



“HARD TO READ, HARD TO BELIEVE”: (DIS)FLUENCY EFFECTS ON EWOM CREDIBILITY AND PURCHASE INTENTIONS

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Purpose: to investigate the impact of Perceptual (physical-visual characteristics) and Conceptual (content/meanings) Fluency (ease) and Disfluency (difficulty) on eWOM (Electronic Word-of-Mouth) credibility and purchase intentions.

Design/methodology: in two online experiments, we manipulated eWOM valence (negative *vs* positive) and (dis)fluency for fictional and real online stores, testing the direct effects of positive eWOMs on purchase intentions (H3) and the mediational effects of eWOM credibility (H1) from disfluent negative eWOMs (H2).

Originality/Value: to our knowledge, it is the first study to directly evaluate eWOMs’ (both positive and negative) (Dis)Fluency on purchase intentions, and its eWOM credibility mediational effects.

Findings: although prior studies indicated overall (Dis)fluency symmetric effects on positive and negative evaluations (i.e., perceived truth and attitudes), here we demonstrate that only negative eWOM credibility was affected by Disfluency, resulting in an indirect effect on purchase intentions. Indeed, Positive eWOMs did not suffer credibility reduction from Disfluency, maintaining a direct bias effect. We also observed that these effects hold even with consensus and multiple eWOM evidence.

Theoretical contribution: We demonstrate here that (Dis)Fluency effects on eWOM credibility (and later purchase intentions) depend on eWOM valence. Specifically, while negative eWOM perception can be altered by Disfluency, positive eWOM effects cannot be suppressed by readability, or even difficulty to remember in the short run, maintaining its credibility and faster deliberations.

Social/ Management contributions: Furthermore, the (Dis)Fluency manipulations tested are similar to what occurs daily (i.e., the smartphones’ “dark theme/mode” and font color and type variations) with or without managers’ intentions, increasing purchase intentions.

Keywords: eWOM. Valence. Fluency. Credibility. Purchase intention.

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1 Introduction

WOM (word-of-mouth) has been established as one of the most relevant sources of information for decision-making due to a reliance on comments made by close people (Reicheld, 1998). Importance also has been given to eWOM (electronic word-of-mouth), which is considered essential for consumers, companies, politicians, celebrities, etc. (Pfeffer, Zorbach, & Carley, 2014). The first eWOM studies focused on analyzing its influence on consumers' attitudes, given its reach and capillarization (Cheung, et al, 2009), as well as at determining the main motivational factors for making eWOMs (Hennig-Thurau, et al, 2004) and the motivations of those who seek and use them (Goldsmith & Horowitz, 2006). But despite congruent results with WOM studies, eWOM is perceived as more reliable, and it is accepted even by people with whom consumers had had no previous contact (Dellarocas, 2003; Park, Lee & Han, 2007). Because eWOM acceptance depends on its credibility - whether the eWOM can be trusted or believed - it has become a focus of research that can be addressed by understanding its content, the communicator, the context, and the consumer himself, the one who will read and adopt the information (Verma and Dewani, 2020). Previous studies have found that eWOM credibility could be affected by its source and platform (Chen, Yang & Wang, 2016), the presence of sound arguments and supporting facts (Park et al, 2007; Lee, 2009), opposing viewpoints, the number of features discussed, review and sentence length (Li and Zhan, 2011), argument quality (Lee & Shin, 2014), accuracy, completeness, relevance, consistency (Sussman & Siegal, 2014), the impact of UGC (user-generated content) (Muda and Hamzah, 2021), and previous consumers' experience (Izogo, Jayawardhena and Karjaluoto, 2022). Differently, here we propose that eWOM credibility can be affected by Fluency (*vs* Disfluency) – the perceived ease (*vs* difficulty) to read/process eWOM meanings – thus influencing purchase intentions.

Fluency can be understood as the perceived ease or comfort in cognitive processing that leads to a series of biases, such as intensifying the effects of what is being interpreted (Claypool, Mackie, & Garcia-Marques, 2015; Landwehr, Golla, & Reber, 2017), more intuitive and overconfident decision-making (Aydin, 2016; Schwarz et al, 2020); greater perception of veracity, familiarity, value (Miele & Molden, 2010; Yang, Huang, & Shanks, 2018) and truthfulness (Reber & Schwarz, 1999), which we propose, could positively affect eWOM credibility. In contrast, Disfluency is linked to cognitive discomfort, having general opposite effects (Sanchez & Jaeger, 2015; Ryffel & Wirth, 2018) negatively affecting eWOM credibility.

Besides, by focusing on the context of online reviews, we demonstrate that (Dis)Fluency affects eWOM credibility differently according to its valence (positive *vs* negative eWOM),



while other studies focus on a general impact of (Dis)Fluency on the perception of truth (Garcia-Marques et al., 2016; Silva et al., 2016). By doing so, we also demonstrate that information provided by others (eWOMs) alters the general (dis)fluency symmetric effect for negative and positive general evaluations (Scharz, 2004). Briefly, it would occur due to different effects of positive and negative information on confidence (Sorbeck & Clore, 2005; Kensinger & Schacter, 2008), prevention and attention (Prato & John, 1991; Herr, Kardes, & Kim, 1991), and heuristics use (Rowe et al., 2007; Herr, Page, Pfeiffer, & Davis, 2012). To demonstrate these results, the article begins with a review of eWOM and credibility. Then, we address (Dis)Fluency and its impact on information processing and adoption, followed by the effects of positive and negative information. Next, two experiments are presented to test the hypotheses, later discussing their results. Finally, the conclusion seeks to make a synthesis with theoretical and managerial implications.

2 Literature review

2.1 EWOM

eWOM can be defined as any negative or positive statements made by potential or former customers about a product or company that are available to a multitude of people and institutions on the Internet (Hennig-Thurau, et al, 2004). These statements can be made available in several ways (reviews, comments, assessments, experience reports), in various locations/platforms (forums, online communities, opinion platforms, boycott/complaint sites, etc.), with information that anyone can seek and find on almost any subject (Brown et al, 2007). Moreover, it allows consumers to hear and be heard by institutions and other consumers, gaining more power in these relationships (Sohn, 2009).

Individuals would read eWOMs to learn about products or companies, to easily obtain information with greater perceived value so as to reduce decision-making risks (Goldsmith & Horowitz, 2006; Brown, et al, 2007). Yet, consumers are affected by others' positive (or negative) experiences because they would induce expectations of similar satisfaction, emotions, and performance (Sirgy, 1984; Oliver, 2010). Mainly, satisfied consumers would produce positive eWOMs (with positive emotions, facts/results, etc.), thus increasing the reader's purchase intentions. On the other hand, dissatisfied consumers would produce negative eWOMs (with negative emotions, facts/results, etc.), thus decreasing the reader's purchase intentions (Oliver, 2010; Agnihotri, Dingus, Hu, & Krush, 2016). Consumers would report their positive or negative experiences to express their identity, share their joy, empathy, gratitude, discontent



toward a product/brand or even “ventilate” their negative feelings, receiving both emotional support and achieving psychological closure. Therefore, other consumers would believe that they were receiving responsible and unbiased information, increasing their trust and most importantly, resulting in eWOM credibility (Hennig-Thurau, et al, 2004; Akyüz, 2013; Lee & Shin, 2014; Balaji, Khong, & Chong 2016).

eWOM credibility can be affected by several factors: source (person, communities, platforms); rankings; quantity; consensus, etc. It could also be affected by perceived quality and argument clarity (Cheung, et al, 2007; Li and Zhan, 2011; Willemsen et al, 2011; Lee & Shin, 2014; Moran & Muzellec, 2017). Even stylistic elements (spelling, grammar errors) can reduce eWOMs' perceived value (Schindler & Bickart, 2012) while, on the other hand, the presence of sound arguments, facts to support its position, evidence presented, and presence of opposing viewpoints could increase eWOM acceptance (Park et al, 2007; Lee, 2009; Li and Zhan, 2011). Argument accuracy, relevance, consistency (Sussman & Siegal, 2014) or even web appearance (attractiveness, proper use of fonts, graphics, and colors, etc.) could impact readability and information influence (Aladawani & Palvia, 2002). Therefore, not only eWOM content could influence credibility, but eWOM comprehension also could – and that would be affected by the ease (and difficulty) to process information *per se*.

