

## *Sherlock-wannabes* or when the audience fact-checks. How ideology, education, and alternative media use explain individual fact-checking behaviors in Chile\*

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Recibido: 19 de mayo de 2023 / Aceptado: 10 de septiembre de 2023

**Abstract.** When confronted with suspicious information, the most common advice is to rely on trusted, well-known news media outlets to verify it. However, in a high-choice, fragmented media ecosystem, news readers might easily find a source that confirms what they previously thought about an issue, or debunks reports that challenge their values and beliefs. As such, alternative news outlets might be a feasible venue for citizens to confront cross-cutting information. At the same time, avoiding contrary information or actively seeking different points of view depends on personal characteristics, such as ideology or education. Drawing upon research on selective exposure and confirmation bias, this study observes how alternative news media use, together with people's education and political ideology, affect citizens' fact-checking behaviors when encountering challenging information. Results from a two-wave panel study conducted in Chile suggest that ideology plays a role only for the highly educated, who rely on alternative media to fact-check the most when they are closer to the left side of the political spectrum.

**Keywords:** fact-checking; alternative news media; confirmation bias; survey research.

### [es] Cuando la audiencia verifica. Efectos de la ideología, educación y medios alternativos en comportamientos de verificación en Chile

**Resumen.** El consejo más común para enfrentar información sospechosa es contrastarla con datos provenientes de fuentes profesionales y confiables. No obstante, en ecosistemas mediáticos altamente fragmentados y con muchas opciones para escoger, los públicos pueden elegir medios de comunicación que confirmen sus actitudes previas hacia un tema, o desmientan información que cuestiona sus creencias y valores. De este modo, los medios de comunicación alternativos pueden ser una fuente atractiva para que los ciudadanos confirmen o descarten información desafiante. Evitar este tipo de información, o al contrario, exponerse a puntos de vista distintos, dependerá de características personales, como son la educación o la ideología. A partir de conceptos como exposición selectiva y sesgos de confirmación, este estudio observa cómo el uso de medios alternativos afecta la tendencia a verificar información, tomando en cuenta los niveles de educación e inclinación ideológica de las personas. Los resultados de una encuesta de panel de dos olas realizada en Chile sugieren que las personas con alta escolaridad y con tendencias políticas de izquierda son quienes recurren a medios alternativos como fuentes de verificación con mayor regularidad, revelando que la ideología juega un rol central en lo referido a comportamientos de verificación.

**Palabras clave:** verificación; medios de comunicación alternativos; sesgo de confirmación; encuestas.

**Sumario.** 1. Introduction 2. Fact-Checking and Confirmation Bias 3. Alternative Media as Opposed to Legacy Media 4. The alternative/legacy dichotomy in Chile's news media landscape 5. The Impact of Selective Exposure, Ideology, and Education 6. Methods 6.1 Variables 6.2 Statistical Analysis 7. Results 8. Discussion 9. References

**Cómo citar:** Saldaña, M., & Santos, M. (2023). *Sherlock-wannabes* or when the audience fact-checks. How ideology, education, and alternative media use explain individual fact-checking behaviors in Chile. *Estudios sobre el Mensaje Periodístico* 29 (4), 795-805. <https://dx.doi.org/10.5209/esmp.88097>

## 1. Introduction

Fact-checking relates to spotting false or questionable claims to deliver corrections and protect audiences from being exposed to misinformation (Graves, 2018). While fact-checking and data verification are usually associated with journalism practice and pro-

fessional fact-checking organizations (Ufarte-Ruiz, Peralta García & Murcia-Verdú, 2018), the accelerated spread of misinformation in recent years have prompted regular citizens to *channel their inner Sherlock Holmes* and verify the information they encounter themselves (Urbani, 2019), especially facts challenging their political values and beliefs.

\* Este trabajo recibió financiamiento de la Agencia Nacional de Investigación y Desarrollo de Chile (ANID) a través del proyecto Fondecyt de Iniciación 11230980, y la Iniciativa Científica Milenio ICN17\_002 y NCS2021\_063.

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As the concept of confirmation bias suggests, people tend to favor information that goes in line with their worldview, so that they become less critical of news or even rumors that confirm what they previously thought about an issue (Bakir & McStay, 2018; Watson, 1960). However, what happens when these *Sherlocks* stumble upon information that challenges their values and political beliefs? What factors lead them to engage with challenging information instead of avoiding cross-cutting perspectives? Drawing upon research on selective exposure and confirmation bias, and relying on a two-wave panel survey conducted in Chile in late 2020, this study aims to answer those questions, at least to some extent.

We analyze Chile's referendum where citizens decided whether to write a new constitution (October 2020), expecting a binary political election (yes/no) to sharpen the behaviors we set forth to assess. The Chilean case also brings along, as in most of Latin America, a controversial media system, often accused of being heavily biased (de Albuquerque, 2019), captured (Guerrero & Márquez-Ramírez, 2014), and monopolistic (Mönckeberg, 2009). As a consequence, alternative media are playing an increasingly relevant role in the Chilean news media landscape by providing options often more aligned with their audiences' expectations regarding the coverage of political events (Luna, Toro & Valenzuela, 2021).

## 2. Fact-Checking and Confirmation Bias

Fact-checking has become a sub-field in journalism practice in the last decades. Wardle (2018) distinguishes fact-checking from verification, although both are recent developments in the journalistic industry. The first refers to corroborating techniques to assess veracity of content that has been widely circulated, a practice motivated originally by imprecise or misleading claims by public figures and organizations such as think tanks. As such, it happens necessarily *ex post*, that is, after such claims are made public. On the other hand, verification as a systematic practice emerges with the need for pressrooms to make sense and verify the growing flows of unofficial sources, i.e., user-generated content. Consequently, it necessarily occurs *ex ante*, that is, before publishing (Wardle, 2018). Distinctions aside, they converge in the process of source-checking and debunking.

