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**Influence of News-Finds-Me Perception on accuracy, factuality and relevance assessment.  
Case study of news item on climate change**

***Influencia de la percepción "las-noticias-me-encuentran" en la evaluación de la exactitud,  
la factuality y la relevancia. Estudio de caso de una noticia sobre el cambio climático***

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**Abstract**

*This paper analyses the effect of 'News-Finds-Me' Perception on the user's assessment of a news item on climate change, both directly and indirectly through news-sharing habits, news-consumption habits, uses and gratifications on social media sites, prior knowledge and attitudes regarding the decision to share said news item. Ninety-six Spanish university students took a survey and were asked to read and rate the quality of a news item on climate change, then to indicate whether they would share that news item on social media. The results show that students with a higher news-finds-me perception tended to rate accuracy and factuality more highly than students with a lower news-finds-me perception. However, relevance was not different between the two groups. Hence, it is concluded that 'News-Finds-Me' Perception lowers the user's expectations but has no influence on the relevance of the news item. As for sharing intentions, none of the aspects considered in the assessment of the news item had an effect on the decision to share that item.*

**Resumen**

Este artículo analiza el efecto de la percepción "las noticias-me-encuentran" en la evaluación que hace el usuario de una noticia sobre el cambio climático tanto directamente como indirectamente a través de aspectos como los hábitos en la compartición de noticias, los hábitos de consumo de noticias, los usos y gratificaciones en redes sociales, el grado de conocimiento previo y las actitudes preexistentes. Se evalúa asimismo la influencia de estos factores respecto a la decisión de compartir esa noticia. 96 alumnos universitarios españoles rellenaron un cuestionario en el que se les pedía leer y puntuar la calidad de una noticia sobre el cambio climático, e indicar si compartirían esa noticia a través de las redes sociales. Los resultados muestran que los alumnos con una mayor percepción "las noticias-me-encuentran" tendieron a valorar el artículo como más factual y exacto que aquellos otros con una percepción menor. Por el contrario, no se hallaron diferencias significativas en la evaluación de la relevancia entre los dos grupos. Por tanto, se concluye que la percepción "las noticias-me-encuentran" reduce las expectativas de los usuarios sobre la calidad, pero no influye en la percepción de la relevancia de la noticia. En cuanto a la intención de compartir la noticia, ninguno de los aspectos considerados en la evaluación de la noticia influyó en la decisión de compartirla.

## Keywords

*Factuality; News-Finds-Me; News-sharing; quality perception; relevance; Social Media*

## Palabras clave

*Factualidad; "Las noticias-me-encuentran"; compartir noticias; percepción de calidad; relevancia; medios sociales*

## 1. Introduction

Social media has potentially become the most important news distribution channel ever (Dafonte-Gómez, 2018) and a source for political and civic information among citizens (Anspach, Jennings & Arceneaux, 2019). This trend has gained global dimensions in western countries such as the United States, where at least 68% of people follow news on social media at least occasionally (Matsa & Shearer, 2018), as well as in developing countries (Mitchell, Simmons, Matsa & Silver Laura, 2018). Almost half of Spanish Internet users (48%) usually get news through Facebook (Newman, Fletcher, Kalogeropoulos, Levy & Nielsen, 2018).

Social media have also displaced the traditional, unidirectional concept of distribution by the idea of dissemination (Noguera-Vivo, 2018). In this environment, users are no longer the final end of a transmission line but a node inside a wider network (Carlson, 2016). This change means that users play an active role in spreading news by deciding what content and articles they share with their contacts on their different social media profiles.

In this sense, the importance of social media for finding news has led to the so-called 'News-Finds-Me Perception' (NFM Perception), that is, the belief that there is no need to actively follow traditional mass media to keep abreast of events, since social media provides the user with the relevant information (Gil de Zúñiga, Weeks & Ardèvol-Abreu, 2017). It has been warned that this reliance on social media has negative civic effects, as it is linked to lower levels of political knowledge and political participation (Gil de Zúñiga & Diehl, 2018; Shehata & Strömbäck, 2018).

On the other hand, due to the fast pace of change in news consumption patterns driven by social media and new technologies, we know little about the possible sharing patterns and the impact of social media on peoples' experiences of news distribution.

Previous research shows that the decision to share news items on social media is deeply related to message characteristics (Trilling, Tolochko & Burscher, 2017). Specifically, the perceived quality of content [Singer, 2014] and the perceived relevance of the topic (Ma, Sian Lee & Hoe-Lian Goh, 2014) have been highlighted as characteristics that stimulate news sharing on social media.

Message characteristics alone, however, do not fully explain the phenomenon of news sharing. To obtain a fuller picture of this behaviour, it is necessary to take into account personal traits. For example, research has shown that people tend to consume media and information that are consistent with their own views and beliefs, a phenomenon known as 'selective exposure' or 'confirmation bias' in psychology (Cappella, Kim & Albarracín, 2015). Today's news media environment, exemplified by the relevance of user-distributed content on social media, has seen the emergence of a parallel trend: 'selective sharing' or the extent to which individuals share primarily attitude-consistent content with their social networks (Shin & Thorson, 2017). According to this phenomenon, prior attitudes towards a certain topic influences the kind of media content that users share and distribute on social media (Barnidge, 2015).

Users are not only influenced by the type of media they consume but also by the type of content and concrete uses they seek through these media (McLeod, 2000). In this sense, the Uses and Gratifications Theory (U&GT) helps to explain different patterns of media behaviour and different effects (Segado-Boj, Díaz-Campo & Quevedo-Redondo, 2019). This theory posits that individuals have an innate need that can be satisfied through media usage.