2.1 (DIS)FLUENCY

Individuals may experience ease or difficulty in information processing. Although such experience may be due to individuals' characteristics (e.g., intelligence, previous learning), this can also be caused by peripheral clues and the situation itself (e.g., a difficult math task) (Schwarz et al, 2020). According to Alter and Oppenheimer (2007) and Kahneman (2011), human reasoning involves two distinct processing systems: one that is fast, effortless, associative, and intuitive – therefore associated with heuristics; and another one that is slow, laborious, analytical, and deliberative. Schwarz (2004) links this fast-processing system to Fluency, which is the ease with which an individual can process new information. On the other side of the continuum, Disfluency refers to the difficulty to process information. Both Fluency and Disfluency can be influenced by metacognitive experiences affecting memory retrieval, decisions, familiarity, emotions and more importantly here, the perception of truth (Schwarz et al, 2020), which could affect credibility. Mainly, when (Dis)Fluency is a result of physical-visual characteristics (e.g., brightness, contrast, colors, text print quality, etc.), it can be understood as Perceptual (Dis)Fluency (Labroo, Dhar, & Schwarz, 2008). In contrast,

Conceptual (Dis)Fluency can be understood as the ease/difficulty to process meanings (e.g., easy/complex words, concepts, problem solving, memory retrieving) (Song & Schwarz, 2008).

Individuals should prefer Fluency (over Disfluency), as it tends to be hedonically processed (Maier & Dost, 2018). Individuals would attain cognitive comfort from perceived ease, which reduces uncertainties and elicits more positive responses in stimulus processing (Labroo & Pocheptsova, 2016), induces veracity perception (Silva, Garcia-Marques, & Reber, 2017), and acts as peripheral cues that could influence attitudes (Ryffel & Wirth, 2016), thus inducing faster and fewer deliberations (Kahneman, 2011; Ryffel & Wirth, 2018) because individuals would not have to deal with inconsistencies or new interpretations (Bajšanski, Žauhar, & Valerjev, 2019). These effects would occur daily. For example: tests on technical (difficult) versus common (easy) words (Alter, Oppenheimer, Epley, & Eyre, 2007) or on easy versus difficult-to-read fonts (Song & Schwarz, 2008) indicated that Fluency led people to misread instructions and use more heuristics. Accordingly, difficulty was associated with the perception of greater risk (Song, & Schwarz, 2009) while perceived ease was associated with greater information confidence (Park, Herr, & Kim, 2016). Mostly, Fluency (vs Disfluency) led individuals to more favorable evaluations (Alter and Oppenheimer, 2009; Schwarz, et al, 2020): disfluency texts (with complex vocabulary) were linked to the author's lower perceived intelligence (Oppenheimer, 2006); people with easier-to-pronounce names were linked to more truthful claims (Newman et al, 2014); online reviews with greater readability were perceived to be more helpful (Korfiatis et al, 2012).

Not only would fluency help to form preferences (Bayliss, Constable, Tipper, & Kritikos, 2013), but it would also stimulate the maintenance of prior (even erroneous) beliefs, generate overconfidence, and intensify its effects on future decisions (Claypool et al., 2015; Landwehr et al., 2017). Indeed, fluency induced by simple information repetition (Silva, Garcia-Marques, & Reber, 2017), information easier to read (contrast: font vs background color - Reber, & Schwarz, 1999; Garcia-Marques et al, 2016), or even name complexity (Silva et al 2017) could create greater illusions of truth.

In contrast, Disfluency would help avoid these misconceptions. The perceived difficulty would act as a warning, forcing more deliberative processing and detailed memory coding (Alter, et al., 2007; Alter, 2013; Weissgerber & Reinhard, 2017). It would help prevent confirmatory biases and the use of default as well as reduce the impact of heuristics, previous expectations, beliefs, and prejudices (Alter, 2013; Alter, et al, 2007; Hernandez & Preston, 2013). Also, it would induce better information retrieval (Diemand-Yauman, Oppenheimer, &

Vaughan, 2011). Consequently, Simons & Nelson (2006, 2007) and Aydin (2016) demonstrated that opinions, intuitions, or previously made choices that were easily formed developed greater confidence, biasing subsequent decisions. However, if individuals faced difficulty, they would start to consider other options – even less intuitive ones.

Therefore, if eWOM acceptance depends on its credibility, it can be affected by perceived quality, and argument clarity (Cheung, et al, 2007; Li and Zhan, 2011; Willemsen et al, 2011; Lee & Shin, 2014; Moran & Muzellec, 2017). That is because consumers need to understand its contents, its meanings. Such comprehension depends on situational aspects or on individuals' ability to process its meanings, to understand it and become confident on their evaluations, and to perceive eWOMs helpfulness, which will later affect purchase intentions (Li and Zhan, 2011; Willemsen et al, 2011; Lee & Shin, 2014). If Fluency produces overconfident decision-making (Simons & Nelson, 2006; 2007; Aydin, 2016), greater perception of veracity, familiarity, perceived author's intelligence and perceived value (Openheimer, 2006; Alter & Openheimer, 2006, 2008, 2009; Kornell et al, 2011; Miele & Molden, 2010; Openheimer, 2004; Yang et al, 2018) as well as perceptions of truth (Garcia-Marques et al., 2016; Parks & Toth, 2006; Reber & Schwarz, 1999; Silva et al., 2016), it will positively affect eWOM credibility. On the other hand, Disfluency has opposite effects and will negatively affect eWOM credibility. Therefore: **H1: Disfluency negatively affects eWOM Credibility, reducing eWOM influence on purchase intentions.**

When dealing with different information valence (positive/negative), several (Dis)Fluency studies found a symmetric evaluation pattern. As for example, Haddock (2002) demonstrated a conceptual disfluency effect manipulated by a retrieval task. Individuals that needed to remember six positive (*vs* negative) facts about a politician were more (less) favorable to him. On the other hand, remembering more facts did not increase the effect. The 12 positive (*vs* 6 positive) memory task produced lesser favorable opinions, while the 12 negative (*vs* 6 negative) memory task produced greater favorable opinions. Similar results were found by Aarts & Dijksterhuis (1999) when asking about bicycle use, and by Winkielman & Schwarz (2001) when investigating childhood aspects. Despite these symmetric results in judgments, we propose that for eWOM credibility and the impact on purchase intentions, that pattern will only hold for Negative eWOMs due to different effects of positive/negative information on general confidence, prevention and heuristics use.