Recently, though, there has been a growth in sophistication of misinformation creation (microsegmentation, automatization, artificial intelligence usage) and diffusion (coordinated bot and cyborg<sup>3</sup> networks), so that misleading and false content are published directly on users' channels or networks, both visible—like Facebook

or Twitter—and opaque—such as WhatsApp or Telegram private groups—. In Chile, recent events have led to an environment of “omnipresent misinformation,” where many old and new influence industry techniques converge to the dissemination of misinformation (Santos & Orchard, forthcoming). In such context, fact-checking has amplified its activity to the verification of content that may very well be created and initially distributed by non-public actors, and/or widely disseminated either organically or with the help of artificial, inauthentic networks of users, such as paid users or automated bots. For this study, we do not differentiate between falsehood authorship and dissemination strategies, since we are focused on information that contradicts a user's beliefs, rather than the source (public/non-public) or the placement (legacy media/social platforms).

There have been plenty of studies about fact-checking efficiency in Chile (Bachmann, Valenzuela & Ortega, 2022), and other places (see the meta-analysis by Walter, Cohen, Holbert, & Morag, 2020) pointing to significant though limited effects of fact-checking, attenuated by factors related to format (such as the adoption of “truth scales”), and participants' preexisting beliefs, ideology, and knowledge. Yet, effectiveness of alternative fact-checking and the process underlying it is yet to be determined. Fact-checking has an important component that relates to the media system. So, while a trusted media system (for instance, the UK media ecology) is perceived as impartial and has the audience trust to verify facts (Cushion Morani, Kyriakidou & Soo, 2022), less trusted systems such as the one in Chile (Newman et al., 2021) might not enjoy the same faith.

Additionally, there may be asymmetries between different political groups relating to fact-checking. Shin and Thorson (2017) found Republicans presented higher levels of hostility than Democrats toward fact-checking during the 2012 elections. Partisanship, under certain conditions, can even lead to a sort of “backfire effect,” as an individual's effort to counter the arguments of the verification may lead them to a more extreme position (Nyhan & Reifler, 2010). Certainly, the level of trust in fact-checkers is pivotal to its effectiveness, beyond political orientation.

While trust in sources certainly play an important role in the acquisition of information and persuasion towards a certain attitude or behavior, there are other factors to weigh in when studying phenomena related to political information or misinformation. One of the most discussed issues that arise when discussing fact-checking is confirmation bias, generally defined as the tendency to confirm previous beliefs. *Positive confirmation bias* relates to the “tendency, when testing an existing belief, to search for evidence which could confirm that belief, rather than for evidence which could disconfirm it” (Jones & Sugden, 2001, p. 59). But the bias could also manifest itself in the opposite way, as a tendency to undervalue evidence that challenges previous beliefs (Klayman, 1995). As the same author puts it, a general definition for confirmation bias is the “inclination to retain, or a disin-

<sup>3</sup> Cyborgs stand for “cyber organisms” and in this context refer to inauthentic accounts where humans behave similarly to automated systems, repeating certain tasks and masquerading them to seem authentic. They usually are remunerated (such as hired by political or commercial marketing agencies). Chu and colleagues (2010) define a cyborg as a “bot-assisted human or human-assisted bot” (p. 21).

clination to abandon, a currently favored hypothesis” (Klayman, 1995, p. 386).

The effects for political communication are tangible: from selective exposure –the tendency to search for sources of information reinforcing previous beliefs– to selective avoidance –the tendency to avoid sources of information challenging existing beliefs– confirmation bias is a psychological trait that helps explain many difficulties in obtaining a healthy informational environment during political processes. To fact-checkers, confirmation bias is perhaps the most complex challenge, for reason and facts give way to beliefs and perceptions (Hindman, 2009), in a psychological struggle of our reasoning. Hameleers and van der Meer (2020) found that, for certain issues, audiences avoid fact-checkers when they go against their prior attitudes and they are welcome when they are congruent with preexisting beliefs, showing a sort of instrumentalization of fact-checkers to favor the user’s cognitive convenience.

In high-choice media environments, all forms of confirmation bias are highly problematic because it is plausible that a user with a higher directional motivation –ideology prevails over precision (Lodge & Taber, 2000) – and some degree of persistence will find a source, regardless of quality, that confirms her previous beliefs and attitudes. Nevertheless, even in polarized high-choice media environments, Hameleers and van der Meer (2020) found that fact-checking can overcome such polarization, bringing divided audiences closer together. The consequences are unclear though – when fact-checking is impersonated by individuals with their own selection of sources, as they could reach out to IFCN-accredited fact-checkers, obscure alternative outlets, or anything in between.

### 3. Alternative Media as Opposed to Legacy Media

Usually, news professionals’ most common advice is to rely on trusted, well-known news media outlets to verify suspicious information. This seat of honor used to be reserved for legacy media; however, alternative news outlets, with their counter-hegemonic essence (Holt et al., 2019) have come to dispute this role. In a high-choice, fragmented media ecosystem, alternative news media emerge as an option to the legacy news tradition, where news content and news framing are portrayed as alternative (or even as opposition) to the mainstream media narrative (Harcup, 2005). In Latin American countries, many of the fact checkers are dedicated exclusively to such task, being a specific niche of journalistic activity that competes with traditional journalistic organizations. It has been frequent to find consortia that pulls together many initiatives to tackle the issue, motivated by extraordinary events such as elections or the Covid-19 health crisis. Some examples are *Verificado* in México, *Chequeado* in Argentina, and *Comprova* in Brazil<sup>4</sup>.