U&GT has been demonstrated to moderate certain effects (Segado-Boj, Díaz-Campo & Navarro-Sierra, 2020), as happens with selective selection and exposure. Previous studies (Hart, Albarracín, Eagly, Brechan, Lindberg & Merrill 2009; Knobloch-Westerwick & Kleinman, 2012) have shown that this type of bias has a lower impact when users are mainly motivated by seeking information. However, these are not the only gratifications that influence media sharing attitudes. Socially focused gratifications are related to both news internalizing (Winter, Metzger & Flanagin, 2016) and news externalizing (Picone, De Wolf & Robijt, 2016).

## 1.1 Objectives and hypothesis

Previous studies have found that people relying on social media have different political views and opinions (Lee, Lindsey & Kim, 2017) and that people with heavier exposure to political information on Facebook attribute different salience to political issues (Feezell, 2018). Even though NFM Perception has been assumed to lower users' standards for the news sources they receive information from (Spohr, 2017), there is a gap in the literature regarding how dependence on social media influences the perception and evaluation of news items. Thus, the first aim of this study is to understand how NFM Perception influences this assessment of journalistic products. We suggest that users with different levels of NFM Perception will assess the quality of a news item differently.

A second objective for the research is to measure how this evaluation of the news item influences the decision to share said news article on social media. Understanding the logic of "why people share news" is a key to understanding the societal impact of social media (Singer, 2014) and how news travels (Khuntia, Sun & Yim, 2016). Granted that the quality perception of news influences the intention to share news (Ma et al., 2014), we expect that users' different qualities of assessment will have an influence on the decision to share (or not to share) the proposed new item.

The study thus seeks to evaluate how 'NFM Perception' influences the perceived relevance, accuracy and factuality of news about climate change. In addition, it measures the moderating role of uses and gratifications, news habits, prior knowledge and attitudes on climate on that influence. Finally, it aims to check whether changes on the evaluation of that piece of news increase or decrease the individual's decision to share that item on social media.

Hence, we posit hypothesis H1: 'NFM Perception influences the perceived relevance, accuracy and factuality of news on climate change'.

Additionally, the present paper explores the impact of the moderating role where by some aspects, as expounded in the introduction, affect the user's perception of news. Therefore, we decided to test two additional hypotheses:

H1.1. Use & Gratification (U&G) moderates the effect of NFM Perception regarding the perceived relevance, accuracy and factuality of the news item on climate change.

H1.2. News habits on social media moderate the effect of NFM Perception regarding the perceived relevance, accuracy and quality of the news item on climate change.

As mentioned, social media not only serve as a news consumption venue but also as a secondary distribution channel. Choi (2016a) suggests that users' social media activity is differentiated between news internalizing (how people receive news on social media) and news externalizing (how users share news on social media). It has been confirmed that prior knowledge of a topic has a strong role on the decision to read news that users are incidentally exposed to on social media (Karnowski, Kümpel, Leonhard & Leiner, 2017).

H1.3. Attitudes towards the topic moderate the effect of NFM Perception regarding the perceived relevance, accuracy and factuality of news on climate change.

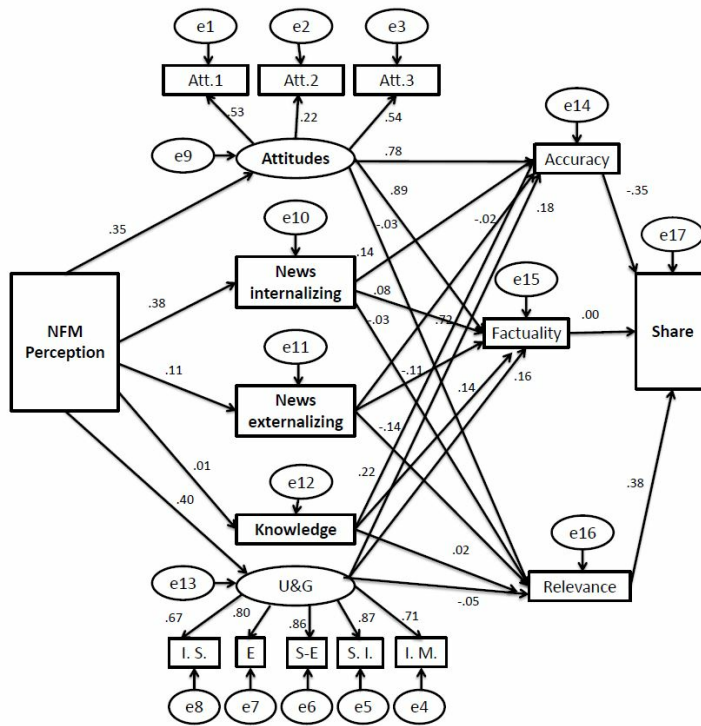
H1.4. Prior knowledge of the topic moderates the effect of the NFM Perception regarding the perceived relevance, accuracy and factuality of the news item on climate change.

Lastly, we consider that higher perceptions of quality lead to higher chances of considering a news item.

H2. Higher perceived relevance, accuracy and factuality correlates to higher chances that a news item is shared on social media.

Figure 1 summarizes the proposed initial model for this research.

Figure 1. Research model



Source: Own elaboration

## 1.2 Justification

While much of the literature focuses on the information source and the message characteristics, it omits the receiver's role in sharing news (Shi, Lai, Hu & Chen, 2017). The present study, however, attempts to evaluate the role played by the user's assessment of a news item when deciding whether to share an item on climate change.

This research also considers the role of self-presentational concerns, which has been linked to users' self-disclosure on Facebook of political concerns (Liu, Rui & Cui, 2017). In this context, we predict that uses and gratifications associated with self-presentation would moderate the role of NFM Perception, since such content is a strategic subject in building and projecting self-identity on the Internet (Jensen Schau & Gilly, 2003).