2.3 Positive/negative information effects

eWOMs can be seen as self-reported experiences through narratives of joy, gratitude, and satisfaction - or the opposite, with dissatisfaction and the need to "ventilate" negative feelings (Hennig-Thurau, et al, 2004; Kozinets, et al, 2010; Kim & Gupta, 2012). Generally, positive eWOM will produce a positive influence towards the product/brand, while negative eWOM will produce a negative influence. Despite these straightforward results, individuals would have different perceived values and different strength effects depending on information valence. Positive eWOMs are associated with greater perceived value (Sohn, 2009; Kim, et al, 2016), and higher trust, strengthening decision confidence (Hartman, et al, 2013). In contrast, negative eWOMs have strong impacts on decision-making due to their bond to negative emotions (Kim, et al, 2016) with greater salience and informative content (Herr, et al, 1991).

Negative information is more distinct and, therefore, more accessible in memory, enhancing the recall of central and essential facts (Kensinger & Schacter, 2008; Kensinger, 2009; Bookbinder & Brainerd, 2017; Kensinger & Marks, 2018; Brewin & Langley, 2019). It is associated with increased attention and more concrete adaptive processing, leading to overall prevention states for longer periods (Prato & John, 1991), with greater focus on problem-solving (Orita & Hattori, 2018) and better memory retrieval to avoid unwanted results (Bowen, Kark, & Kensinger, 2017). So, if disfluency decreases eWOM veracity perception, familiarity, perceived author's intelligence and perceive value, it will trigger such prevention states for attention for longer periods, thus increasing purchase intentions, but not too much, and only to a level where individuals will start considering a less intuitive option (Schwarz, 2004; Simons & Nelson, 2006;2007; Aydin, 2016). Therefore: **H2: Disfluency decreases negative eWOM Credibility, therefore, resulting in an indirect effect that increases purchase intentions.**

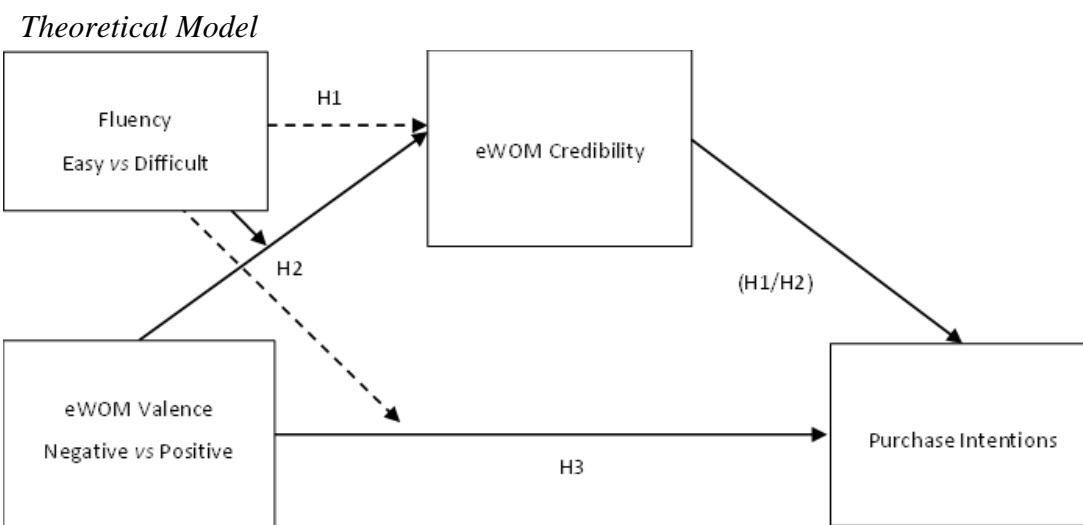
Differently, positive information would require more associations to be remembered (Madan, Scott, & Kensinger, 2019), and would lead to peripheral attention, making people focus on overall results and abstract aspects, therefore, paying less attention to external/new information (Talarico, Berntsen, & Rubin, 2009). Positive information is not so vivid (Sorbeck & Clore, 2005), making individuals only remember the "essence" of positive events - even forgetting details (Kensinger, 2009). Thus, retrieving positive information would result in more inconsistencies (recall errors) (Brewin & Langley, 2018), but it is also associated with greater confidence (Kensinger, 2009), and a feeling of being "safer" (Lazarus, 1991), thus relaxing inhibitory control (Rowe, Hirsh, & Anderson, 2007), increasing perceived value and trust, and strengthening decision confidence (Sohn, 2009; Hartman, et al, 2013; Kim, et al, 2016).

Moreover, positive evaluations would be faster, more spontaneous, and relatively more automatic, leading to lower quality and more biased decisions (Herr & Page, 2004; Herr, Page, Pfeiffer, & Davis, 2012). In short, it would make individuals focus less on details, deliberate less, and increase the use of schematics or heuristics (Rowe et al., 2007). Therefore, we expect that disfluency will not significantly affect positive eWOM credibility – and so, it will not affect purchase intentions. Hence: **H3: Disfluency will NOT decrease positive eWOM Credibility, therefore, Positive eWOMs will directly bias purchase intentions.**

3 Methodological procedures

Two experiments were developed to test our hypotheses (Figure 1 – Theoretical Model). We used non-probabilistic convenience sampling, with subjects randomly assigned to the experimental conditions. Individuals were invited to participate by email and postings on social media. Design and procedures are presented within each experiment.

Figure 1



3.1 Experiment 1

Procedures: experiment 1 consisted of a single-factor (Positive *vs* Negative review) factorial design, moderated by perceived difficulty to read. One hundred and two individuals completed an online Qualtrics questionnaire, and 101 were considered valid (37.6% men, $M_{age} = 28.16$ years, $SD = 9.03$) (one individual was excluded because he read the review too fast,

<10s). After a brief explanation about the study, the individuals answered sociodemographic questions and read a fictional customer review. It consisted of a purchase report from the fictional "The Founder" bookshop. In the positive scenario, the customer received the wrong book, made a complaint and the problem was quickly solved. In the negative scenario the customer also received the wrong book, made a complaint, but even after a few weeks the problem was not solved.

Figure 2

Experiment 1 – Positive and Negative scenarios

Hello. I have bought a book from "The Founder" Bookshop's website, the title of which was "Caroline". It was the collector's version, with a hardcover, and larger than the regular size. However, when I received the order, I realized that they had actually sent me the economic version, with simpler pages, no hardcover, and smaller. I contacted the store through their website chat to notify about the mistake and try to resolve it. But then the attendant clarified that the product that had been delivered to me was according to my purchase order and the amount paid. Then, she sent me a link where I could see the hardcover book (which was what I thought I had bought) with a similar price, but that was higher than what I had paid. That is, she understood my problem, showed me that I had actually placed the order incorrectly, and gave me the option to exchange the product by paying only the price difference.

While I was waiting for the attendant to complete the exchange procedures, she informed me that she had told her staff about my collection and, in view of that, they had decided to absorb the loss from my purchase and would exchange my book without my having to pay the price difference to the book version that I wanted. She added that I would receive an e-mail message with the tracking code for me to return the product that I had received, and as soon as I confirmed that the e-mail message had arrived, she ended the service.

