ABSTRACT – This article pairs journalism studies and social psychology to investigate, with a quantitative method, audience perceptions of news media in the initial stages of the Covid-19 pandemic in Brazil by verifying the relations among media credibility, subjective well-being (SWB), and fear of missing out (FoMO). All told, 306 Brazilians took part in this study, answering a questionnaire to elicit demographic data, perceptions of media credibility, and behavioral characteristics. The findings revealed high averages of measures of news media credibility, with over 70% of respondents evaluating the work of the press as excellent or good. People with higher averages of negative affects tended to perceive the news media as more reliable. Furthermore, individuals who reported fear of missing out on the news during Covid-19 experienced more negative affect, and attributed greater credibility to news media. These findings show that in a time of fear and uncertainty, citizens seem to trust solid institutions more, accepting their reports less critically. We also found that unknown risks can attract attention more than regular events, tending to keep vigilance on specific news. Future studies can add additional measures of FoMO and use more diverse samples in different contexts.

AUDIENCE PERCEPTIONS OF NEWS MEDIA ON THE COVID-19 PANDEMIC

1 Introduction

An unprecedented event in modern world history, officially declared as a pandemic by the World Health Organization (WHO) in
March 2020, coronavirus disease (Covid-19) has killed millions of people around the globe and changed many aspects of life\(^1\). The disease has been detected in more than 200 countries, with the US and Brazil experiencing the most widespread outbreaks outside of China. In order to avoid coronavirus spread, citizens were put under lockdown, with governments shutting down schools, bars, restaurants, and other non-essential service venues (Reynolds & Weiss, 2020).

Keeping informed about this crisis is almost imperative for survival, so much so that in the first months of 2020 several news media outlets saw a spike in website pageviews\(^2\) (Tameez, 2020). In this context, news consumption during the Covid-19 pandemic has been a prominent object of study. Van Aelst et al. (2021) found an overall rise in news use across 17 European countries, especially an increase in TV news consumption, and a higher reliance on social media and the internet for news and information. Investigating multi-platform news consumption in association with civic participation during the Covid-19 pandemic in Belgium, Waeterloos et al. (2021) revealed that it stimulates two different types of participation, through civic talk with strong ties and civic attitudes.

But do a larger audience and more interest in news mean an elevated level of trust in the media? Using survey data collected in late March and early April 2020 in six countries, Nielsen et al. (2020) found that news organizations were the most widely used source of information about Covid-19 in almost every country, and they were rated as relatively trustworthy by the majority of respondents. However, those with low levels of formal education were much less likely to say that they rely on news organizations. Trust and news consumption can also pose critical barriers to health literacy and foster negative prejudicial responses that further undermine public health efforts surrounding the Covid-19 pandemic (Dhanani & Franz, 2020).

The unprecedented nature of this pandemic warrants a study about how people are connecting to news media and how this access impacts general life. In this vein, this study examines how people of the largest country in South America perceived the media in the early days of the Covid-19 pandemic in the country.

The way individuals interact with the media, considering confidence or skepticism, has the potential to generate emotions and influence states of mind, health, and happiness, and can affect emotional states and feelings of well-being (Bernardino et al., 2016).
Studies have shown, for example, that the use of social media has a significant influence on well-being. Individuals who spend more time using social media suffer from more negative emotions and feelings (Baker & Algorta, 2016); have less satisfaction with life (Elhai et al., 2016); experience more emotional tensions (James et al., 2017; Lai et al., 2016); and suffer deterioration of physical and mental well-being (Alt, 2018). Drawing on a dataset of U.S. residents in mid-to-late March 2020, Stainback et al. (2020) found that greater Covid-19 media consumption was associated with greater psychological distress. Also, regarding the feeling of well-being, Jain (2021) revealed that high levels of news exposure, combined with low levels of interest in Covid-19 news, led people to experience more stress and lower satisfaction, gratitude, and happiness.

Probably for this reason, media users deviate, temporarily or permanently, from the use of social media due to weariness caused by interactions and exposure. Compulsive media access triggers fatigue that can result in elevated anxiety and depression (Dhir et al., 2018), and the widespread apprehension that others may be having experiences from which someone is absent – the fear of missing out (FoMO) – favors dysfunctional use of media and contributes negatively to the subjective well-being (SWB) index.

Previous research has also investigated FoMO in the Covid-19 pandemic. Yu et al. (2020) compiled the Covid-19 information fear of missing out scale (CIFS) and found that regarding social media usage, CIFS scores were associated with the frequency of active reposts rather than passive browsing. In other words, what causes an impact on Covid-19 FoMO is the active reposting and interpretation of information. Bruin et al. (2021) investigated the degree of news avoidance during the first months of the pandemic in the Netherlands and found that the increased presence of this behavior could be explained by negative emotions and feelings the news caused to citizens. “In a pandemic such as Covid-19, news consumers need to be informed, but avoiding news is sometimes necessary to stay mentally healthy” (Bruin et al., 2021, p. 1).