Furthermore, this paper goes beyond the realm of political communication, which is the type of information most studied from the perspective of information circulation on social media (Bene, 2017; Bode, 2017; Hasell & Weeks, 2016; Segado-Boj, 2020; Weeks, Lane, Kim, Lee & Kwak, 2017) to include other kinds of news stories that might trigger different reactions in users and affect the way they are shared (Ma et al., 2014). Thus, surveying information unrelated to political communication could help to improve our knowledge of social media dissemination routines and motivations (Schweisberger, Billinson & Chock, 2014).

Lastly, by considering a set of factors that includes users and message characteristics, our study takes a multifaceted approach that overcomes the limitations of monotonous approaches that preclude us from identifying how different factors influence one another (Son, Lee & Kim, 2013).

## 2. Material and methods

An online self-administered questionnaire was used, as this method allowed us to include relational and social aspects of news sharing on social media, as suggested by previous studies (Kalsnes & Larsson,

2018). The design of the questionnaire, the informed consent and the procedures to collect and analyse the data gathered from the participants were approved by the research ethics office in the corresponding author's University. The first page of the online questionnaire provided information about the study, to which all the participants gave their informed consent to participate by clicking "next" to begin the survey. Data were later analyzed anonymously.

The questionnaire was sent to a sample ( $n = 96$ ) of undergraduate students selected from universities in the Madrid region, recruited by a social studies firm (Societae). To avoid similar academic backgrounds, the students were selected from different degree courses. To encourage participation, each participant was offered a €25 gift voucher upon successfully completing the survey. The sample comprised 61.46% women and 38.54% men, with an average age of 20.23 years ( $SD = 3$ ). Young people provide a relevant subject for study, not only because younger adults are particularly active news sharers on social media but also because this news sharing is likely to remain a key feature of news distribution models (Bobkowski, 2015). The responses to the survey were collected from May 5th to July 3rd, 2017.

The participants responded to several sets of questions detailed in Tables 1-5. After those questions were submitted, participants were asked to read a news item on the effects of climate change (La Vanguardia, 2017). The text and images of the item included no reference to its source or any other context. After reading the news item, the participants were asked whether they would share that 'news item' on social media. Finally, they were asked to rate the perceived relevance of the new item.

## 2.1 Measurements

This section details the measures and scales used in the study. Cronbach's alpha is indicated in each Table by the symbol  $\alpha$ . 'News-finds-me' Perception was measured by the sum of the responses to a set of four questions (Gil de Zúñiga et al., 2011) through a 7-point Likert-type scale (1 = lowest agreement, 7 = highest agreement) (see Table 1).

**Table 1. Measurements for News-Finds-Me Perception**

News-Finds-Me Perception ( $\alpha = 0.693$ )	I rely on my friends to tell me what's important when news happens.
	I can be well informed even when I do not actively follow the news.
	I do not worry about keeping up with the news because I know news will find me.
	I rely on information from my friends based on what they like or follow through on social media.

Source: Gil de Zúñiga et al., 2017

Table 2 shows the measurements for social media Uses & Gratifications, which were determined by the items developed by Gao and Feng (2016); each U&G was determined by the sum of several independent values, and each was measured on a 7-point Likert-type scale (1 = lowest agreement, 7 = highest agreement).

**Table 2. Measurements for Uses & Gratifications of social media use**

Information seeking ( $\alpha = 0.9$ )	I can get a large amount of information quickly and easily I can get useful information I can get information at a lower cost I can get information that I am interested in I can use it to collect information for future use I can learn a lot
Entertainment ( $\alpha = 0.878$ )	I use it for entertainment I think it is fun I feel excited when I use it I enjoy using it
Self-expression ( $\alpha = 0.88$ )	I can express my personal interests or preferences I can express my feelings I can post information about myself to let others know about me I can keep a record of my life
Social interaction ( $\alpha = 0.912$ )	I can get information about my friends I can communicate and interact with my friends I can show concern and support to my friends I can get opinion and advice from my friends I can express my ideas and give advice to friends

Impression management ( $\alpha = 0.91$ )	I can meet new people
	I can feel connected
	I can make others like me
	I can make others think I am friendly
	I can make others think I am socially attractive
	I can make others think I am competent

**Source: Gao and Feng, 2016**

In line with Hyun and Kim (2015), prior knowledge about climate change was measured as an additive index of four items (average = 1.54, SD = 0.87), obtained by summing the correct answers to four true/false questions regarding climate change (see Table 3), where each correct response was coded as 1. In addition, concern about climate change was measured as a single item question (1 = "not concerned at all", 7 = "very concerned"; average = 5.81, SD = 1.27) as well as interest in news about science (1 = "not interested at all", 7 = "very interested"; average = 4.92, SD = 1.59).

**Table 3. Measurements for climate change knowledge**

Global temperatures were first recorded 150 years ago. Since then these temperatures have risen unremittingly (True).

CO2 is the only industrial gas responsible for the greenhouse effect (False).

USA has signed the Kyoto Protocol (False).

Every country that signed the Kyoto Protocol has agreed to reduce its CO2 emissions by 5% (False).

**Source: Own elaboration**

Attitudes towards climate change were independently measured through the items shown in Table 4 (1= completely disagree, 7 = totally agree).

**Table 4. Measurements of attitudes towards climate change**

	Average	SD
Attitude 1: Climate change is a consequence of human action (Man-induced)	5.93	1.43
Attitude 2: Climate change is a natural phenomenon unrelated to human action (Nature-induced)	2.18	1.3
Attitude 3: Climate change can be halted if citizens and governments adapt the necessary measures (Solvable)	5.71	1.3

**Source: Own elaboration**

Social Media news attendance was operationalized through the scale used by Choi and Lee (2015), shown in Table 5, through a Likert type scale (1 = never, 7 = every day).