Finally, after such excellent service, my order has arrived, and I have been enjoying wonderful reading moments for the last ten days. I have called their customer service again, thanked them for the help provided, and told them that I will continue shopping at the store.

Hello. I have bought a book from "The Founder" Bookshop's website, the title of which was "Caroline". It was the collector's version, with a hardcover, and larger than the regular size. However, when I received the order, I realized that they had actually sent me the economic version, with simpler pages, no hardcover, and smaller. I contacted the store through their website chat to notify about the mistake and try to resolve it. But then the attendant told me that the product that had been delivered to me was according to my purchase order and the amount paid. Then, she sent me a link where I could see the hardcover book (which was what I had bought), but with a much higher price than what I had paid. That is, she didn't understand my complaint. It wasn't that I didn't like the quality. I just didn't receive a book with the quality I had bought. If they got the price wrong, that's not my fault.

After I really insisted, she told me that she had talked to her staff about my complaint, that their website had actually shown a problem related to the product and its pricing, and that they had agreed to exchange my book. She wasn't very convincing, but that's OK. We then followed to the exchange procedures. She added that I would receive an e-mail message with the tracking code for me to return the product that I had received, and as soon as I confirmed that the e-mail message had arrived, she ended the service.

Finally, after such terrible service, my order is late. I've been waiting for ten days, and nothing has happened. I've called customer service again, asking for the delivery tracking code, but they have informed me that such a code does not exist. No one seems to be able to solve anything.

All read one post (positive or negative) with gray letters on a black background (Figure 2) based on Alter and Oppenheimer (2009) (similar for smartphones and computers' "Dark-theme") to produce a disfluency amplitude (easy – difficulty), as results of pre-tests (pre-tests results also indicated that individuals who already used similar configurations perceived the task more easily than their counterparts). Next, they answered if, when needed, they would buy a book from "The Founder" bookshop (purchase intention, "PINT": 1 - Certainly NOT / 10 – Certainly YES) and responded to the eWOM global credibility scale (Cheung et al. 2007; Akyüz, 2013) ("I believe this online word-of-mouth is a credible information source." / "I believe this online word-of-mouth is an important information source." / "I believe this online word-of-mouth is written under responsibility") (1-Totally Disagree / 10-Totally Agree).



Lastly, they responded to the perceived difficulty to read ("How difficult was it for you to read the post/review? 1-Too easy / 10-Too difficult) and scenarios manipulation checks (overall evaluation of the review: 1-Too negative / 10-Too positive; overall review comprehension: 0-the problem was solved, 1-the problem was partially solved / 2- it was not solved).

Manipulation checks: an independent t-test showed that individuals in the Positive scenario had greater positive perceptions of the reviews ($t(1,99)=11.883 p<0.001$, $M_{positive}=8.10$ SD=1.74, $M_{negative}=3.52$ SD=2.12). Overall difficulty to read was not affected by the scenarios ($t(1,99)=0.150 p=0.881$, $M=2.91$ SD=2.040). Further analyses revealed no direct or interaction effects on time to read (all $p>0.609$), and neither on review comprehension (all $p>0.170$).

Results: first regression analyses indicated that a higher perceived difficulty to read decreased eWOM credibility (Cronbach's Alpha = 0.847) ($F(1,99)=8.757 p=0.004 r=-0.285$). Also, the first eWOM credibility mediation tests indicated an interaction with eWOM valence ($F(1,97)=14.9787 p<0.001$), where higher Negative eWOM Credibility decreased PINT (Purchase Intentions) ($r=-0.530 p<0.001$), but with non-significant effects for Positive eWOM Credibility on PINT ($r=+0.194 p=0.173$). Although this corroborated H1, it indicated the necessity to split the sample according to eWOM valence to test for possible indirect effects.

Analyses (PROCESS_3.5.3: Model 1, Bootstrapping 10.000, Hayes, 2018) indicated ($R^2=0.7430$) that PINT was positively affected by perceived difficulty to read (Coeff=+0.2461 $p=0.0479$ LLCI=+0.0023 ULCI=+0.4900), by eWOM Scenarios (Negative=0, Positive=1) (Coeff=+7.1378 $p<0.0001$ LLCI=+5.8671 ULCI=+8.4084) and their interaction (Coeff=-0.3697 $p=0.0432$ LLCI=-0.7279 ULCI=-0.0115, R^2 increase=0.0432). Conditional effects analyses indicated that disfluency increased negative eWOM PINT (Coeff=+0.2461 $p=0.0479$ LLCI=+0.0023 ULCI=+0.4900), but there were non-significant effects for positive eWOM scenarios (Coeff =-0.1236 $p=0.3523$ LLCI=-0.3859 ULCI=+0.1388). Also, there was a significant interaction on PINT decision time (Coeff=-2.0558 $p=0.0344$ LLCI=-3.9577 ULCI=-0.1540), indicating that difficulty to read the negative eWOM made individuals deliberate longer (Coeff=+3.1404 $p<0.0001$ LLCI=+1.8457 ULCI=+4.4351) but not for the positive scenario (Coeff=+1.0846 $p=0.1256$ LLCI=-0.3086 ULCI=+2.4777).

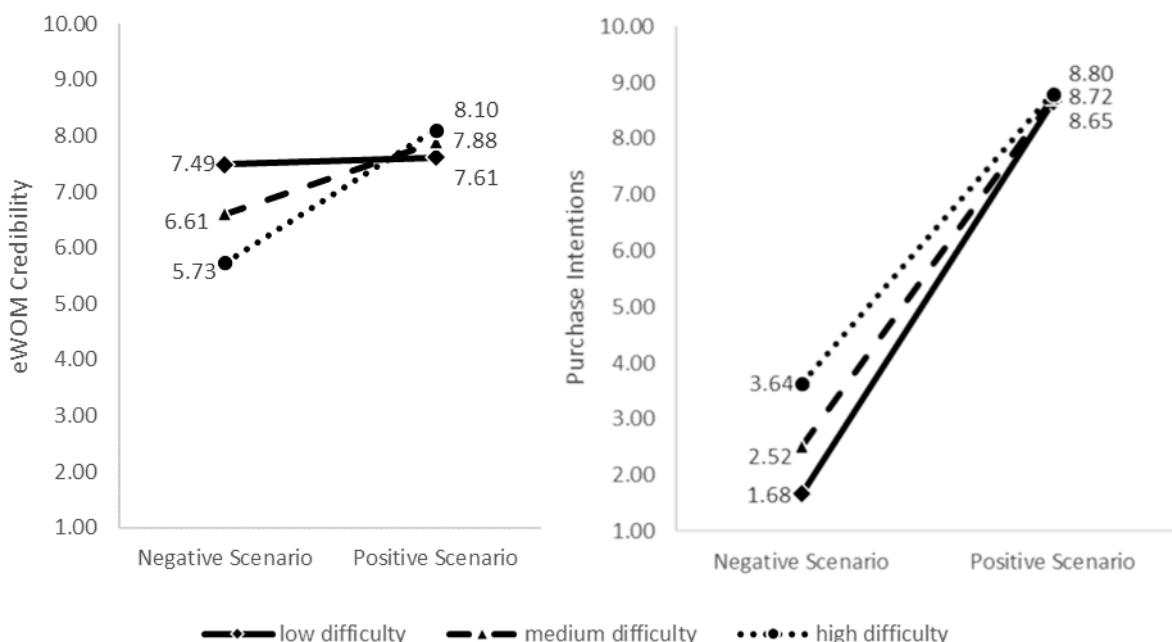
Next, we tested the eWOM credibility indirect effects (Cronbach's Alpha = 0.847) on PINT (PROCESS_3.5.3: Model 4, Bootstrapping 10.000, Hayes, 2018) by splitting the sample according to the scenarios. Analyses for the negative scenario showed that credibility was affected by difficulty to read ($R^2=0.1550$, Coeff=-0.3435 $p=0.0047$ LLCI=-0.5762 ULCI=-0.1108). Corroborating H2, credibility had a significant indirect effect on PINT ($R^2=0.2849$ –