Alternative media can be approached from different angles. Primarily delimited as *non-commercial*, alternative media definitions evolved from an aggregate of denials –“it is not the established order; it is not the capitalist system; it is not the mainstream view of a subject” and so on (COMEDIA, 1984) – to a multiplicity of dimensions. Still, it is usual to define alternative media as tied up to liberal, progressive values (Rauch, 2015), or anti-capitalist (COMEDIA, 1984), critical (Fuchs, 2010), and/or anti-systemic political positions (Downing, 2001, who prefers the term “radical media”). Those may refer to a different editorial position, a non-commercial operation, a non-tangible platform (digital-only for instance) and so on. Surveying readers of two traditional partisan news outlets in the U.S., Rauch (2015) reinforces the validity of the mainstream/alternative media dialectic in times of hybrid media environments, concluding that the audience values content (diversity of voices, neglected issues, mobilizing information) over form (nonprofit, noncommercial, small-scale, means of distribution), a display of pragmatic acceptance of concessions of form (such as commercialization) when they are a means to an end seen as good, such as social transformation. This perspective is in line with Fuchs’ (2010) perception of critical content as a necessary condition, and critical form as optional: “The category of critical media is connected to Negt and Kluge’s notion of the counter-public sphere. Critical media can be seen as the communicative dimension of the counter-public sphere” (1993, p. 173).

Those notions of alternative as a unidirectional value-driven or politically-driven relatively homogeneous group have been put to test in the last decade or so, with the rise of interconnected transnational hyper partisan right-wing media, that come also in heterogeneous forms (Heft et al., 2019). Worldwide examples are *Breitbart* in the U.S., *Compact* in Germany, *Nyheter Idag* in Sweden, *O Antagonista* in Brazil, and *El Líbero* in Chile. Those examples seem to fit somehow the description of alternative: they are critical, though not progressive; many have alternative forms and are digital-only outlets; most mobilize and have clear political orientation, though not left-leaning. Altogether, they seem to be more of a phenomenon linked to a populist agenda around the globe (Heft et al., 2019) than to the 1990’s counter-hegemonic ‘indymedia’ movements (Mamadouh, 2004).

In face of such context, we have operationalized *alternative* as opposed to legacy media, in form *and* content, but not regarding directionality (left or right), nor in reference to news quality, for we are interested in the adoption of alternative media as sources for fact-checking by individuals. In the Chilean news media system, legacy media are nearly entirely commercial<sup>5</sup>, aligned with moderately conservative views, while more challenging media, both left and right, are

<sup>4</sup> This site provides a global map of Fact-checking initiatives and consortia: <https://reporterslab.org/fact-checking/>

<sup>5</sup> Even State-funded National Television (TVN), operates as a commercial outlet with a competitive market-driven management, a unique case in the spectrum of public TV channels (see Godoy, 1995).

digitally native. For example, one of the most reputable news outlets is *Ciper*, a digital-only investigative outlet sometimes criticized as progressive or left-leaning, mostly financed by subscribers (circa 70% of the income) and with no current links to private funding<sup>6</sup>. It does match both aspects of form and content proposed by Rauch (2015), but they have had links to a patron in the past, financed by a very wealthy Chilean entrepreneur. As we will see, in the Chilean case, as in many countries in Latin America, the media system is a more radicalized scenario, since mainstream media is perceived as dramatically biased, captured either by economic or political powers<sup>7</sup>.

#### 4. The alternative/legacy dichotomy in Chile's news media landscape

As previously stated, Chile's mainstream press is said to be homogenous (Arriagada & Navia, 2013), to lose journalistic autonomy when under political pressure (Mellado & Humanes, 2012), and to be close to the country's political right wing (Dermota, 2002). On the other hand, alternative media tend to represent ideas from the extreme sides of the political spectrum. During the country's last episodes of social unrest, analysts have said that alternative media even aligned with protesters' and social movements' demands (Luna et al., 2022). While alternative news sources used to be considered not as professional—or not as objective—as traditional news outlets (in Chile but also elsewhere, as explained by Holt et al., 2019), alternative media are nowadays considered a legitimate source of information, reaching high peaks of popularity and news consumption in the country (Newman et al., 2021), especially after Chile's political riots in October 2019, when they reached a sustained growth in audience (Luna et al., 2022). The legitimacy crisis for legacy media has been a constant even before (Scherman et al., 2018), but had an especially acute crisis in the aftermath of the October 2019 protests, losing 15% of popular trust next year (Newman et al., 2020). During the riots, legacy media were accused of not providing accurate reports of the massive demonstrations going on in the country (Luna et al., 2021), and alternative outlets became the go-to source to learn about the riots and the protesters' grievances (Ortiz, 2021).

In spite of such an unprecedentedly dynamic media environment, fact-checking in Chile has proven to have, even under such a crisis of legitimacy, a significant effect over correction of misbeliefs, even when against one's political orientation (Bachmann et al., 2021). But what happens with citizens who turn to other outlets to verify information?

The context of a binary referendum (Do you want a new constitution? Yes/No) is prone to polarization,

since there is no center, no moderate position. The case studied here is even more politicized, since it is a referendum originated as an institutional response to an acute social crisis, leading to passionate responses as it unfolded. Moreover, considering that legacy media are associated with conservative values in Chile, stronger political positions might be unlikely to trust them as sources of information in critical political events, and even less so as sources of verification of dubious information. In the same vein, those readers who seek information to fact-check rumors or cross-cutting reports might feel more comfortable looking for information in alternative sources with different levels of professionalism and partisanship, instead of in traditional news outlets.