**Table 5. Measurements for news internalizing and news externalizing**

News internalizing ( $\alpha = 0.687$ )	How often do you get news on SNSs?
	How often do you receive news links from news organizations?
	How often do you receive news links from other individuals?
News externalizing ( $\alpha = 0.76$ )	How often do you share news links with friends?
	How often do you post news on SNSs?

**Source: Choi and Lee, 2015**

Quality, understood as the perception of excellence of a news story by the public, is a complex attribute with diverse layers (Sundar, 1999). We measured three different constructs (accuracy, factuality and relevance) on a 7-point Likert-type scale (1 = lowest agreement; 7 = highest agreement), as shown in Table 6.

**Table 6. Measurements for quality of a news item**

<b>Accuracy</b> (SD=1.51)	The news item provides accurate and exact information
<b>Factuality</b> ( $\alpha = 0.9$ )	The news item provides fact-based information The news item provides credible information
<b>Relevance</b> ( $\alpha = 0.87$ )	The news item provides information that should be known by the general public The news item provides information that I should know The news item provides information that should be known by political leaders

**Source: Authors, based on Sundar, 1999**

Regarding data analysis, linear regression was chosen when the dependent variable was continuous. Ordinal regression was applied when the dependent variable was discreet. Such statistical tests are commonly applied in similar studies in Communication (Chyi & Yang, 2009; Stempel, Hargrove & Stempel, 2007), as well as in other disciplines (Kaufman, Dwyer, Land, Klein & Park, 2018; Kirk, Ng, Lee, Ang & Lee, 2015) that measure relationships between perceptions and evaluations of messages of issues and other constructs or features.

To determine whether a variable is a moderator, the biostatistical Penn State University model was used. According to this model, when a coefficient considering a third variable changes more than 10% from the coefficient without that third variable, it is taken as a moderator. The formula applied was:

$$\% \text{ variation} = \left( \frac{\text{coef with no moderator variable} - \text{coef with moderator variable}}{\text{coef with no moderator variable}} \right) \times 100$$

Tables 7-9 show moderating variables in bold characters. Coefficients reaching statistical significance are indicated by an asterisk.

Also, starting from the defined structure of direct and indirect effects, Structural Equation Modeling (SEM) analysis has been applied to validate the initial theoretical model. The analysis was implemented in the IBM AMOS 23 software.

To validate data, the assumption of multivariate normality has been tested by analyzing the multivariate kurtosis index and the corresponding critical ratio. A critical ratio below 5 indicates that the multivariate normality assumption is fulfilled (Bentler, 2004). In this case, the critical ratio is 1.890, which points to maximum likelihood for the estimation. However, as the sample size is small and the model includes categorical variables, a Bayesian estimation process has been followed to avoid assumptions on the a priori distribution of the estimated parameters (Byrne, 2009).

The analysis has been developed into two main stages. In the first, the initial, null, and saturated models were estimated. The first model reflects the relationship among variables. The null model assumes no relationships among the variables, thus reflecting the worst possible outcome. The saturated model assumes that every parameter is significantly different from zero, which implies full adjustment of the whole dataset (Gaviria Soto, Bienciento López & Navarro, 2009). In the second phase, the initial model was modified to improve the adjustment by discarding non-significant effects and studying the modification indexes derived.

The model adjustment was tested through the following indexes:

- Absolute adjustment index. The index analyzes how the model adjusts to the observed data. In other words, it indicates whether the underlying theory adjusts to the sample data. The Chi square value is divided by the degrees of freedom of the model (CMIN/df). Values below 2 are considered very good, while those between 3 and 5 acceptable. GFI values above 0.9 are also accepted (Hair, Black, Babin & Anderson, 2014).
- Incremental adjustment indexes. These indexes assess the improvements to the independence model through the CFI index. Values above 0.95 are considered good (Byrne, 2009).
- Root Mean Square Error of Approximation (RMSEA). This index compares the adjustment between the proposed model and hypothetical population data. In this case, values above 0.05 are considered very good, and those between 0.05 and 0.08, acceptable (Byrne, 2009).

3. Results

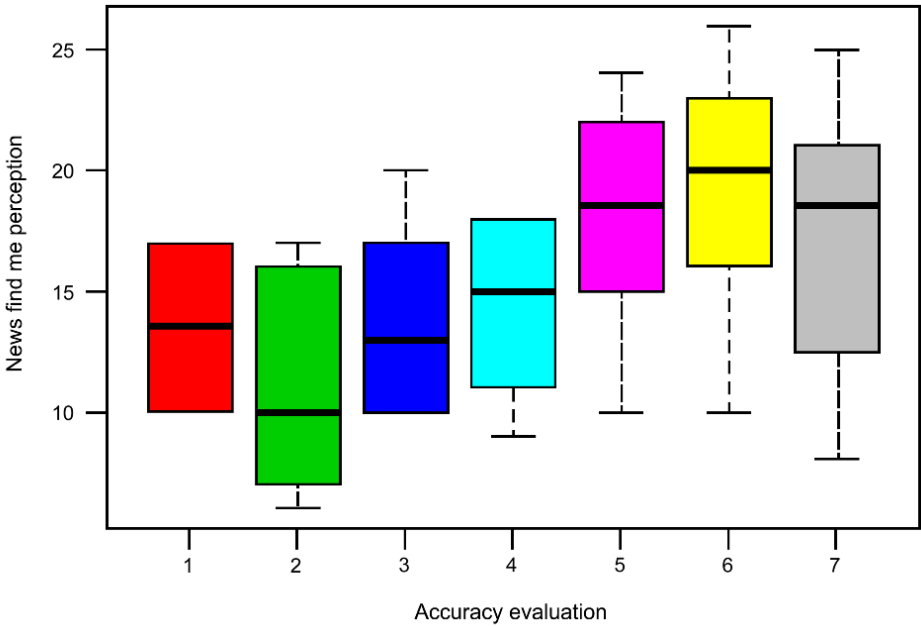
3.1 Influence of “News-Finds-Me” Perception

3.1.1 Influence on the perceived accuracy of the climate change news item

As Figure 2 shows, the NFM Perception influences the perceived accuracy of the news item under study. Based on a simple ordinal regression model, the associated odds ratio was 1.1366, indicating it reached statistical significance (95% confidence interval: 1.0526, 1.2298). That means that the higher the users rate the NFM Perception, the more likely (13% for each point of the scale) it is they will perceive the quality of the news item as higher.