This article brings together two fields of knowledge – social psychology and journalism – to investigate the audience perception of news media on the Covid-19 pandemic in Brazil. The primary aim is to verify the relations among media credibility, subjective well-being (SWB), and fear of missing out (FoMO).
2 The credibility perceived by the audience

Media trust is a dialectical and live experience. It is not taken for granted; it does not remain forever – trust is dynamic and changes according to circumstances and individuals. To trust in news media is a matter of social orientation and is one of the most important mechanisms in helping people deal with the risk of a complex future (Kohring & Matthes, 2007).

From the perspective of communication research, trust is an important variable for media effects (Tsfati, 2003) and it supplies information about how individuals perceive and evaluate news media. And here is a challenge: people have been relying less on the media over the years. According to the University of Oxford Digital News Report 2020, only 38% of the 80,000 participants in the sample said they trusted most news most of the time – a fall of four percentage points from 2019. In Brazil, the report highlighted that trust in news overall improved slightly after a significant contraction in 2019 amid an atmosphere of political polarization following the election of far-right President Jair Bolsonaro in 2018 (Newman et al., 2020).

Conceptually, it should be mentioned that trust in news is different from trust in news media. Citizens, non-professional journalists and other institutions can also produce news. Audience trust in news media is a general attitude toward the media as an institution (Tsfati & Cohen, 2013), and is rooted both in the journalistic text and in the individual characteristics and trends of the audience.

This intersection between reliability and credibility can upset concepts and cause the misconception that they are the same. However, there are significant epistemological differences to be considered (Santos & Grossi, 2018). Trust can be understood as a psychological state in which an individual chooses to believe in something or that someone is aware of a vulnerable act since there are no forms of guarantee (Lewicki & Tomlinson, 2003).

When it comes to credibility, however, the literature presents it as a multidimensional construct. Performance, accuracy, responsibility, and role of the news media make credibility a diversified concept, which can be defined as a characteristic anchored by practices and principles, along with consolidated values of journalism. In this sense, there is the credibility constituted by the speaker and the credibility perceived by the listener (Lisboa & Benetti, 2017). This study focuses on the second one. Also, previous research...
indicates the existence of correlations between the decline in media credibility, the erosion of institutions, and scenarios of ideological polarization (Hanitzsch et al., 2018). Perceptions about the credibility of the news media can even be related to stability and confidence in democracy (Tsfati & Cohen, 2005).

Schudson (2019) identified that faith in institutions like Congress, medicine, education, the military, organized religion, major corporations, and journalism began to decline in the 1970s. Concerning journalism, this was due to at least three reasons: despite being a public service, the news media has been largely funded by the self-interest of the market (Waisbord, 2017); the rise of new digital technologies has increased audience participation since they are more likely to identify political or business interests embedded in the news agenda; journalists have spent decades denying that they write from a set of values, not simply from a disinterested effort at truth (Schudson, 2019). In other words, they have sold impartiality and neutrality as values extremely close to trusting, instead of being transparent regarding their methods, angulations, and interests. Thus, the following research questions are raised:

RQ1: What is the perception of news media credibility by Brazilians during the Covid-19 press coverage?
RQ2: What are the most reliable types of news media?

3 Subjective well-being (SWB): the bottom-up aspect

Happiness is a component recognized as part of a healthy life, being a topic addressed by philosophers since ancient Greece. The hedonic perspective of well-being understands happiness in terms of obtaining pleasure and preventing pain, identifying it as a subjective experience, and considering individuals' self-evaluation of their own life (Diener & Emmons, 1984). Even though there is a wide range of terminologies and concepts in literature (Ryan & Deci, 2001), psychological science tests hypotheses with rigorous empirical methods and adopts the scientific expression given to people's self-assessment of their own happiness: subjective well-being (SWB). Thus, the measurement of happiness has been workable with the usage of the concept of SWB, the scientific approach to happiness (Diener et al., 2018).

SWB is a multidimensional construct comprising three components: satisfaction with life; positive affect; and negative affect
(Diener & Emmons, 1984; Diener et al., 1985). Satisfaction with life, the cognitive dimension of SWB, refers to the cognitive judgment about the degree of satisfaction that all people make about their lives in general (Diener & Emmons, 1984; Woyciekoski et al., 2012). The affective dimension is composed of positive affect and negative affect and refers to the intensity and frequency with which individuals experience positive or pleasurable versus negative or unpleasant affects (Zanon & Hutz, 2014).