In sum, the Chilean media landscape is characterized by a distrusted media system, where alternative news outlets provide more acute views—regardless of quality—over current affairs. Alternative media are, then, both a proxy for views outside the political center, and a refugee for politically motivated individuals to pursue information that confirms their previous beliefs. Therefore, we expect people using alternative media to be more likely to show fact-checking patterns when facing information they mistrust. Consequently, we propose:

*H1: Using alternative media (as opposed to legacy media) will lead to fact-checking behaviors.*

#### 5. The Impact of Selective Exposure, Ideology, and Education

Selective exposure refers to seeking supportive news media (selective approach) and/or purposely avoiding opposing information (selective avoidance) (Johnson, Saldaña & Kaye, 2020). Studies indicate that avoiding contrary information or actively seeking different points of view depends on personal characteristics, particularly ideology and strength of party identification (Johnson et al., 2020). While strong partisans are more likely to consume likeminded information and avoid cross-cutting reports, conservatives have been found more likely than liberals to avoid challenging information (Barberá et al., 2015; Faris et al., 2017; Johnson et al., 2020; Santos et al., 2021). Yet, when confronted with facts that oppose their political beliefs, the most educated people, both liberals and conservatives, hold the strongest political identities (Drummond & Fischhoff, 2017), indicating that education also plays a central role in how people confront cross-cutting information. Not always the effect is symmetrical—research about immigration, for instance, has found that highly educated conservatives hold more negative misperceptions about immigrants than highly educated liberals or less educated conservatives (Saldaña, Cueva Chacón & García-Perdomo, 2018).

Polarized environments as the one preceding the 2020 Chilean referendum may lead to biased behavior regarding audience fact-checking and

<sup>6</sup> How is Ciper financed? <https://www.ciperchile.cl/como-se-financia-ciper/>

<sup>7</sup> We refer to the concept of “captured media systems”, by Guerrero & Márquez-Ramírez (2014).

misinformation beliefs (Chia & Gunther, 2022). As Walter and colleagues (2020) state, “it would be somewhat naïve to suggest that the mere exposure to accurate information can shape beliefs in highly polarized political environments, where the notion of objectivity and impartiality is constantly called into question” (p. 3). In polarized political environments, political identity plays a relevant role on attitudes and false beliefs, though contingent upon education levels (Saldaña, McGregor & Johnson, 2021) and heuristic cues seem to be the option to process political information, rather than systematic processing (Johnson et al., 2020). In such environments, where even fact-checkers, usually deemed as very objective and impartial (Walter et al., 2020) are accused of bias, it could be expected that citizens take such tasks into their own hands, fact-checking information themselves with sources they trust the most, as strategies to reinforce their previous beliefs.

Such context could also be fertile to motivated reasoning, where citizens replace facts with beliefs, that is, ideology overcoming empirical evidence (Hindman, 2009), as partisanship aligns with one position or another. When “beliefs become shortcuts for knowledge” (Hindman, 2009, p. 793), it becomes much more difficult to debunk false or misleading content. And while it could seem counterintuitive, higher levels of education do not necessarily translate into better capacity to correct beliefs in false claims (Saldaña et al., 2021). Consequently, we expect the effect of alternative media use on fact-checking to be contingent upon people’s ideology and educational background. Thus, we propose:

*H2: People’s education, ideology, and alternative media use interact to affect factchecking behaviors.*

## 6. Methods

We conducted an online two-wave panel survey in late 2020 through paid advertising on Facebook and Twitter. The first wave was conducted from September 21 to October 6, and the second wave was conducted from October 26 to November 29. The first wave obtained 1,036 responses, while the second wave obtained 415 responses, yielding a 40% retention rate.

### 6.1. Variables

**Fact-checking (t2).** On a 4-point Likert-type scale where 1=never and 4=all the time, respondents indicated how often they verified political information that challenged their personal beliefs ( $M=2.8$ ,  $SD=.95$ , range=1 to 4). Fact-checking was used as the dependent variable of this study.

**News use (t1).** Also on a 4-point Likert-type scale, respondents were asked how often they consumed news from a range of news sources, including legacy media (e.g. newspapers, radio, TV), social media (e.g. Instagram, Facebook, Twitter), and online news websites (including online versions of legacy outlets, as well as digital-only outlets). A factor analysis identified three dimensions of news use with Twitter and digital-only outlets loading together in one factor. Interestingly enough, Twitter did not load together with other social media platforms, while digital-only outlets did not load together with legacy media websites. Based on the results of the factor analysis (see Table 1), we created three variables of news use: legacy news use (five items,  $\alpha=.72$ ,  $M=2.3$ ,  $SD=.7$ , range=1 to 4), social media news use (four items,  $\alpha=.65$ ,  $M=2.5$ ,  $SD=.8$ , range=1 to 4), and alternative news use (two items, *Twitter* and *digital-only outlets*, inter-item correlation= .24,  $M=2.6$ ,  $SD=.9$ , range=1 to 4). The alternative news use variable was used as the independent variable of this study.

Table 1. Dimensions of news use

	<i>Legacy news use</i>	<i>Social media news use</i>	<i>Alternative news use</i>
Newspapers	<b>.81</b>	-.11	.15
News magazines	<b>.76</b>	.09	.03
Radio news	<b>.62</b>	.07	.01
Legacy news outlets' websites	<b>.61</b>	-.10	.44
TV news	<b>.56</b>	.22	.03
News on WhatsApp	.14	<b>.74</b>	-.19
News on Facebook	.11	<b>.74</b>	-.09
News on YouTube	-.01	<b>.72</b>	.17
News on Instagram	-.08	<b>.52</b>	.51
News on Twitter	.02	.04	<b>.75</b>
Digital-only news outlets	.28	-.14	<b>.65</b>

*Notes.* Extraction method: principal component analysis. Rotation method: Varimax with Kaiser normalization. The analysis converged after five iterations to produce three dimensions explaining 54% of the total variance. Primary loading of an item on a factor is indicated in bold.

**Ideology (t1).** We asked respondents to place themselves on a scale from 1 (left leaning) to 10 (right leaning) to measure their political ideology ( $M=5.36$ ,  $SD=3.0$ , range=1 to 10). Ideology was used as one of the moderators of this study.