This is not valid for all the values of the 7-point Likert-type scale (see Figure 2), however, because users are not able to determine very precisely what “accuracy” is, since this trend is clearer for values lower and higher than 4.

Figure 2. Relationship between the perceived accuracy of the news item and the News-Finds-Me Perception.



Source: Own elaboration

Finally, according to the results of the present analysis, none of the considered items (uses and gratifications, users' expectations, news internalizing and externalizing, gender, size of discussion network, and climate change perception) were revealed as mediator or moderator variables in the perceived quality of a news item (see Table 7), since none of them produced a variation higher than 10%.



**Table 7. Moderator variables for the relationship between NFM Perception and accuracy of the news item**

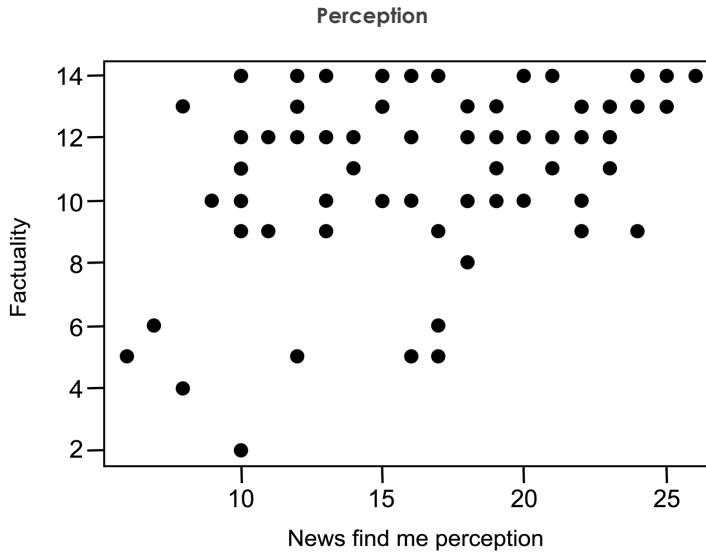
	Moderator variable	Odds Ratio 1.1366	95% CI.lower 1.0526	95% CI.upper 1.2298	% Change
Uses & Gratifications	Information seeking	1.06	0.9791	1.1492	6.7394
	Entertainment	1.1082*	1.0241	1.2013	2.4987
	Self-expression	1.0797	0.996	1.1721	5.0062
	Social interaction	1.0849*	1.0017	1.1771	4.5487
	Impression management	1.1086*	1.0227	1.2038	2.4635
News internalizing & externalizing	News internalizing	1.0926*	1.009	1.185	3.8712
	News externalizing	1.1399*	1.0561	1.2327	0.2903
Attitudes	Climate change as consequence of human action	1.081	0.9977	1.1731	4.8918
	Climate change as natural phenomenon	1.1373*	1.053	1.2307	0.0616
	Climate change can be halted	1.0985*	1.0138	1.1922	0.4223
Knowledge	Previous knowledge	1.1398*	1.0535	1.2359	0.2815

Source: Own elaboration

### 3.1.2 Influence on the perceived factuality of the climate change news item

The linear coefficient ratio between the NFM Perception and the perceived factuality of the news item also reached statistical significance, with 0.1939 (95% confidence interval: 0.0949, 0.2929). This means that when users rated a higher NFM Perception, they also rated the news item with higher factuality (0.1939 points as standard average growth) (see Figure 3).

**Figure 3. Relationship between the perceived factuality of the news item and the News-finds-Me**



Source: Own elaboration

As Table 8 shows, seeking information, entertainment, self-expression, social interaction, impression management, news internalizing and attitudes indicating that climate change is a consequence of human action that can be halted moderates the perceived factuality of the news item.

**Table 8. Moderator variables for the relationship between NFM Perception and factuality of the news item**

	Moderator variable	Linear Coef. 0.1939	95% CI.lower 0.0949	95% CI.upper 0.2929	% Change
Uses & Gratifications	Information seeking	0.085	-0.0076	0.1776	56.163
	Entertainment	0.1495*	0.0496	0.2494	22.8984
	Self-expression	0.1394*	0.0389	0.2399	28.1073
	Social interaction	0.1392*	0.0415	0.2369	28.2104
	Impression management	0.1733*	0.069	0.2776	10.624
News internalizing & externalizing	News internalizing	0.1469*	0.042	0.2518	24.2393
	News externalizing	0.1913*	0.0912	0.2914	1.3409
Attitudes	Climate change as consequence of human action	0.1131*	0.0121	0.2142	41.671
	Climate change as natural phenomenon	0.1949*	0.0969	0.2929	0.5157
	Climate change can be halted	0.1126*	0.0141	0.211	41.9288
Knowledge	Previous knowledge	0.1948	0.0933	0.2962	0.4642

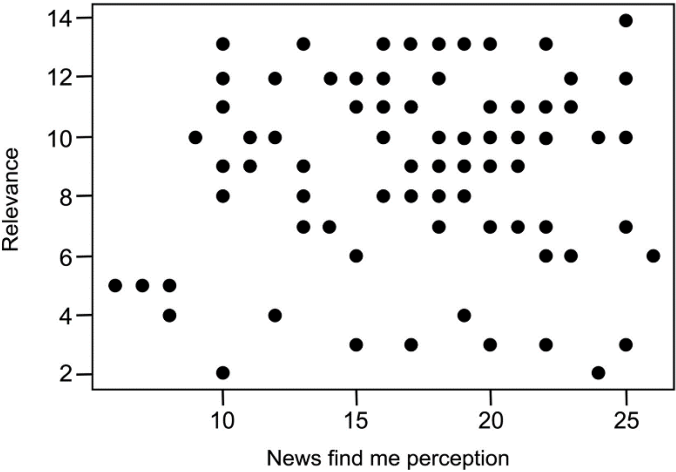
Source: Own elaboration

The strongest moderator influences are Information Seeking and Attitudes, indicating that climate change is a consequence of human action and therefore can be halted.