Many researchers have sought to understand the factors involved in human happiness – a very complex task considering the number of variables that play a role in explaining well-being (e.g., Deaton, 2008; Diener et al., 2013). There is evidence that SWB varies not only due to individual factors, such as genetics and personality, but also for contextual and macro-social reasons (Diener et al., 2018). Thus, the society one lives in is a crucial influence on SWB. Conflicts, contingency or even feeling that one can or cannot trust other people are powerful predictors of happiness worldwide. These are called “bottom-up” aspects of subjective well-being. Situational factors external to persons influence their subjective well-being, such as good and adverse events, and circumstances like health and wealth (Diener, 2021).

The literature suggests that SWB is highly desirable because several good outcomes flow from happiness. For example, happy people (those with long-term average positive emotions) live longer, have stronger immune systems and are better able to cope with tricky situations (Diener, 2021). In contrast, people with low levels of SWB who are chronically stressed, depressed, or angry appear to be less healthy and function less effectively (Diener, 2021). And this stress can be caused by exposure to news. Previous research has even shown that exposure to mass trauma events through the media can increase the initial rates of symptoms of post-traumatic stress disorder (PTSD) (Brackbill et al., 2009; Schlenger et al., 2002).

Although it emphasizes the importance of citizens’ being well informed, aiming at protecting psychological health, the World Health Organization recommends reducing how many people watch, read, or hear the news that makes them feel anxious and depressed. In fact, compulsive access to the media triggers fatigue, and this can cause elevated anxiety and depression (Dhir et al., 2018). When people are aware of negative news, and at the same time are looking for more consistent information, the anxiety and stress caused during the pandemic (Yamada et al., 2021), can lead to decreased well-being.
Audience perceptions of news media on the COVID-19 pandemic (Aquino & Vieira, 2020a). This leads to the following research question:

RQ3: Is there a correlation between news media credibility and subjective well-being?

4 The Fear of Missing Out (FoMO) in an environment of news overload

Fear of missing out (FoMO) is a feeling of foreboding that the person may miss some events that other people are going to enjoy (Przybylski et al., 2013). It is also related to compulsively checking news feeds (e.g., Grohol, 2011; Wortham, 2011). Although it is a term studied from different approaches, the consensus is that FoMO is generally conceptualized as a construct involving anxiety, rumination (Dempsey et al., 2019), and negative humor (Elhai et al., 2020; Wolniewicz et al., 2018): Feelings and emotions which are important aspects of the negative affections that make up subjective well-being.

Such anxiety generated by FoMO tends to negatively impact SWB (Stead & Bibby, 2017). This has been related to the perception of quality of life, both because it is inversely correlated with life satisfaction (Can & Satici, 2019; Sha et al., 2019) and because of the negative correlation with emotional well-being (Chai et al., 2019; Roberts & David, 2019). Increased exposure to critical social situations such as the pandemic leads to psychopathological consequences such as reduced quality of life and well-being (Norris et al., 2002).

In a hyperconnected world, the FoMO on information can be related not to the lack of news, but to its opposite: news overload, which occurs when a person receives more information than s/he can process in a certain period (Ji et al., 2014). It is reasonable to assume that in a time of plentiful information available, people are experiencing negative feelings during the information consumption process.

Song et al. (2016) identified that a flood of news from soaring numbers of sources and platforms is making news consumers feel overloaded, with negative consequences such as fatigue and indifference to the news. The authors found that perceived news overload-induced news avoidance by increasing news fatigue and news analysis paralysis.

Journalists from the New York Times (Wortham, 2011) and the San Francisco Chronicle (Morford, 2010) have already
reported how the mix of media and FoMO can be linked to general unhappiness. Wortham (2011) proposed that FoMO can be a source of negative humor and depressed feelings. The research focused on the underlying motives why social media provide additional reasons to expect the FoMO to be associated with mood deficits and life satisfaction (Uram & Skalski, 2020).

In an article for Vice, Dexter Thomas reported his observation in South Korea during the coronavirus crisis, in February 2020. He was interviewing someone on camera and heard the buzz of a phone notification. “At first, we thought someone had forgotten to put their phone on silent, but then we realized everyone’s phones were buzzing at the same time. The government was pushing out health alerts about nearby outbreaks” (Thomas, 2020). According to him, that might be the most unsettling thing about an epidemic in the age of social media FoMO: the crawling dread that if you look away from your phone for even a moment, you’ll end up dying because you missed an important message.

Also referring to the Covid-19 pandemic, Rutledge (2020) argued that media content of all kinds influences people’s emotions. In a scenario of news overload, reading lots of angry or fearfull tweets or worrisome news stories can increase agitation, raise stress levels, and create feelings of helplessness. “The outbreak of coronavirus has triggered our survival instinct and made us hypervigilant; we are on high-alert for signals of danger, amplifying the impact” (Rutledge, 2020). With this in mind, we propose the following question:

RQ4: Is it possible to verify fear of missing out (FoMO) on the news during the Covid-19 pandemic?