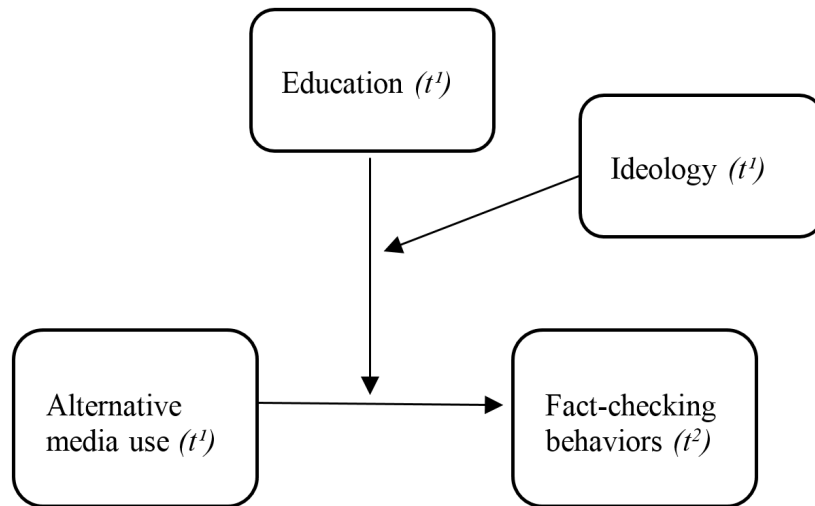
**Education (t1).** Respondents indicated their highest level of education, ranging from 1=Less than high school to 5=Graduate school degree, ( $M=3.8$ ,  $SD=1.0$ , median= college degree). Education was used as one of the moderators of this study.

**Controls (t1).** Respondents' age ( $M=43$ ,  $SD=15.5$ , range=18 to 82), gender (1=male, 55%), and income (range from 1=Less than \$5,000 to 7=more than \$50,000,  $M=4.1$ ,  $SD=2.0$ , median= from \$15,000 to \$20,000) were used as controls.

**6.2 Statistical Analysis**

We ran a linear multiple regression and used model 3 from Hayes' PROCESS macro for SPSS (Hayes, 2013) to test the three-way interaction effects proposed in this study, as illustrated by Figure 1.

Figure 1. Three-way interaction model proposed by this study.



**7. Results**

This study proposed a three-way interaction, so that alternative media use will lead to fact-checking be-

haviors (H1), and the effects of this relationship will be contingent upon people's education as well as ideology (H2). Table 2 shows results for two regression models explaining fact-checking behaviors.

	<i>Model 1</i>	<i>Model 2</i>
	$\beta$	$\beta$
Gender	.03	.03
Age	-.23***	-.24***
Income	-.09	-.07
Education	.02	-1.02**
Ideology	-.03	-1.54*
Legacy news media use	.01	-0.01
Social media news use	-.10	-0.11*
Alternative news media use	.13*	-0.86
Alternative media * Education		1.53**
Alternative media * Ideology		1.30*
Education * Ideology		1.99**
Alternative media * Education * Ideology		-1.80*
<b>Total R<sup>2</sup> (%)</b>	<b>10***</b>	<b>12***</b>
<i>Notes.</i> N=307. Cell entries are final-entry OLS standardized Beta ( $\beta$ ) coefficients.		
* $p < .05$ , ** $p < .01$ , *** $p < .001$		

Results in Model 1 indicate that age and alternative news media use significantly explain fact-checking behaviors, so that younger news consumers ( $\beta = -.23, p < .001$ ), as well as those who consume alternative news media the most ( $\beta = .13, p < .05$ ), are more likely to fact check challenging information. **These results support H1** (see Table 2, Model 1).

Model 2 introduces the interaction terms. Results in Model 2 indicate a significant three-way interaction effect, where the effect of alternative news media use on fact-checking behaviors are contingent upon people's ideology and education ( $\beta = -1.80, p < .05$ ). **These results support H2** (see Table 2, Model 2).

Table 3 and Figure 2 illustrate how the three-way interaction operates on the dependent variable. Results suggest that the effect of using alternative media is contingent upon ideology for highly educated citizens (such as College educated, or those with a Graduate School degree) but not for lower-educated populations. In other words, less-educated individuals relying on alternative news outlets do fact-check challenging information, no matter their political identity. However, for highly educated groups, ideology does matter. The more they use alternative media, the more they tend to fact-check challenging information, and this effect is significantly amplified by ideology, so that those who identify as left-leaning are the ones fact-checking the most.

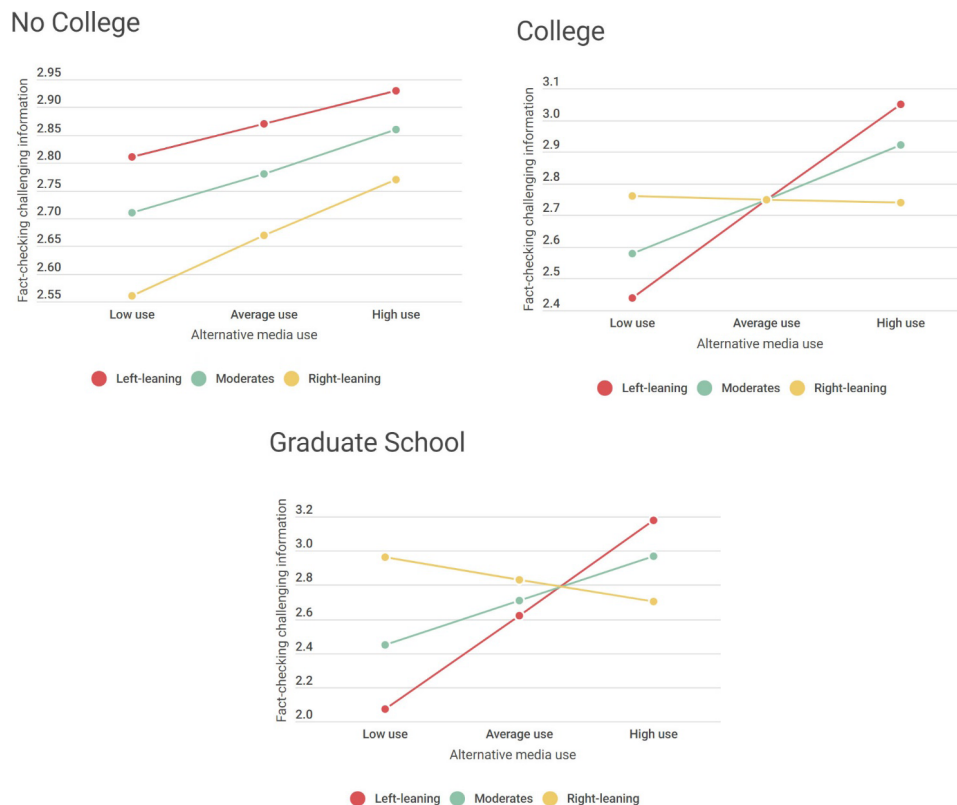
Table 3. Conditional effects of alternative news media use at different values of the moderators (education and ideology).