**3.1.3 Influence on the perceived relevance of the climate change news item**

As Figure 4 shows, the News-Finds-Me Perception does not correlate with the perceived relevance of the news item. The linear coefficient was 0.01; hence, it did not reach statistical significance (95% confidence interval: -0.0117, 0.1318).

**Figure 4. Relationship between the perceived relevance of the news item and the News-Finds-Me Perception**



Source: Own elaboration

As Table 9 shows, seeking information, entertainment, self-expression, and social interaction moderate the perceived relevance of the news item.

**Table 9. Moderator variables measured for the relationship between NFM Perception and relevance of the news item**

Moderator variable		Linear Coef.	95% CI.lower	95% CI.upper	% Change
		0.01	-0.1117	0.1318	
Uses & Gratifications	Information seeking	-0.0613	-0.1895	0.0668	713
	Entertainment	-0.0273	-0.1531	0.0985	371
	Self-expression	-0.0276	-0.1557	0.1005	373
	Social interaction	0.1392	-0.1373	0.1183	1292
	Impression management	0.0158	-0.1135	0.145	58
News internalizing & externalizing	News internalizing	-0.0336	-0.1642	0.097	436
	News externalizing	-0.0079	-0.1268	0.111	179
Attitudes	Climate change as consequence of human action	-0.0885	-0.2129	0.036	955
	Climate change as natural phenomenon	0.0112	-0.1094	0.1318	12
	Climate change can be halted	-0.0503	-0.1788	0.0781	603
Knowledge	Previous knowledge	-0.0014	-0.1261	0.1233	114

Source: Own elaboration

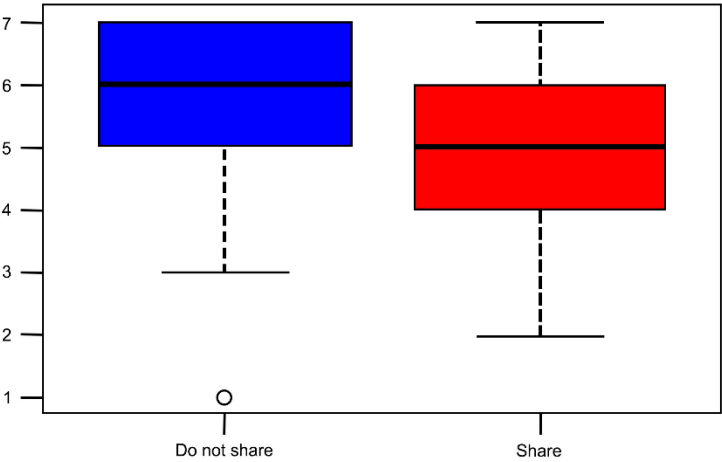
### 3.2 Influence of perceived accuracy, factuality and relevance on the decision to share the news item

No significant correlation was found between the perception of the considered news item attributes and the participant's decision to share the article.

According to the simple logistic regression model, the associated odds ratio with accuracy evaluation did not reach statistical significance, being 0.786 (95% confidence interval: 0.5740, 1.0438) (See Figure 5).

**Figure 5. Relationship between the perceived accuracy of the news item and the decision to share it.**

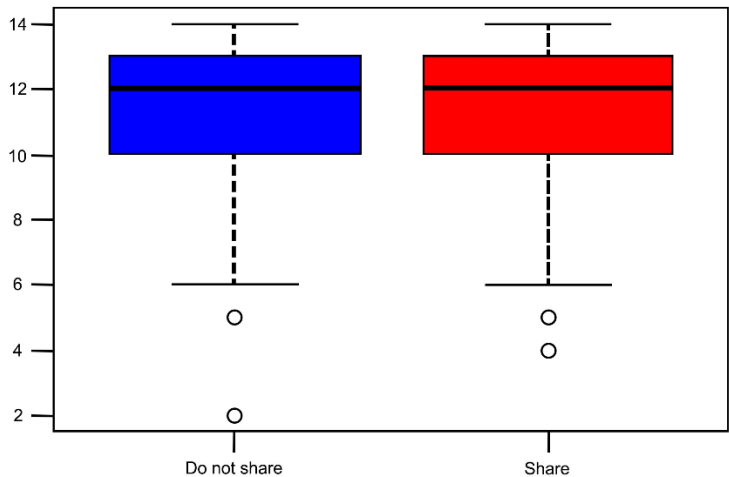
Vertical axis: Perceived accuracy of the news item. Horizontal axis: Decision to share the news item.



Source: Own elaboration

A simple logistic regression model did not reach statistical significance for the relationship between the perception of the news item's factuality and the decision to share, which scored 0.9416 with a 95% trust rate of 0.7936,1.1031 (see Figure 6).