5 Method

This is an exploratory, descriptive, correlational, and transversal survey, utilizing quantitative analysis. We aimed to investigate the audience perceptions of news media in the initial stages of the Covid-19 pandemic in Brazil by verifying the relations among media credibility, subjective well-being (SWB), and fear of missing out (FoMO). In line with the combination of different methods and data sources, an online questionnaire was made available on the internet, and data collection took place for 15 days, between March 26th and April 9th, 2020.
5.1 Sample

There was a non-probabilistic convenience sample of 306 Brazilians over 18 years of age ($M_{age} = 36.83$; $SD = 11.17$); 66% were women. The sample contained people from over 15 Brazilian states, with 64.05% of respondents living in the Southeast region; 21.57% in the South region; 4.58% in the Northeast region; 3.27% in the Midwest region; and 0.65% in the North region. As for education, 3.6% had completed high school; 32.7% had higher education; 63.7% of the people had postgraduate degrees. Politically, 60.1% of the participants positioned themselves on the left, 22.2% in the center, and 17.6% on the right of the political spectrum.

5.2 Instruments

We used an online questionnaire made available on the internet, which contained sociodemographic questions (age, gender, place of residence, education level, political spectrum position), news consumption habits, and perceptions about media. In addition to these questions, there were the following psychometric instruments:

Media credibility scale (Gaziano & McGrath, 1986; adapted for Brazil by Aquino & Vieira, 2020b). This one-dimensional instrument is composed of four items that measure the degree of trust in the media (fair, accurate, tell the whole story, it can be trusted), ranging from 1-Strongly disagree to 5-Strongly agree ($\alpha = .93$).

Satisfaction with life scale (SWLS) (Diener et al., 1985; adapted for Brazil by Zanon et al., 2014). This instrument assesses the cognitive component of the SWB, through five self-responsive phrases about life satisfaction. Answers are provided on a seven-point scale, ranging from 1-Strongly disagree to 7-Strongly agree. ($\alpha = .87$).

Positive and negative affect schedule (PANAS) (Watson et al., 1988; adapted for Brazil by Zanon et al., 2014). The affective dimension of the SWB was assessed using this two-dimensional scale, where each dimension is composed of 10 items. The subscale of positive impact ($\alpha = .88$) measures the degree to which individuals experience positive affect, while the subscale of negative impact ($\alpha = .91$) measures how much individuals experience momentary states of negative affect. In this instrument, the participants are given instructions to indicate “how much they feel this way lately” (1-Not at all; 5-Extremely).
Media perception (Tsfati, 2003; Tsfati & Cappella, 2003). Two questions related to perception about media trustworthiness were adapted and coded so that answers evaluating the media's work in a more favorable and trustworthy manner had higher values, while answers indicating more skepticism were obtained with lower values. One item asked how often they rely on the media to report the news honestly (1-never, 2-sometimes, 3-most of the time, 4-almost always); and the other one scored the quality attributed to the work of the media when reporting on the pandemic (1-bad, 2-regular, 3-good, 4-excellent). Besides this, there was an open-response item in which respondents indicated which news programs were providing the best coverage of the pandemic.

FoMO. The questions regarding FoMO about the news were inserted twice at distinct moments. The first item of the questionnaire, in the beginning, was a general dichotomic question: “Do you usually feel fear of missing out on the news?” At the end of the questionnaire, we specified the question to make a comparison: “Do you feel fear of missing out on the news about Covid-19?”.

5.3 Procedures

Data collection: participants were recruited by snowball sampling (Naderifar et al., 2017) in response to invitations sent via email and made available on social networks. The invitations explained the survey and provided the link to access the questionnaire. On the first page of the website where the questionnaire was available, the Free and Informed Consent Term was presented, attesting to the anonymity of the participants, the confidentiality of the responses, and the free decision to participate in the survey, in compliance with the guidelines and regulatory standards for research involving human beings in Brazil (Resolution 466/2013 from the National Health Council). In addition, participants were informed that the survey was intended for Brazilians over 18 years of age, and we asked them to confirm whether they satisfied this criterion. The questionnaire was configured not to allow missing answers to the scales; however, the open questions were optional. Thus, no treatment of missing cases was necessary.