effect 0.1821 BootLLCI=+0.0057 BootULCI=+0.4308), indicating that the higher the credibility, the lower the PINT were (Coeff=-0.5303 $p=0.0005$ LLCI=-0.8151 ULCI=-0.2454) (direct effects of difficulty to read $p=0.6068$). Analyses for the positive eWOM scenario showed that credibility was not affected by difficulty to read ($R^2=0.0336$, Coeff=-0.1712 $p=0.1453$ LLCI=-0.4038 ULCI=+0.0613). Corroborating H3, credibility did not have a significant indirect effect on PINT ($R^2=0.0477$ – effect -0.0319 BootLLCI=-0.1257 BootULCI=+0.0448). Yet, PINT was not affected by credibility ($p=0.2360$) or difficulty to read ($p=0.4802$).

Figures 3 and 4

Experiment 1 – (Dis)Fluency and eWOM Valence Effects on eWOM Credibility and Purchase Intentions



Discussion: We found initial support for all hypotheses. In general, eWOM credibility was influenced by perceived difficulty, but such influence was significant only in the negative scenario, resulting in an indirect effect on PINT (Figures 3 and 4). That occurred by perceived difficulty, with both reviews being complete and full of sound arguments, facts, and consistency (Park et al, 2007; Lee, 2009; Sussman & Siegal, 2014). Also, both reviews showed common characteristics/content (paragraph/sentence/review length - Li and Zhan, 2011). But, despite the great importance of the first product's review, where a simple negative review can induce low initial sales (Park, Shin and Xie, 2021), some individuals could consider that only one review is less persuasive, which decreases its informational value. They will then search for multiple

evidence (Kim & Gupta, 2012) and eWOM consensus, and that can also affect credibility (Hartman, et al, 2013). Yet, many purchase decisions are based on companies which consumers would have, even if little, previous knowledge, a fact that can affect purchase intentions. More importantly, we tested the effects using only the perceived difficulty – not manipulating (Dis)fluency. The next experiment shall use not only (Dis)Fluency Perceptual manipulations, but also (Dis)Fluency Conceptual manipulations in order to demonstrate that these effects are not simply based on “web appearance” or readability, but on difficulty to process meaning.

3.2 Experiment 2

Experiment 2 aimed to check for congruent results of Experiment 1 and solve its limitations. In it, respondents filled out a similar questionnaire about AliExpress (a Chinese e-marketplace that sells its products in Brazil). We avoided well-known companies (e.g., Amazon) because people may have already bought from them several times or even have strong previous opinions.

Procedures: the experiment showed a 2 ((Dis)Fluency: “Easy” vs “Difficult” eWOM task) x 2 (Positive vs Negative eWOMs) x 2 ((Dis)Fluency type: Conceptual vs Perceptual) factorial design. Two hundred and ninety individuals completed all questions from a Qualtrics questionnaire and were considered valid (34.5% men, $M_{age} = 27.89$ years, $SD = 8.23$). First, individuals were randomly assigned to one of 2 (Dis)Fluency types (Conceptual vs Perceptual) and later, to one of 4 eWOM/(Dis)Fluency conditions. All individuals read 12 eWOMs (12 positive *or* 12 negative - based on real Amazon eWOMs) with similar narratives, controlling basic facts, paragraph, length, etc. Conceptual (Dis)Fluency was manipulated by asking participants, after they had read the eWOMs (Times New Roman font, fine printing), to remember and write 6 eWOMs facts – easy task (*vs* 12 eWOMs – difficult task) from the 12 eWOMs previously presented (adapted from Schwarz et al., 1991; Aarts and Dijketrhuis, 1999; and Haddock, 2002). Perceptual (Dis)Fluency was manipulated directly by the eWOMs’ presentation (reading task). Participants in the easy-to-read task read the 12 eWOMs (Times New Roman font) in a finely printed font, while, in the difficult task, the 12 eWOMs were blurred (Schwarz, 2004) and in bold type (Diemand-Yauman et al., 2011) (pre-tests showed increased difficulty only by these two manipulations together). Also, to ensure a more realistic representation, we added the “star point” score. In general, positive reviews had 4 or 5 “stars”, while negative reviews 1 or 2 (examples in Figure 5). Following, the procedures from Experiment 1 were adapted. We also asked for the participants’ overall attention while reading



the reviews, their overall perceived comprehension and, at the end of the survey, we enquired about their prior overall negative/positive perceptions concerning AliExpress (1-Too much negative/ 10-Too much positive).

Figure 5

Experiment 2 – Positive/Fluent and Negative/Disfluent eWOM examples



Manipulation checks: an independent t-test showed that individuals in the Positive scenario had greater positive perceptions of the reviews ($t(1,288)=37.803 p<0.001$, $M_{positive}=8.89 SD=1.47$, $M_{negative}=1.87 SD=1.69$), and Disfluency increased the perceived difficulty of the task (read/perceptual or remember/conceptual) ($t(1,288)=3.998 p<0.001$, $M_{difficult}=5.01 SD=2.71$, $M_{easy}=3.78 SD=2.53$). Three-way ANOVA tests showed no effects on overall attention (all $p>0.200$), and that only the positive scenario increased perceived comprehension ($F(1,282)=8.570 p=0.004 \eta_p^2=0.029$ / $M_{positive}=5.33 SD=1.65$, $M_{negative}=4.78 SD=1.70$). Time to read the reviews was shorter for the positive scenario ($F(1,282)=4.520 p=0.034 \eta_p^2=0.016$ / $M_{positive}=153.92s SD=60.27$, $M_{negative}=169.58 SD=69.59$), and also for PINT decisions ($F(1,282)=4.318 p=0.039 \eta_p^2=0.016$ / $M_{positive}=12.08s SD=6.83$, $M_{negative}=13.98 SD=8.14$) (all others $p=ns.$). Indeed, analyses indicated a significant interaction of decision time and eWOM valence ($R^2=0.3604$, $p=0.0180$). Those in the negative scenario who took longer to make decisions developed higher PINT ($M_{18.53s}=4.09$, $M_{7.62s}=3.71$), while those in the positive scenario who took longer to make decisions developed lower PINT ($M_{18.53s}=7.05$, $M_{7.62s}=7.63$).

