaggerated Optimism [$r = 0.16$ (169), $p = 0.037$], Magical Thinking [$r = 0.21$ (169), $p = 0.005$], Superstitious Thinking [$r = 0.25$ (169), $p = 0.001$] and Paranormal Beliefs [$r = 0.36$ (169), $p < 0.001$]. The correlation with Esoteric Thought stands out for its magnitude, both in its facets of Paranormal Beliefs and in Superstitious Thought and although these correlations oscillate within moderate intensity margins, it should be noted that some specific items of these dysfunctional beliefs would be contributing different weights on the variance of credibility in fake news.

Thus, for example, when asked about the belief about the laws of mental attraction (for example, I think that some people can make me think about them just by thinking of me), those who say they strongly or absolutely agree obtain higher credibility scores towards fake news than those who remain skeptical of the possibility of influencing people's actions by summoning them with thought [$t(135) = 3.79$, $p < 0.001$, $d = 1.08$]. This distinction is also present when considering other esoteric beliefs such as telepathy [$t(126) = 3.00$, $p = 0.003$, $d = 0.66$], clairvoyance [$t(119) = 2.79$, $p = 0.006$, $d = 0.51$] and mental projection [$t(135) = 2.87$, $p = 0.005$, $d = 0.50$]. At the level of superstitious beliefs, the items that are most related to credibility in fake news are those referring to the belief that the moon influences thoughts [$t(120) = 3.11$, $p = 0.002$, $d = 0.62$], belief in the Evil eye [$t(134) = 3.44$, $p = 0.008$, $d = 0.53$] and the belief in good and bad omens [$t(116) = 2.74$, $p = 0.007$, $d = 0.51$]. However, some of the more common esoteric beliefs such as phantasmagoria, astrology, and amulet fetishism did not show significant relationships with fake news credibility.

Naturally, correlations were also found between the internal facets of dysfunctional beliefs, highlighting the links between Naivety and Exaggerated Optimism [$r = 0.68$ (169), $p < 0.001$], Paranormal Beliefs and Superstitious Thinking [$r = 0.65$ (169), $p < 0.001$] and Naivety and Superstitious Thinking [$r = 0.51$ (169), $p < 0.001$].

Figure 2
Pearson correlation matrix between credibility
in fake news and dysfunctional beliefs



Note: * = $p < 0.05$; ** = $p < 0.01$; *** = $p < 0.001$

Discussion and conclusion

People do not have a silver bullet against fake news and although the contrasting of sources and critical scrutiny of the information allows minimizing their assimilation as a biased belief, they contain the potential to permeate in different segments, including the populations with academic training, proof of the above is the high credibility rates that participants grant to certain fake news, figures that are even higher than those found in previous studies with the Chilean population (e.g. Halpern et al., 2019; Valenzuela et al., 2019). From a structural point of view, the context in which a news story is made would play a relevant role in their credibility, since it is precisely in times of crisis that they manage to go viral with more force. Even so, it is possible to identify certain psychological propensities of those who usually consume and believe in these contents. This research was fruitful in finding multiple correlations with credibility in fake news, highlighting the link to

the facets of paranormal belief and superstitious thinking. These correlations are aligned with the main hypothesis of the study, supporting the existence of shared variability between credibility in fake news and dysfunctional beliefs, except for the relationship with the facet of stereotyped thinking. This suggests that the basis for taking the news that are really false as true would be associated with the same cognitive biases that operate on the basis of other implausible beliefs that in practice are surrounded by a halo of mysticism and charlatanism.

The results are in tune with the research that reveals the role of critical thinking and skepticism in adherence to alternative facts (Pennycook & Rand, 2019; Bronstein et al., 2018; Pennycook et al., 2020). Consequently, there would be a common profile of credulous people who tend to be guided by their first impressions at the expense of minimizing the cognitive efforts necessary to elucidate the truth, either due to the satisfaction of complacency, disinterest in the information environment, or due to a genuine low analytical ability. Whatever the case, the proliferation of falsehoods highlights the need to call for greater efforts on the part of social institutions, mainly the educational system and press institutions.

When comparing the results of credibility in fake news based on gender, significant differences were obtained, which placed women as the group with the greatest susceptibility to misinformation in the media. These differences are small, as has already been noted in previous research (Rampersad & Althiyabi, 2019) and should be interpreted with caution, since not in all fake news did women show greater credibility than men, thus the existence of an interaction between gender and news content when judging its veracity is probable. On the other hand, it should be noted that the differences by gender can be absorbed by the covariation they have with the differences in magical and esoteric thinking, since the literature reports that it is precisely women who hold this type of belief more frequently (Caldera et al., 2017; Rodríguez & Valenzuela, 2019), a difference attributable to culturally anchored gender socialization patterns that are intergenerationally reproduced.

Despite the foregoing, the credibility granted to fake news not only varies according to the individual characteristics of the audiences, but it also does so based on the degree of distance between the exposed content and the objective possibilities of its occurrence. News that introduces subtle distortions to the facts are easier to take as true than those that appeal to large-scale conspiracies and hoaxes. For example, the news that affirmed the

running over of protesters by a civilian police officer in Valparaíso attracted high credibility due to the reasonableness of extrapolating to this situation the previous abuses that contributed to sowing mistrust towards the functioning of the security institutions and order. This example would be a fake news story that, given the social conditions in which it was registered, is more likely to have occurred. Indeed, during the social protests, there were run-overs against protesters, of which there were two fatalities, attributed to the police forces. In this sense, the problem of the dissemination of fake news should not only be weighed by the extension that these have in the population, but also by their margin of proximity to reality, since a greater deviation usually imposes more dramatic consequences for those who hold such beliefs. Consider, for example, the potential consequences of almost a third of university students claiming that prolonged use of masks generates lack of brain oxygenation, an argument that is frequently used by denial groups that have emerged in the United States and Europe in the context of the health crisis. The post-truth scenario seems to be a sad reminder of the vulnerability of the human species to deal with uncertainty.

As Rodríguez and Valenzuela (2019) point out, the 21st century has not only given shelter to impressive scientific and technological developments but also in parallel to this notion of progress, it has been the catalyst to expand new unfounded narratives and preserve irrational beliefs that neither education nor science have managed to banish. Naivete —as opposed to grounded criticism— represents a serious problem for society and for the people that comprise it, since absolute devotion to personal beliefs paves the way for biased decisions, including those that work in aggregate terms. At the individual level, it is important to become aware of the fallibility of thought. It is not too much to ask, from time to time, to question ideas and preconceptions about the world and exercise critical reasoning when intentionalities are noticed behind the content we consume, especially if it is aligned with the confirmatory expectations of our beliefs.

Finally, there are certain limitations whose consideration should be taken into account in future studies. Due to the particularities of the sample, it is likely that the correlation values are higher when selecting participants with a wider range of individual differences, especially with regard to cultural background and socioeconomic status. On the other hand, it is naive to conclude that credibility in fake news is the sole expression of people's individual dispositions and, in this sense, it is necessary to determine in new

investigations the effects resulting from the involvement of factors related to the sender, the channel, and context, as well as the eventual interaction that these factors would have with the individual attributes of the audience.

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