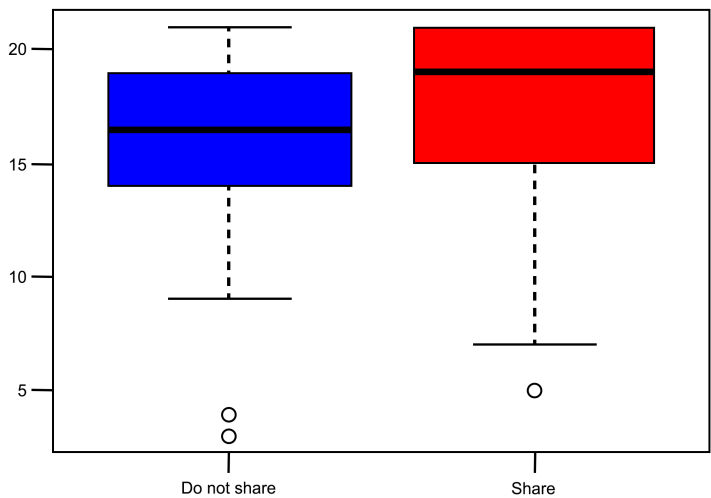
**Figure 6. Relationship between the perceived factuality of a news item and the decision to share it.**  
Vertical axis: Perceived factuality of the news item. Horizontal axis: Decision to share the news item.



Source: Own elaboration

A simple logistic regression model did not reach statistical significance for the odds ratio between the perceived relevance of the news item and the user's decision to shared it, which scored 1.0806 with a 95% trust rate of 0.9841, 1.1919 (see Figure 7).

**Figure 7. Relationship between the perceived relevance of a news item and the decision to share it.**  
Vertical axis: Perceived relevance of the news item. Horizontal axis: Decision to share the news item.

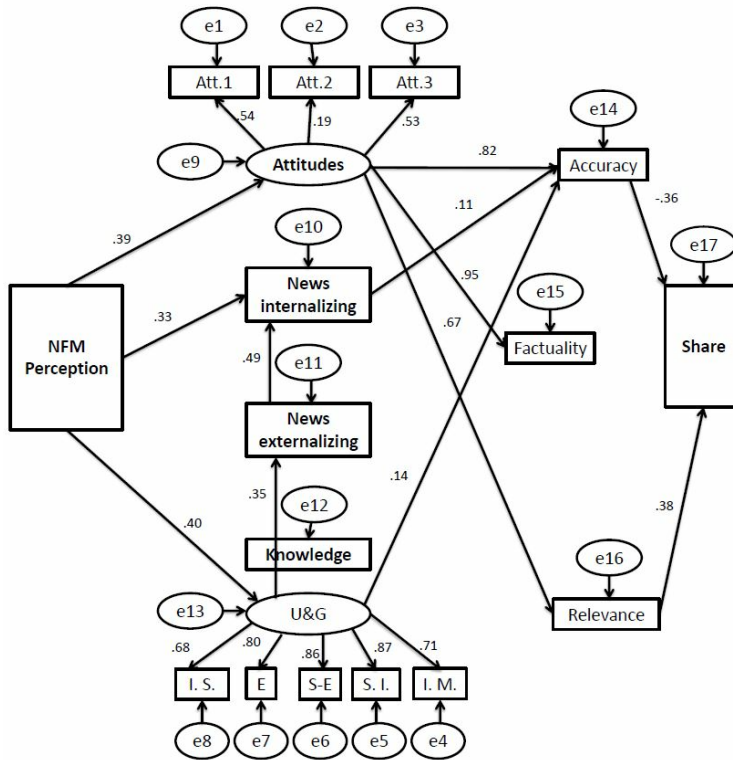


Source: Own elaboration

3.3 Direct and indirect effects

Figure 8 shows the final research model. Standardized regression weights are shown at Table 10. Standardized indirect effects can be seen at Table 11.

Figure 8. Final research model



Source: Own elaboration

Table 10. Standardize regression weights

		Estimate
Uses & Gratifications	← NFM Perception	.398
News Externalizing	← Uses & Gratifications	.347
Attitude	← NFM Perception	.393
News Internalizing	← NFM Perception	.328
News Internalizing	← News Externalizing	.486
Accuracy	← Attitude	.817
Relevance	← Attitude	.674
Accuracy	← News Internalizing	.108
Accuracy	← Uses & Gratifications	.142
Attitudes 1	← Attitude	.538
Attitudes 2	← Attitude	-.195
Attitudes 3	← Attitude	.535
Impression management	← Uses & Gratifications	.713
Social interaction	← Uses & Gratifications	.865
Self-expression	← Uses & Gratifications	.856
Entertainment	← Uses & Gratifications	.802
Information seeking	← Uses & Gratifications	.676
Decision to share	← Accuracy	-.357
Decision to share	← Relevance	.376
Factualty	← Attitude	.949

Source: Own elaboration

**Table 11. Standardized indirect effects**

	NFM Perception	Uses & Gratifications	News Externalizing	News Internalizing	Attitude	Relevance	Accuracy
Uses & Gratifications	.000	.000	.000	.000	.000	.000	.000
News Externalizing	.138	.000	.000	.000	.000	.000	.000
News Internalizing	.067	.168	.000	.000	.000	.000	.000
Attitude	.000	.000	.000	.000	.000	.000	.000
Relevance	.265	.000	.000	.000	.000	.000	.000
Accuracy	.420	.018	.052	.000	.000	.000	.000
Factuality	.373	.000	.000	.000	.000	.000	.000
Decision	-.050	-.057	-.019	-.038	-.038	.000	.000
Information seeking	.269	.000	.000	.000	.000	.000	.000
Entertainment	.319	.000	.000	.000	.000	.000	.000
Self-expression	.341	.000	.000	.000	.000	.000	.000
Social interaction	.344	.000	.000	.000	.000	.000	.000
Impression management	.283	.000	.000	.000	.000	.000	.000
Solvable	.210	.000	.000	.000	.000	.000	.000
Nature-induced	-.076	.000	.000	.000	.000	.000	.000
Man-induced	.211	.000	.000	.000	.000	.000	.000

**Source: Own elaboration**

Table 12 shows the adjustment values of the model. All the indexes assume values above the acceptable margins. The CMIN/df value is below 3, while GFI is above 0.9.