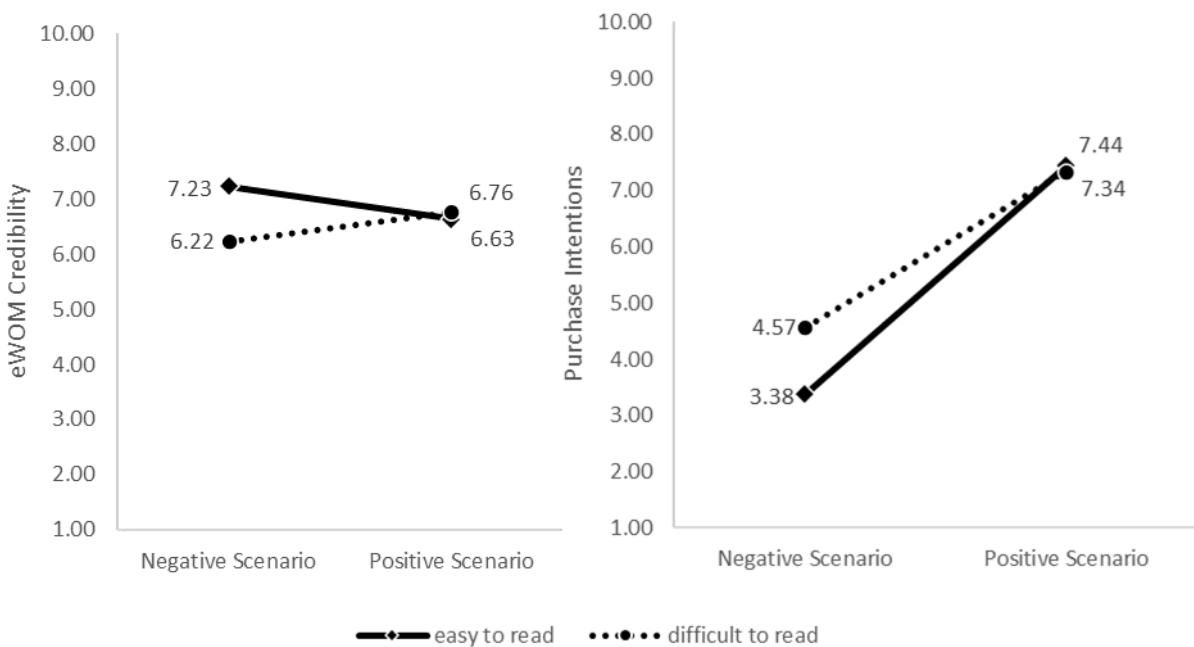
Results: a three-way ANCOVA (previous AliExpress perception used as a covariate: $p=0.087 \eta_p^2=0.010$) test showed a significant interaction between (Dis)Fluency and the eWOM scenarios ($F(1,281)=8.036 p=0.005 \eta_p^2=0.028$) on eWOM Credibility (Cronbach's Alpha = 0.821) (all other interactions $p>0.156$). It also showed that Disfluency scenarios significantly decreased eWOM credibility ($F(1,281)=4.119 p=0.043 \eta_p^2=0.014$ $CRED_{difficult}=6.49 SD=1.82$ / $CRED_{easy}=6.92 SD=1.74$) (no other significant direct effects), indicating initial corroboration of H1. Indeed, we found significant differences only inside the negative scenario ($p=0.001$,

$M_{\text{difficult}}=6.22 \text{ SD}=1.86$, $M_{\text{easy}}=7.23 \text{ SD}=1.52$) (positive scenario $p=0.567$, $M_{\text{difficult}}=6.76 \text{ SD}=1.64$, $M_{\text{easy}}=6.63 \text{ SD}=1.88$) (Figure 6), also initially corroborating both H2 and H3.

A three-way ANCOVA (previous AliExpress perception used as a covariate: $p<0.001$ $\eta_p^2=0.307$) test showed a significant interaction between (Dis)Fluency and the scenarios ($F(1,281)=6.481 p=0.011 \eta_p^2=0.023$) on PINT (all other interactions $p>0.413$). It also showed significant higher PINT for the positive scenario ($F(1,281)=152.087 p<0.001 \eta_p^2=0.351$ $\text{PINT}_{\text{positive}}=7.39 \text{ SD}=2.19 / \text{PINT}_{\text{negative}}=3.94 \text{ SD}=2.58$). Disfluency increased PINT in the negative eWOM scenario ($p=0.001$, $M_{\text{difficult}}=4.57 \text{ SD}=2.48$, $M_{\text{easy}}=3.38 \text{ SD}=2.56$), with no effects in the positive eWOM scenario ($p=0.878$, $M_{\text{difficult}}=7.34 \text{ SD}=2.08$, $M_{\text{easy}}=7.44 \text{ SD}=2.24$), also corroborating both H2 and H3.

Figures 6 and 7

Experiment 2 – (Dis)Fluency and eWOM Valence Effects on eWOM Credibility and Purchase Intentions



Once more, the first eWOM credibility mediation test indicated an interaction with eWOM valence ($F(1,285)=60.4718 p<0.001$). Linear regressions controlling previous Aliexpress perception ($p<0.001$) indicated that, higher negative eWOM Credibility decreased PINT ($r=-0.460 p<0.001$), and higher positive eWOM Credibility increased PINT ($r=+0.218 p<0.001$). Although this corroborated H1, once again, it indicated the necessity to split samples according to eWOM valence in order to test for possible indirect effects. Next, we again tested

the eWOM credibility mediational effects (Cronbach's Alpha = 0.821) on PINT (PROCESS_3.5.3: Model 8, Bootstrapping 10.000, Hayes, 2018) with a sample split. Analyses for the negative eWOM scenario showed that credibility was only affected by task difficulty (to read/perceptual or remember/conceptual) ($R^2=0.1092$, Coeff=-1.7369 $p=0.0491$ LLCI=-3.4665 ULCI=-0.0072) (previous Aliexpress perception Coeff=-0.1170 $p=0.0830$ LLCI=-0.2496 ULCI=+0.0155). Corroborating H2, credibility had a significant indirect effect on PINT ($R^2=0.4184$) (Perceptual: effect 0.7826 BootLLCI=+0.2320 BootULCI=+1.4268, Conceptual: effect 0.4660 BootLLCI=+0.0002 BootULCI=+1.0107), indicating that, the higher the credibility, the lower the purchase intentions were (Coeff=-0.6329 $p<0.0001$ LLCI=-0.8336 ULCI=-0.4322) (previous Aliexpress perception Coeff=+0.4716 $p<0.0001$ LLCI=+0.3118 ULCI=+0.6313) (for all others $p>0.6500$). Analyses for the positive eWOM scenario showed that credibility was only affected by previous Aliexpress perception ($R^2=0.1178$ Coeff=+0.2488 $p=0.0001$ LLCI=+0.1232 ULCI=+0.3745) (for all others $p>0.2950$). Although credibility could significantly increase PINT ($R^2=0.4839$) (Coeff=+0.2632 $p=0.0008$ LLCI=+0.1120 ULCI=+0.445), no indirect effects were found (Perceptual: effect -0.0330 BootLLCI=-0.2847 BootULCI=+0.1907, Conceptual: effect 0.1264 BootLLCI=-0.0647 BootULCI=+0.3905), corroborating H3 (previous Aliexpress perception Coeff=+0.5694 $p<0.0001$ LLCI=+0.4487 ULCI=+0.6900) (for all others $p>0.5800$).