Analyses: initially, demographic data were analyzed using descriptive statistics (frequency/percentage, measures of central tendency, and dispersion). Then, Pearson's correlation coefficients, and group differences using Student t-tests were also calculated with the IBM-Statistical Package for Social Science (SPSS).
6 Results

6.1 Media credibility

To answer RQ1, we analyzed the frequencies of responses to establish the perception of general news media trust. When asked how often they think they can trust the media to report the news honestly, 50% (n=153) of the sample answered “sometimes”, 36.9% (n=113) “most of the time”, 9.2% (n=28) “almost always” and 3.9% (n=12) “never”.

The question to elicit evaluation of the quality of press coverage of the Covid-19 pandemic obtained the following indices: 29.74% (n=91) evaluated the quality of coverage as “Excellent”, 42.48% (n=130) evaluated it as “Good”, 18.95% (n=58) rated it as “Regular” and 8.82% (n=27) rated it as “Bad”.

6.2 Perceptions of diverse types of media

RQ2 sought to explore the opinions of the most reliable types of media to report the pandemic. Participants indicated how they learned more about Covid-19 and chose their main source of news. The types of media to which respondents devoted more time to obtain information about the pandemic were: “News websites”, chosen by 38.9% (n=119), “TV”, indicated by 35% (n=107), “Social Networks”, chosen by 23.5% (n=72), “Radio” indicated by 2% (n=6), “Magazine” 0.3% (n=1) and “Printed Newspaper” also 0.3% (n=1).

Since the internet is a farthest reaching medium today, respondents also indicated which online service they used most to obtain information on the pandemic. First, “news websites (e.g., newspaper or magazine websites)” were indicated by 49.7% (n=152) of respondents, followed by “Twitter”, indicated by 10.1% (n=31), then “Influencer Channels” with 9.2% (n=28), “Facebook” with 8.2% (n=25) and “Instagram” 8.2% (n=25), both in fourth place. “WhatsApp” was indicated by 3.9% (n=12) of the respondents, and finally, “Podcasts” were chosen by 2.6% (n=8).

Additionally, we posed a qualitative question: “Think about the quality of TV and radio programs, magazines, blogs, printed newspapers, etc. Considering all the media, in your opinion, which news outlet has provided the best coverage of the Covid-19 pandemic? Cite only one product/program of a specific news outlet that you consider to best cover the pandemic”. Since this was an open/free question, we
grouped the most cited answers according to some categories identified from the data. Some participants mentioned over one program/news outlet, despite our request. Some answers could not be categorized as a product, a program, or a news outlet (e.g., 36 participants cited “TV” as a type of media; and 28 cited Rede Globo, which is the largest TV company in Brazil). We considered the answers that mentioned other specific sources of information, such as experts and governments and responses that none of the news outlets have provided good coverage. The most mentioned and valid qualitative answers are in table 1.

**Table 1**

*News outlets with the best coverage of the pandemic*

<table>
<thead>
<tr>
<th>Category</th>
<th>Information sources</th>
<th>Absolute number(n)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Products, Programs, or News Outlets</strong></td>
<td>Globo News</td>
<td>27</td>
</tr>
<tr>
<td></td>
<td>Jornal Nacional</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>CNN Brazil</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>Folha de S.Paulo</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>G1</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>TV Record newscasts</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Átila Iamarino YouTube channel</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Combate ao coronavirus (Globo TV)</td>
<td>6</td>
</tr>
<tr>
<td><strong>Official sources and experts</strong></td>
<td>Health ministry</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Federal government</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>São Paulo state government</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Experts</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Experts’ Instagram</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Scientific websites</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Defense ministry</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>WHO website and medical journals</td>
<td>1</td>
</tr>
<tr>
<td><strong>None</strong></td>
<td>Consider that none of the news outlets have provided good coverage</td>
<td>9</td>
</tr>
</tbody>
</table>
6.3 SWB and media credibility

To discover the correlation between SWB and media credibility (RQ3), Pearson correlations were calculated. Negative affect was positively related to the average of credibility attributed to the media, \( r(306) = .20, p < .001 \), and positive affect was negatively related, \( r(306) = -.17, p < .001 \). These results indicate that people with a higher average of negative affect also had a higher average in credibility attributed to the media; while people with a higher average of positive affect had a lower average in credibility attributed to the media. Other variables, such as age and political orientation, also showed significant correlations with the variables, as seen in table 2.