Education	Ideology	Effect	SE	95% C.I.	
				Lower	Upper
No College	Left-leaning	.06	.13	-.2	.32
	Moderate	.08	.09	-.1	.26
	Right-leaning	.11	.12	-.14	.35
College	Left-leaning	.31***	.11	.1	.51
	Moderate	.17*	.07	.03	.31
	Right-leaning	-.01	.11	-.23	.21
Graduate School	Left-leaning	.55***	.16	.24	.87
	Moderate	.26**	.11	.05	.47
	Right-leaning	-.13	.17	-.47	.21

Notes. N=307. Effect cell entries are unstandardized Beta coefficients.

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$

Figure 2. Three-way interaction effects of ideology, education, and alternative news media use on fact-checking behaviors.



## 8. Discussion

Drawing upon research on selective exposure and confirmation bias, this study aimed to identify the extent to which verifying cross-cutting information is affected by people's education and political identity, and the extent to which news users debunk misinformation relying on alternative news media.

Research shows that people's political beliefs motivate their media use patterns (Stroud, 2008). Alternative media usually cover issues (or angles) that legacy media ignore, be that because it is partisan, non-verifiable, non-commercial, or other. Considering that confirmation bias is known to emerge regardless of source quality (Westerwick et al., 2017), when people get confronted regarding claims they strongly believe, they possibly reach out to the sources they think will provide attitude-consistent content to contradict challenging reports. Such informational dynamics is quite problematic in a high-choice media environment, especially where alternative news outlets become more like partisan media, right or left, allowing partisan individuals to pursue outlets friendly to their previous beliefs. This kind of selective exposure is particularly likely to happen within the political realm (Stroud, 2008). Our findings are consistent with this literature, as we found that highly educated left-leaning citizens are the most likely audiences to rely on alternative news media to debunk information they mistrust, while this relationship does not hold for highly educated right-leaning news users. We are not saying the right wing does not fact-check – they do, but their information seeking patterns are not supported by alternative news consumption.

The legacy news press in Chile is said to promote the ideas of the Chilean right wing (Mönckeberg, 2009). As such, the educated right-wing citizen probably trusts legacy media more to counter the attitude-challenging information, so they don't need to reach out to alternative media to confirm their previous beliefs, while left-wing pursues alternative outlets due to mistrust on the very same legacy media. As legacy media holds a generalized sense of skewed editorial positions in Latin America, these results could be further tested in other countries of the region, such as Argentina, Brazil, and Mexico.

The fact that even moderate citizens display a tendency to rely on alternative sources for fact-checking is perhaps another evidence of the changing media habits imposed by the juxtaposition of the ongoing global media credibility crisis (Newman et al., 2021) with a local ingredient linked to Chile's social crisis of 2019 uprisings. Such behavior could be, to some degree, contingent on the circumstance, because legacy media has recovered some of its trust in the aftermath of the social crisis, when the COVID-19 health crisis that followed it triggered needs that were better responded by legacy media than alternative outlets (Newman et al., 2021). Still, they are worthy of being further scrutinized, as misinformation is a growing

pain for democracy, and fact-checking is among its remedies.

As seen in previous studies testing the corrective effect of education on misperceptions (Saldaña et al., 2018), education does play a role in how individuals evaluate cross-cutting information. Research has found that highly educated people tend to hold onto their perceptions even if confronted with factual information that opposes those perceptions. Probably because they are more educated, they have more resources to argue back, and to not get easily convinced that what they believe in is false. By relying on a stronger sense of self-efficacy, they will pursue further a supporting argument to maintain their beliefs (Hindman, 2009), even more so in the context of a polarizing event such as the binary referendum studied. Interestingly enough, our findings suggest that less-educated citizens do reach out to alternative media to verify information, meaning that alternative news outlets could help the information-vulnerable to be more critical, or at least less likely to simply reject opposite information.

Taken together, findings of this study suggest three trends. First, alternative media outlets can act as counter-hegemonic venues in times of political polarization and high-choice digital media ecosystems. Second, ideological differences are relevant for highly educated citizens only, but do not determine fact-checking performance on the less educated. And third, ideological parallelism between citizens and news media might lead to a more passive attitude toward media and fact-checking behavior.

This study is not without limitations. Our analyses rely on a non-random sample that is not necessarily representative of the internet-user population in Chile. In fact, our sample is slightly more educated than the Chilean population at large, so the number of citizens with a graduate school degree might be overrepresented. Subsequent scholarship could address this limitation by accurately matching the sample demographics with those of the population observed. Similarly, a qualitative look could provide a more nuanced understanding of how news users verify information that contradicts their values and beliefs. Despite these limitations, this study has made a significant contribution to our understanding of citizens' behaviors to protect themselves from what they might see as fake or imprecise information. We invite scholars to replicate this study in other countries of the Global South, where news media trust is low and alternative media outlets have become an important source of political information.