4 General discussion

In addition to the fact that the results of both experiments corroborated the hypotheses, some aspects are noteworthy. First, the results concerning eWOM credibility and purchase intention corroborate previous studies. Here, eWOM was also perceived as reliable and was accepted even by people with whom the consumer had no previous contact (Dellarocas, 2003; Park, Lee & Han, 2007), as they would believe that they were receiving responsible and unbiased information (Hennig-Thurau, et al, 2004). Yet, although we found only the indirect effects of negative eWOM credibility on PINT, overall, eWOM credibility did affect purchase intentions (Verma and Dewani, 2020). Indeed, considering that the eWOMs in the experiments (and in real life) can be easily obtained, thus reducing decision risks (Goldsmith & Horowitz, 2006; Brown, et al, 2007; Sohn, 2009), by itself, an eWOM can be inducive of credibility.

The results also showed a tendency for Fluency to intensify the effects of what is being interpreted (Landwehr, et al, 2017). Yet, although we found faster and fewer deliberations in positive eWOM scenarios, most of the individuals that deliberated faster increased the influence

of the information being interpreted, while those taking longer decreased the eWOMs effects. Mainly, it showed that, while perceiving Fluency (vs Disfluency), individuals would not have to deal with inconsistencies or new interpretations (Bajšanski, Žauhar, & Valerjev, 2019). It would also stimulate the maintenance of prior beliefs, generate overconfidence, and intensify its effects in future decisions (Claypool et al., 2015; Landwehr et al., 2017). But it is important to say, that despite these congruent results, here, we demonstrated that positive eWOM credibility (and PINT) was not significantly affected by Disfluency because of its positive information bias and heuristics use (Rowe et al., 2007; Herr, Page, Pfeiffer, & Davis, 2012).

5 Final considerations

Two studies showed perceptual Disfluency effects on eWOM credibility (convergent evidence to Garcia-Marques et al., 2016; Parks & Toth, 2006; Reber & Schwarz, 1999; Silva et al., 2016) and subsequent purchase intentions - with indirect effect for Negative eWOM, and direct bias for positive eWOM. Experiment 1 review and Experiment 2 12 eWOMs provided sound arguments, facts, completeness, and consistency (Park et al, 2007; Lee, 2009; Sussman & Siegal, 2014), while maintaining constant characteristics (paragraph/sentence/review length - Li and Zhan, 2011), but, nevertheless, were impact by Disfluency. Yet, Experiment 2 showed that: such an effect was not caused by simple readability by testing the effects for Conceptual (Dis)Fluency too, and; Disfluency can decrease eWOM credibility, even with multiple eWOM evidence (Kim & Gupta, 2012) and eWOM consensus, which should have increased credibility (Hartman, et al, 2013). Also supporting our hypotheses, positive eWOM scenarios induced more automatic (less deliberative) decisions, while those that experienced Disfluency in the negative scenario needed more time to evaluate their purchase intentions.

We showed that the results obtained by using previously validated manipulations (conceptual and perceptual) are similar to some procedures that are already being used on the Internet, even without managers' or users' noticing it. Firstly by altering the background and font colors, from common white and black, to black and gray, not only reproducing Alter and Oppenheimer (2009) perceptual Disfluency manipulation, but in a quite similar fashion to what we call smartphones' and computers' "Dark Mode" (or "dark theme" - similar options can be found in iOS/Apple- and Windows). To save batteries, many users are beginning to change their backgrounds to black (or dark colors) and using darker font colors. While in general technology, the media tend to say that it is "more pleasant to the eyes" (TECHNOBLOG.NET,

2021), some users might be self-manipulating Disfluency. But, individuals may also be self-adapting to this, thus reducing difficulty perception effects (Schwarz et al, 2020).

Thus, we could contribute to theory by demonstrating that information provided by others (eWOMs) alter the general (dis)fluency symmetric effect for negative/positive general evaluations (Scharz, 2004; Haddock, 2002). And not only could (dis)fluency affect credibility (if we think of a general effect on the perception of the truth - Silva et al., 2016), but it could also affect eWOM credibility differently, according to its valence (positive *vs* negative eWOM).

Despite our results, some limitations must be discussed. We used an experimental approach with relatively small samples, so further studies using different approaches with the collaboration of sales websites should collect (and test) real and larger databases. For example, sales websites such as Amazon, which already have positive/negative reviews below their products should enable simple A/B (dis)fluency tests. Another limitation can be found in the second experiment, where two perceptual (Dis)fluency manipulations together needed to be used (blurred fonts - Schwarz, 2004; bold fonts - Diemand-Yauman et al., 2011). But other similar studies also tend to use combinations (i.e., Miele & Molden, 2010 used italicized 12-point Juice ITC font for disfluency groups). And, although this combination may seem too aggressive, "peculiar" or uncommon, similar eWOM writing can be identified on Facebook and Instagram, where users can use bold fonts and even "play" with the way sentences are presented to be scary or appear "cool" – making reading much more difficult. Indeed, the results here indicate that this pattern (increasing Disfluency/difficulty) could be incentivized by companies.

Perceptual Disfluency can be manipulated in several ways that may already be inducing those effects (italicized printings - Miele & Moden, 2010; Diemand-Yauman et al., 2011; very small letters - Su et al., 2018; green, yellow, or light blue fonts on a white background - Reber & Schwarz, 1999; Brusch, Juice ITC or Mistral typefaces - Song & Schwarz, 2008; Miele & Molden, 2010). Even similar results could be found by asking reviewers to insert more technical keywords (Oppenheimer, 2004) – something that can already be found in review sites and specialized blogs. Counterintuitively, the results here indicate that if a consumer writes a full negative post using bold fonts, increases sentence/paragraph length (full description) and inserts many technical words, it will have a lesser impact due to its disfluency (but will not significantly affect positive eWOMs).

Despite all that has been mentioned, here, eWOMs valence produced the most substantial influence on purchase intentions. So, even if disfluency can start inducing changes

in buying decisions, most of the effect is still based on quality and better services that would lead to satisfaction/dissatisfaction and positive/negative eWOMs (Oliver, 2010).

Although we manipulated (Dis)Fluency, future studies can also evaluate the impact of perceived difficulty related to different educational levels or the effects of age-related overconfidence effects (Mendes-da-Silva & Yu, 2009). Also, tests can be made to observe if people with easier-to-pronounce names – which can induce higher perceived truthfulness of claims (Newman et al, 2014) – will significantly affect eWOM credibility. Yet, Lee (2009) observed that eWOMs' perceived quality would have more influence on consumers with high involvement, while quantity would influence more consumers with low involvement.

As we analyze the effects based on the eWOMs' different valences/scenarios, other limitations must be mentioned. We tested the hypotheses using eWOMs from people with whom consumers had no previous contact (Dellarocas, 2003). However, will the results hold for disfluent negative eWOMs from close friends, family, or others with strong ties? We could expect that perceived truthfulness and source credibility would be higher, sustaining the negative impact of the negative eWOM. Additionally, we used only one valence for each scenario, but it is common to find mixed valence information (Chatterje, 2001). Other studies (Moran & Muzellec, 2017; Hartman, et al, 2013) showed that the eWOM mix and consensus can improve eWOM acceptance, and therefore, potentially affect our results. Also, the impact on purchase intention can differ in different sectors, products (industry) and types of services, thus altering these results.