Table 2

Correlations between media credibility, SWB, and other variables

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Media credibility</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. MP coverage assessment</td>
<td>.54**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. MP frequency of reliance</td>
<td>.62**</td>
<td>.54**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Negative affect</td>
<td>.20**</td>
<td>.16**</td>
<td>.15**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Positive affect</td>
<td>-.17**</td>
<td>-.11</td>
<td>-.12*</td>
<td>-.31**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Satisfaction with life</td>
<td>.01</td>
<td>.03</td>
<td>.05</td>
<td>-.09</td>
<td>.30**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Political orientation</td>
<td>-.31**</td>
<td>-.49**</td>
<td>-.22**</td>
<td>-.24**</td>
<td>.16**</td>
<td>.01</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Age</td>
<td>-.21**</td>
<td>-.23**</td>
<td>-.15**</td>
<td>-.34**</td>
<td>.23**</td>
<td>-.02</td>
<td>.23**</td>
<td></td>
</tr>
<tr>
<td>9. Education level</td>
<td>-.08</td>
<td>-.06</td>
<td>.04</td>
<td>-.06</td>
<td>.07</td>
<td>.14*</td>
<td>.01</td>
<td>.34**</td>
</tr>
</tbody>
</table>

Note. N=306. MP = Media perception. **p<.01; *p<.05.

The significance of the results found in Pearson’s analysis indicated the existence of correlation, but without indicating a causal direction. So, multiple linear regression analysis was performed (forward method) to investigate to what extent the affective dimension of SWB had an impact on levels of media credibility. The results showed there was a significant influence of the affects experienced by the sample on the degree of credibility they attributed to the news media (\( F(2.303) = 8.046, p < .001 \); adjusted R2 = 0.044). The regression indicated
that positive affect ($\beta=-.12; p=.048$), and negative affect ($\beta=.16; p=.007$) were statistically significant predictors of media credibility, explaining 4.4% of the variance in credibility they attributed to the news media ($B=2.677, t=9.013, p<.001$). VIF levels were acceptable, indicating excellent model adequacy. In contrast, according to multiple linear regression (enter method), the credibility attributed to the media explained 3.8% of negative affect ($F(1,304)=12.018, p=.001$; adjusted $R^2=0.035$; $B=.195, t=3.467, p=.001$), while it explained 2.4% of positive affect ($F(1.304)=8.577, p=.004$; adjusted $R^2=0.024$; $B=-.166, t=-2.929, p=.004$). Thus, there seemed to be a moderating effect of affects according to this regression model.

### 6.4 FoMO on Covid-19 news

The averages of FoMO were compared in two moments. The answers to the general question were ‘Yes’, indicated by 53.9% (n=165), and ‘No’, representing 46.1% (n=141). The mean differences between these groups according to the student t-test are reported in table 3.

**Table 3**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Yes (n=165)</th>
<th>No (n=141)</th>
<th>t Test</th>
<th>p value</th>
<th>Cohen’s d</th>
</tr>
</thead>
<tbody>
<tr>
<td>Media credibility</td>
<td>2.93</td>
<td>2.54</td>
<td>-3.58</td>
<td>&lt;.001</td>
<td>0.41</td>
</tr>
<tr>
<td>Negative affects</td>
<td>2.69</td>
<td>2.37</td>
<td>-3.29</td>
<td>.001</td>
<td>0.38</td>
</tr>
<tr>
<td>Positive affects</td>
<td>2.52</td>
<td>2.81</td>
<td>3.35</td>
<td>.001</td>
<td>0.38</td>
</tr>
<tr>
<td>Satisfaction with life</td>
<td>3.90</td>
<td>4.12</td>
<td>1.50</td>
<td>.135</td>
<td>0.17</td>
</tr>
</tbody>
</table>

Note. N = 306

The answers to the specific FoMO question about Covid were 61.8% (n=189) ‘Yes’ and 38.2% (n=117) ‘No’. Student t-tests were performed differentiating the group of individuals who declared FoMO in general and individuals who declared FoMO concerning Covid-19 (table 4). We highlight that higher averages of credibility attributed to the media were identified for individuals who said they are afraid of
missing something important about the pandemic (M=2.94; SD=0.88) and those who declared they did not have this fear (M=2.43; SD=1.01), t(220,551)=4.44; p<.001; d=0.53. Negative affect averages were also higher in the group that declared FoMO on the news about Covid-19 (M=2.93; SD=0.86) than in the group of individuals who did not declare it (M=2.25; SD=0.79), t(304)=4.88; p<.001; d=0.58. All results of differences between these groups can be seen in table 4.

Table 4

Mean differences between those who answered Yes and those who answered No to FoMO on the news about Covid-19