As media systems get more complex and lose traditional foundational referents and values, more trouble is probably yet to come, before it gets to a new plateau of stability. A 'partisanization' of alternative media could eventually spill over to fact-checkers. The natural next step in this context would be partisan fact checkers whose work is to disguise smart spins to facts to feed their political allies.

Careful consumption of content, with a degree of skepticism has been discussed as a desired user



skill (Rheingold, 2012) in the current context of a high-choice digital media environment permeated with misinformation. Turn on the crap detector! – Ernest Hemmingway would say. Nevertheless, the present work revolves around one more variable: *where* do they fact-check. While alternative media may function even as a second level watchdog – a watchdog for legacy media– they can also be partisan or have less professional routines and lower resources. Thus, fact-checking practices relying

on alternative media during politically polarized events is a somewhat problematic combination that this study enlightens a bit further. Future research should, for instance, look further into the characteristics of such alternative media and into the processes underlying citizen verification procedures and perhaps include misinformation beliefs as a variable to understand the outcome of *Sherlock wannabe* users relying on alternative news media.

## 9. References

- Arriagada, A., & Navia, P. (2013). Medios y audiencias, democracia y ciudadanos. In A. Arriagada, & P. Navia (eds.) *Intermedios: Medios de comunicación y democracia en Chile*. Ediciones Universidad Diego Portales.
- Bachmann, I., Valenzuela, S., & Ortega, C. (2022, January 18). #Real: El fact-checking en Chile reduce la desinformación. *Fast Check CL*. <https://tinyurl.com/ybx7x7zp>
- Bakir, V. & McStay, A. (2018). Fake News and The Economy of Emotions. *Digital Journalism*, 6(2), 154-175.
- Barberá, P., Jost, J. T., Nagler, J., Tucker, J. A., & Bonneau, R. (2015). Tweeting from left to right: Is online political communication more than an echo chamber? *Psychological Science*, 26(10), 1531-1542.
- Chia, S. C., Lu, F., & Gunther, A. C. (2022). Who Fact-checks and Does It Matter? Examining the Antecedents and Consequences of Audience Fact-Checking Behaviour in Hong Kong. *The International Journal of Press/Politics*, 0(0). <https://doi.org/10.1177/19401612221142439>
- Chu, Z., Gianvecchio, S., Wang, H. & Jajodia, S. (2010, December). Who is tweeting on Twitter: human, bot, or cyborg?. In *Proceedings of the 26th annual computer security applications conference*, 21-30. <https://10.1145/1920261.1920265>
- COMEDIA. (1984). The alternative press: The development of underdevelopment: Comedia. (1984). *Media, Culture & Society*, 6(2), 95–102. <https://doi.org/10.1177/016344378400600202>
- Cushion, S., Morani, M., Kyriakidou, M. & Soo, N. (2022). Why Media Systems Matter: A Fact-Checking Study of UK Television News during the Coronavirus Pandemic. *Digital Journalism*, 10(5), 698-716. <https://doi.org/10.1080/21670811.2021.1965490>
- de Albuquerque, A. (2019). Protecting democracy or conspiring against it? Media and politics in Latin America: A glimpse from Brazil. *Journalism*, 20(7), 906–923. <https://doi.org/10.1177/1464884917738376>
- Dermota, K. (2002). *Chile inédito: El periodismo bajo democracia*. Ediciones B.
- Downing, J. D. (2001). *Radical media: Rebellious communication and social movements*. Sage.
- Drummond, C., & Fischhoff, B. (2017). Individuals with greater science literacy and education have more polarized beliefs on controversial science topics. *Proceedings of the National Academy of Sciences*, 114(36), 9587–9592.
- Faris, R., Roberts, H., Etling, B., Bourassa, N., Zuckerman, E., & Benkler, Y. (2017). *Partisanship, Propaganda, and Disinformation: Online Media and the 2016 U.S. Presidential Election*. Berkman Klein Center for Internet & Society Research Paper.
- Fuchs, C. (2010). Alternative media as critical media. *European Journal of Social Theory*, 13(2), 173–192. <https://doi.org/10.1177/1368431010362294>
- Graves, L. (2018, February). Understanding the Promise and Limits of Automated Fact-Checking. *Factsheet, Reuters Institute*. <https://tinyurl.com/42xrryeu>
- Godoy, S. (1995). ¿Para qué sirve Televisión Nacional?. *Cuadernos.Info*, (10), 124–137. <https://doi.org/10.7764/cdi.10.296>
- Guerrero, M. A., & Márquez-Ramírez, M. (2014). The “captured-liberal” model: Media systems, journalism and communication policies in Latin America. *The International Journal of Hispanic Media*, 7.
- Hameleers, M., & van der Meer, T. G. L. A. (2020). Misinformation and Polarization in a High-Choice Media Environment: How Effective Are Political Fact-Checkers? *Communication Research*, 47(2), 227–250.
- Harcup, T. (2005). ‘I’m Doing this to Change the World’: Journalism in Alternative and Mainstream Media. *Journalism Studies*, 6 (3), 361–374.
- Hayes, A. F. (2013). *Introduction to mediation, moderation, and conditional process analysis*. New York: The Guilford Press.
- Heft, A., Mayerhöffer, E., Reinhardt, S., & Knüpfer, C. (2019). Beyond Breitbart: Comparing Right-Wing Digital News Infrastructures in Six Western Democracies. *Policy & Internet*, 12(1), 20-45. <https://doi.org/10.1002/poi3.219>
- Hindman, D. B. (2009). Mass media flow and differential distribution of politically disputed beliefs: The belief gap hypothesis. *Journalism & Mass Communication Quarterly*, 86(4), 790–808.
- Holt, K, Figenschou, T. U., & Frischlich, L. (2019) Key Dimensions of Alternative News Media. *Digital Journalism*, 7(7), 860-869,
- Johnson, T.J., Saldaña, M., Kaye, B.K. (2020). Think the Vote: Information Processing, Selective Exposure to Social Media, and Support for Trump and Clinton. *International Journal of Communication*, 14, 4621–4645.