**Table 12. Adjustment values of the model**

Model	CMIN/DF	GFI	CFI	RMSEA
Initial Model	3.036	.862	.881	.099
Final Model	2.451	.922	.916	.081
Saturated Model		1	1	0
Independence model	7.006	.350	0	.251

**Source: Own elaboration**

This value of the CFI index indicates that the model has improved as compared to the independence model, as seen in the CFI index, which in the final model stands above 0.9. The RMSEA value also falls within the acceptable margins.

#### 4. Discussion

The results show that higher NFM Perception is related to higher evaluations of accuracy and factuality. We interpret this finding as evidence that NFM lowers the user's expectations towards news items.

Information seeking has the most relevant moderating role regarding the influence of NFM on this regard (see Table 8), but when considering relevance on its own, the most important moderating role comes from social interaction (see Table 9). This could be explained by the different aspects implied in each value. As relevance measures many factors, among them an external aspect ('The news item provides information that should be known by the general public'), social interaction U&G may encourage this attitude and behaviour. On the other hand, information seeking could moderate the influence of NFM Perception because users with higher informational needs might have more criteria to evaluate the factuality of the news item, given their higher information literacy or familiarity with journalism products. Further research is needed.

Although self-presentational U&G led to higher self-disclosure in political issues (Liu et al., 2017), self-expression and impression management play a minor moderating role compared to the most influential U&G (Information Seeking and Social Interaction).

Thus, relevance is more related to social interaction, whereas the link between self-presentational U&G and political news sharing might be better explained by personal and psychological aspects.

News internalizing plays a stronger moderating role than news externalizing, thus substantiating the suggestion that consumption habits are more relevant to the perception of news and topics than sharing habits are. In other words, users who attach greater importance to social media as a means to stay informed and receive more news through social media, tend to have different perceptions and assessments of a news story.

Attitudes towards climate change were shown to have a greater moderating role than prior knowledge did. In fact, the idea that climate change is a phenomenon provoked by humans that can be halted led to a higher factuality and relevance assessment. Prior knowledge, in contrast, did not exert a moderating role. This could imply a link between attitudes and perception towards the topic and the relevance of climate change, thus suggesting a need to share information about the topic.

The perception of responsibility as well as the possibility to halt climate change leads to different attitudes towards this topic (Chang, Kim, Shim & Ma, 2016), which as demonstrated here, also moderate the other influences regarding the willingness to share the information about this topic.

In contrast, the NFM Perception does not directly influence the relevance of the news topic. Although higher exposure to political news on social media led to higher levels of interest in political issues (Feezell, 2018), our findings suggest that such exposure must occur to be effective. In other words, the simple dependence users have on social media for receiving news does not increase users' interests or relevance given to social or political issues.

Regarding news sharing, our model shows that the assessment of the news item had almost no relevance in the decision to share or not to share it on social media. This is consistent with previous findings that maintain that topic relevance takes precedence over news credibility when users decide to share a link or news item [Ma et al., 2014]. This is especially relevant, given that NFM Perception might increase the reliance on untrustworthy sources of information, as misinformation and low quality information circulates through social media (Gil De Zúñiga, Huber & Strauß, 2018).

#### **4.1 Conclusion**

Our findings could mean that NFM Perception might affect the assessment of journalistic pieces and products, since accuracy and factuality are aspects inherent to news reports. However, topical relevance is not so dependent on the way people acquire their news.

In this sense, almost every other factor considered in our model (media habits, prior knowledge and attitudes, uses and gratifications) moderates the influence of NFM Perception in topic relevance assessment (see Table 8 and Figure 8). This points that relevance attribution is a complex phenomenon that requires models of greater complexity to be understood and that NFM Perception does not play a relevant role.

Although NFM Perception might explain differences in the perception of textual characteristics of news (accuracy, factuality), aspects related to topic relevance are not directly affected by this construct.

According to our results, users might share information regardless of its accuracy or factuality. In other words, other factors external to the journalistic quality of the news item itself might be what truly matter in news sharing. This is meaningful for understanding the way in which misleading information is distributed on social media

#### **4.2. Limitations and further research**

Cronbach's  $\alpha$  measurement of news internalizing and NFM Perception, ranging from 0.6 to 0.7, was below the ideal value, although it qualifies them as acceptable constructs (DeVellis, 2017).

This study used a single-message design, which does not reflect the complexity of media effects and reception. Future studies could develop a design in which multiple messages are used as a stimulus.

Additionally, given the size of the sample and the variability on the considered variables, which combine numeral and ordinal variables, it is impossible to normalize the measures and build an integral research model that could reflect marginal changes.

Regarding the sample, all the participants are undergraduate students. This implies than results could only be extrapolated to this sociodemographic sector. Regardless, young adults are a relevant subject of study given their strong orientation towards online news and news sharing on social media (Antunovic, Parsons & Cooke, 2018).

Although prior attitudes and knowledge were measured, prior general interest towards the topic was not surveyed. This construct has been shown to be a motivating factor for engaging with news (Kümpel, 2018); therefore, future research should incorporate it to better understand the role of NFM Perception in news assessments.

As already mentioned, attitudes towards the topic were shown to play a relevant moderating role. Future studies should respond to or adapt the study to ascertain whether the identified tendencies appear in other socially relevant or controversial news topics.

We also mentioned that psychological aspects may help to improve our understanding of the link between the willingness to share information and uses and gratifications, which has been observed in studies on the effects of media (Ngai, Tao & Moon, 2015). Considering some psychological features and constructs such as the big five personality traits might help to gain further insight into the current topic.

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