<table>
<thead>
<tr>
<th>Variables</th>
<th>Yes (n=189)</th>
<th>No (n=117)</th>
<th>tTest</th>
<th>p value</th>
<th>Cohen's d</th>
</tr>
</thead>
<tbody>
<tr>
<td>Media credibility</td>
<td>M 2.94 SD 0.88</td>
<td>M 2.43 SD 1.01</td>
<td>t(220,551)=4.44</td>
<td>&lt;.001</td>
<td>0.53</td>
</tr>
<tr>
<td>Negative affects</td>
<td>M 2.93 SD 0.86</td>
<td>M 2.25 SD 0.79</td>
<td>t(304)=4.88</td>
<td>&lt;.001</td>
<td>0.58</td>
</tr>
<tr>
<td>Positive affects</td>
<td>M 2.57 SD 0.74</td>
<td>M 2.77 SD 0.81</td>
<td>t(304)=2.18</td>
<td>.030</td>
<td>0.25</td>
</tr>
<tr>
<td>Satisfaction with life</td>
<td>M 3.89 SD 1.24</td>
<td>M 4.18 SD 1.37</td>
<td>t(304)=1.92</td>
<td>.055</td>
<td>0.22</td>
</tr>
</tbody>
</table>

Note. N = 306

To conclude the analysis regarding RQ4, we performed a chi-square test of independence to examine the association between FoMO in general and FoMO on the news about Covid-19. It showed there is a significant association between the two variables, confirming that FoMO was higher when referring to news about the pandemic. \( \chi^2(1, N=306) = 76.61, p<.001 \).

7 Discussion

During this survey, Brazil was in the early phases of the pandemic: on the last day of the data collection (April 9th, 2020), there were 18.176 people infected and 957 deaths in the country. That means Brazilians knew very little about how the disease would spread in the country. This study aimed to investigate the audience
perceptions of news media in the initial stages of the Covid-19 pandemic in Brazil by verifying the relations among media credibility, subjective well-being (SWB), and fear of missing out (FoMO). The findings suggest that the pandemic crisis influenced the perceptions regarding the work of the press and media credibility, and this was correlated with the experienced levels of Brazilians’ well-being.

Initially, the responses obtained to establish the perceived trustworthiness of the news media in general, indicated that a large portion of the sample seemed to trust the honesty of the news reported by the media more often. In addition, the quality attributed to the media’s work in covering the pandemic was high. This result is similar to that of Nielsen et al. (2020), showing that the majority rated the media as reliable during the first stages of the pandemic. Thus, the perception of news media credibility by Brazilians during the Covid-19 press coverage was favorable, based on perceptions about reliability.

News websites and TV were indicated by the majority as the media to which people devoted the most time to get news about Covid-19. And when considering only the digital environment, news websites remained in the first place, despite Brazil being among the countries that most use social media in the world. In a way, at this time of intense social crisis, the internet still seemed to be a channel through which less reliable information circulates. This could endorse an argument about how much the global crisis context influences individuals to rely on traditional news sources. Even when choosing which online service they used most to obtain information on the pandemic, the reliance on traditional media was greater, considering that also most news sites are owned by legacy outlets.

This assumption became stronger when we asked the respondents to mention the outlet brand they trust the most in the pandemic coverage: two TV programs owned by the largest Brazilian media company were cited in first and second place. Official sources and experts were also named, highlighting the search for technical knowledge, in contrast to general media knowledge.

An important finding in this study is the correlation between SWB and media credibility: people with higher averages of negative affects were more confident in the media. The more a person is afflicted, frightened, distressed, angry, and disturbed, the more he/she thinks that news media are fair, accurate, tell the whole story, and can be trusted. On the other hand, people that feel more determination, enthusiasm, strength, pride, inspiration, and animation are more
skeptical about the media. Considering that subjective well-being also varies according to contextual and macrosocial reasons (Diener et al., 2018), it is reasonable to assume that a disruptive context that brings profound social consequences will alter well-being. In a time of fear and uncertainty, even purchasing behavior can be impacted by perceived dangers (e.g., Billore & Anisimova, 2021; Lins & Aquino, 2020). Thus, the impact of unwanted news can affect positive and negative emotions (e.g., Jain, 2021; Stainback et al., 2020), also in case people trust solid institutions like the traditional media and accept their reports less critically. Conversely, it is assumed that people who wish to preserve some positive emotions and feelings during a disruptive event may tend to attribute less credibility to news to cope better with the tough times.

Despite the significance of the correlations found, they do not provide a guide to a causal direction, indicating only that the variables are mutually modified. Interestingly, the test of the predictive power of affections on credibility pointed out that they have direct impacts on the levels of credibility attributed to the media. Although degrees of trust in the media can be influenced by many contingencies, positive and negative emotions influence some credibility attributed to the media. If there is more experience of negative affections and feelings, they will predict higher credibility attributed to the media. Conversely, if there are more positive feelings and affections, this could explain the low credibility of the media, and here is a plausible reason: researchers suggest that happy individuals seem not to use diligent processing all the time (Diener, 2009), so avoiding giving credence to media can be effective in ameliorating the effects of negative life events and preserving positive affections. The coping avoidance skill cannot change the situation, but it can help by reducing psychological discomfort (Sun & Zhang, 2014). Therefore, in a challenging social context, there is a predictive power of anxiety or enthusiasm, fear or vigor on how much the audience gives credit to the work of the press.