- Jones, M., Sugden, R. (2001). Positive confirmation bias in the acquisition of information. *Theory and Decision* 50, 59–99. <https://doi.org/10.1023/A:1005296023424>
- Klayman, J. (1995). Varieties of confirmation bias. *Psychology of learning and motivation*, 32, 385–418. [https://doi.org/10.1016/S0079-7421\(08\)60315-1](https://doi.org/10.1016/S0079-7421(08)60315-1)
- Lodge, M., & Taber, C. S. (2000). Three steps toward a theory of motivated political reasoning. In A. Lupia, M. McCubbins, & S. Popkin (Eds.), *Elements of reason: Cognition, choice, and the bounds of rationality* (pp. 183–213). Cambridge University Press.
- Luna, J. P., Toro, S. & Valenzuela, S. (2021, March, 23). El ruidoso silencio de los medios tradicionales. *Ciper*. <https://tinyurl.com/yhjc3ph9>
- Luna, J. P., Toro, S., & Valenzuela, S. (2022). Amplifying Counter-Public Spheres on Social Media: News Sharing of Alternative Versus Traditional Media After the 2019 Chilean Uprising. *Social Media+ Society*, 8(1). <https://doi.org/20563051221077308>.
- Mamadouh, V. (2004). Internet, scale and the global grassroots: geographies of the Indymedia network of independent media centres. *Tijdschrift voor Economische en Sociale Geografie* 95, 482–497.
- Mellado, C., & Humanes, M. L. (2012). Modeling perceived professional autonomy in Chilean journalism. *Journalism*, 13(8), 985–1003.
- Mönckeberg, M. O. (2009). *Los magnates de la prensa: Concentración de los medios de comunicación en Chile*. Debate.
- Negt, O. & Kluge, A. (1993). *Public Sphere and Experience: Analysis of the Bourgeois and Proletarian Public Sphere*. University of Minnesota Press.
- Newman, N., Fletcher, R., Schulz, A., Andi, S., & Nielsen, R.K. (2020). Reuters Institute Digital News Report 2020. Reuters Institute for the Study of Journalism. <https://tinyurl.com/mekmcvrj>
- Newman, N., Fletcher, R., Schulz, A., Andi, S., Robertson, C.T., & Nielsen, R.K. (2021). Reuters Institute Digital News Report 2021. *Reuters Institute for the Study of Journalism*. <https://tinyurl.com/535mfdeb>
- Nyhan, B., Reifler, J. (2010). When Corrections Fail: The Persistence of Political Misperceptions. *Political Behavior* 32, 303–330. <https://doi.org/10.1007/s11109-010-9112-2>
- Ortiz, M. (2021, July 29) Medios alternativos: la colaboración hace la fuerza. *Interferencia*. <https://tinyurl.com/2p8m4nw3>
- Rauch, J. (2015). Exploring the Alternative–Mainstream Dialectic: What “Alternative Media” Means to a Hybrid Audience. *Communication, Culture and Critique*, 8(1), 124–143. <https://doi.org/10.1111/cccr.12068>
- Rheingold, H. (2012). *Net smart: How to thrive online*. Mit Press.
- Saldaña, M., Cueva Chacón, L., & García-Perdomo, V. (2018). When gaps become huuuuge: Donald Trump and beliefs about immigration. *Mass Communication and Society*, 21(6), 785–813.
- Saldaña, M., McGregor, S., & Johnson, T. (2021). Mind The Gap! The Role of Political Identity and Attitudes in the Emergence of Belief Gaps. *International Journal of Public Opinion Research*, 33(3), 607–625. <https://doi.org/10.1093/ijpor/edab006>
- Santos, M. L. B., Jaramillo Castro, O., & Aguirre, D. (2021). “Vital testimonio confirmó...”: Polarización de fuentes y redes en el Caso Catrillanca en Twitter. *Cuadernos.Info*, (49), 26–50.
- Scherman, A. Peña y Lillo, Pardo, J. & Feedback (2018, December 22). ¿Qué ha cambiado en una década? *La Tercera*. <https://tinyurl.com/3b9f9u9b>
- Shin, J. & Thorson, K. (2017). Partisan Selective Sharing: The Biased Diffusion of Fact-Checking Messages on Social Media. *Journal of Communication*, 67(2), 233–255, <https://doi.org/10.1111/jcom.12284>
- Stroud, N. J. (2008). Media Use and Political Predispositions: Revisiting the Concept of Selective Exposure. *Political Behavior*, 30, 341–366.
- Ufarte-Ruiz, M. J., Peralta García, L., & Murcia-Verdú, F. J. (2018). Fact checking: un nuevo desafío del periodismo. *El Profesional de la Información*, 27(4), 733–741.
- Urbani, S. (2019, October 14). Verifying online information: The absolute essentials. *First Draft*. <https://tinyurl.com/bdfr3kak>
- Walter, N., Cohen, J., Holbert, R. L., & Morag, Y. (2020). Fact-Checking: A Meta-Analysis of What Works and for Whom. *Political Communication*, 37(3), 350–375. <https://doi.org/10.1080/10584609.2019.1668894>
- Wardle, C. (2018). The Need for Smarter Definitions and Practical, Timely Empirical Research on Information Disorder. *Digital Journalism*, 6(8), 951–963. <https://doi.org/10.1080/21670811.2018.1502047>
- Wason, P. C. (1960). On the Failure to Eliminate Hypotheses in a Conceptual Task. *Quarterly Journal of Experimental Psychology*, 12(3), 129–140.
- Westerwick, A., Johnson, B. K., & Knobloch-Westerwick, S. (2017) Confirmation biases in selective exposure to political online information: Source bias vs. content bias, *Communication Monographs*, 84(3), 343–364.

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