Interestingly, the older people in the sample had lower perceptions about media credibility and honesty, along with feelings of uncertainty and nervousness, representing a negative affect. The only positive relationship with age was for positive affect, indicating that positive experiences such as vigor, dynamism, and enthusiasm increased with age. And at the other end of this correlation, younger people felt more fear and uncertainty. In parallel, the younger the age, the more they gave credit to the work of the media, evidencing that when listening to and reading
news, people may feel more anguished.

As we pointed out, news media credibility can have a relation with the context. Brazilians have been experiencing an atmosphere of political polarization since the 2018 election (Nielsen et al., 2020), and this can partly explain the increasing credibility attributed to the media by respondents on the left of the political spectrum. This perception has a practical example: in response to the Bolsonaro administration’s decision to restrict access to data on the Covid-19 pandemic, six Brazilian news outlets formed a partnership and worked collaboratively to gather appropriate data in the 26 states and the Federal District. Since then, the most reliable source of information on the pandemic in the country has been provided by the mainstream media, not by the extreme-right government (it is noteworthy that some of these news outlets were cited by the respondents as better sources of information during the pandemic). That shows how the press was actively helping society to keep informed in this moment of crisis, and maybe by doing so, achieving more credibility.

In this context, we also measured the FoMO on the news. It is assumed that unknown risks can attract attention more than regular events, and this maintains vigilance and awareness of specific news on the subject. That is the likely reason for the higher averages of FoMO when people answered questions about the pandemic than generically. It is worth highlighting the effect sizes found in the average differences in both measures of FoMO, indicating the magnitude of the results in this sample. These values constitute evidence (Cohen, 1977) that the average differences found favor the interpretations discussed in this study.

In assessing the credibility of the media associated with FoMO, this study shows that individuals experiencing more FoMO and more negative affect believe more strongly in the media. Considering all analyses, those who said they trust the media tended to be more concerned about missing news, and this happened when they were experiencing negative affect such as fear or nervousness, e.g. Individuals that experience more positive affects like pride or joy tended to be more critical about the press and they experienced less fear of missing the news.

Regarding this point, mention should be made about a research limitation: the non-probabilistic sample, mostly consisting of women from the Southeast region (the country’s richest and most developed, with the highest average schooling) cannot be considered
as representative of the Brazilian population. A sample with greater schooling diversity may bring different results. So, it is necessary to be cautious in interpreting the result because these extracted outcomes can reflect specific biases. Nevertheless, the pandemic has affected the entire country and the different Brazilian social strata. For example, people may have wanted to make a good impression – this commonly occurs with questionnaires with self-response scales – in saying they do not have any fear of missing news about the pandemic. This leads us to infer that the average of FoMO could be higher.

Although the results obtained are consistent and represent a significant contribution, it should be considered that it was not the purpose of this study to generalize, but rather to explore this pandemic context. As a broad result, the relation between media credibility and negative affect can be seen as a challenge. If well-being is also defined by the affective state experienced when positive affect prevails over negative affect, the positivity or negativity of an emotional state can influence judgments (Gilovich & Griffin, 2010), activate positive or negative information, and distort how objects or propositions are evaluated (Mayer et al., 1992). This helps to understand how attitudes about media can be influenced by affect.

8 Conclusion

This study reveals that people who are experiencing more negative affects demonstrate FoMO on the news, specifically during Covid-19, and these people are also the ones who give the media the most credibility. Here is a challenge to news outlets: how can journalism remain relevant to citizens who attach less credibility to the media and are comfortable being left out of the news – even when they are peremptory? If this same profile is also formed by people who hold the experience of positive emotions and feelings, supporting their subjective well-being, investigating whether disbelief in the media is a cause of this (beyond being related) is a relevant field for future audience-based research. It seems to be more difficult to make this type of audience less skeptical, but the effort may be worthwhile in a long-term strategy that seeks stronger connections with the audience.

Finally, this paper opens pathways for in-depth research on the FoMO phenomenon in relation to the news. Although the literature presents FoMO with several frameworks, specific tools for news reading
can be developed to better cover the complexity of the construct. Still, the analysis of this topic during a disruptive event like the pandemic is a relevant contribution of this study, which can suggest a lengthy list of new investigative possibilities. Future studies can also explore, describe, and correlate SWB, media credibility, and FoMO in distinct stages of the pandemic worldwide, to verify outcomes of different audience perceptions of the news coverage in distinct samples.

NOTES

1 In Brazil, from 3 January 2020 to 9 February 2022, there were 26.599.593 confirmed cases of Covid-19, with 632.621 deaths. Retrieved from https://Covid19.who.int/region/amro/country/br


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