Similarly to Schwarz et al (2020), we think that these results could also be used against fake news. Fake news are news, information, or articles that are proven to be intentionally false, or even invented, and that simulate credible content with known negative effects deceiving readers (Allcott & Gentzkow, 2017; Lazer et al, 2018). Today, the social media are the main engines for fake news, mainly Facebook and Twitter, due to their large number of users and capillarity (Allcott & Gentzkow, 2017; Lazer et al, 2018). It would be interesting to test (Dis)Fluency effects on fake news with positive content (fake endorsement or support of an issue with false facts/arguments) or negative content (with fake derogatory accusations). Moreover, if Disfluency can affect eWOM credibility, it could help prevent the so-called “online firestorms” (Rost, et al, 2016), which rapidly disseminate negative (real or fake) content about an idea, product, brand, or person (Visentin, et al, 2019; Wu, et al, 2020). However, it is important to think that this “positive” or “negative” valence could depend on prior beliefs concerning the subject (Lazer, et al, 2018). Pennycook et al (2018) had already observed that



fluent fake news is perceived as being more credible, so we may be able to make fake news less credible by inducing disfluency. Even with small effects, it could help.

Authors' contribution

Contribution	Viacava, J.J.C.	Andrade, G.K.M	Lima, Y.A.
Conceptualization	X	X	X
Methodology	X	X	X
Software	X	X	X
Validation	X	X	X
Formal analysis	X	X	X
Investigation	X	X	X
Resources	X	X	X
Data Curation	X	----	----
Writing - Original Draft	X	X	X
Writing - Review & Editing	X	X	X
Visualization	X	X	X
Supervision	X	-----	-----
Project administration	X	-----	-----
Funding acquisition	X	-----	-----

References

- Aarts, H., & Dijksterhuis, A. (1999). How often did I do it? Experienced ease of retrieval and frequency estimates of past behavior. *Acta Psychologica*, 103(1-2), 77-89.
[https://doi.org/10.1016/S0001-6918\(99\)00035-9](https://doi.org/10.1016/S0001-6918(99)00035-9)
- Agnihotri, R., Dingus, R., Hu, M.Y., & Krush, M. (2016). Social media: Influencing customer satisfaction in B2B sales. *Industrial Marketing Management*, 53, 172–180.
<https://doi.org/10.1016/j.indmarman.2015.09.003>
- Alter, A.L., Oppenheimer, D. M., Epley, N., & Eyre, R. N. (2007). Overcoming intuition: Metacognitive difficulty activates analytic reasoning. *Journal of Experimental Psychology: General*, 136(4), 569-576. <https://doi.org/10.1037/0096-3445.136.4.569>
- Alter, A.L., & Oppenheimer, D.M. (2008). Easy on the mind, easy on the wallet: The roles of familiarity and processing fluency in valuation judgments. *Psychonomic Bulletin & Review*, 15(5), 985-990. <https://doi.org/10.3758/PBR.15.5.985>
- Alter, A.L., & Oppenheimer, D.M. (2009). Uniting the tribes of fluency to form a metacognitive nation. *Personality and Social Psychology Review*, 13(3), 219-235.
<https://doi.org/10.1177/1088868309341564>
- Alter, A.L. (2013). The benefits of cognitive disfluency. *Current Directions in Psychological Science*, 22(6), 437–442. <https://doi.org/10.1177/0963721413498894>

- Allcott, H., & Gentzkow, M. (2017). Social media and fake news in the 2016 election. *Journal of Economic Perspectives*, 31(2), 211-236.
<https://doi.org/10.1257/jep.31.2.211>
- Aydin, A.E. (2016). Processing fluency: Examining its relationship with thinking style and purchase intention, *Journal of Marketing Communications*, 24(6), 588-598.
<https://doi.org/10.1080/13527266.2016.1167765>
- Balaji, M.S., Khong, K.W. & Chong, A.Y.L (2016). Determinants of negative word-of-mouth communication using social networking sites. *Information & Management*, 53, 528–540. <https://doi.org/10.1016/j.im.2015.12.002>
- Bajšanski, I., Žauhar, V., & Valerjev, P. (2019). Confidence judgments in syllogistic reasoning: The role of consistency and response cardinality, *Thinking & Reasoning*, 25(1), 14-47. <https://doi.org/10.1080/13546783.2018.1464506>
- Bowen, H. J., Kark, S. M. & Kensinger, E. A. (2018). NEVER forget: Negative emotional valence enhances recapitulation. *Psychonomic Bulletin & Review*, 25(3), 870-891.
<https://doi.org/10.3758/s13423-017-1313-9>
- Bookbinder, S. H., & Brainerd, C. J. (2017). Emotionally negative pictures enhance gist memory. *Emotion*, 17(1), 102-119. <https://doi.org/10.1037/emo0000171>
- Brewin, C. R., & Langley, K. M. R. (2009). Imagery retrieval may explain why recall of negative scenes contains more accurate detail. *Memory & Cognition*, 47(3), 420-427.
<https://doi.org/10.3758/s13421-018-0876-7>
- Brown, J.; Broderick, a. J. E, Lee, N. (2007). Word of mouth communication within on-line communities: conceptualizing the on-line social network. *Journal of Interactive Marketing*, 21(3), 2-20. <http://dx.doi.org/10.1002/dir.20082>
- Chen, Y., Yang, S., & Wang, Z. (2016). Service cooperation and marketing strategies of Infomediary and online retailer with eWOM effect. *Information and Technology Management* 17(2), 109-118. <http://dx.doi.org/10.1007/s10799-015-0237-1>
- Cheung, M. Y., Luo, C., Sia, C. L., & Chen, H. (2009). Credibility of electronic word-of-mouth: Informational and normative determinants of online consumer recommendations, *International Journal of Electronic Commerce*, 13(4), 9-38.
<https://doi.org/10.2753/JEC1086-4415130402>
- Cheung, M.Y; Chuan, L.; Sia, C.L. & Huaping, C. (2007). How do People Evaluate Electronic Word-Of-Mouth? Informational and Normative Based Determinants of Perceived Credibility of Online Consumer Recommendations in China. *Pacific Asia Conference on Information Systems 2007*, Sections 1-6. Natl sun yat-sen univ, 2007.
<https://aisel.aisnet.org/pacis2007/18/>
- Claypool, H. M., Mackie, D. M., & Garcia-Marques, T. (2015). Fluency and attitudes. *Social and Personality Psychology Compass*, 9(7), 370–382.
<https://doi.org/10.1111/spc3.12179>



- Constable, M. D., Bayliss, A. P., Tipper, S. P., & Kritikos, A. (2013). Self-generated cognitive fluency as an alternative route to preference formation. *Consciousness and Cognition*, 22(1), 47–52. <https://doi.org/10.1016/j.concog.2012.11.006>
- Dellarocas, C. (2003). The digitization of word of mouth: promise and challenges of online feedback mechanisms. *Management Science*, 49(10), 1407-1424. <http://dx.doi.org/10.1287/mnsc.49.10.1407.17308>
- Diemand-Yauman, C., Oppenheimer, D. M., & Vaughan, E. B. (2011). Fortune favors the BOLD (and the Italicized): Effects of disfluency on educational outcomes. *Cognition*, 118(1), 111-5. <https://doi.org/10.1016/j.cognition.2010.09.012>
- Epley, N., & Gilovich, T. (2006). The anchoring-and-Adjustment Heuristic: Why the Adjustments Are Insufficient. *Psychological Science* 17(4), 311-318. <https://doi.org/10.1111/j.1467-9280.2006.01704.x>
- Garcia-Marques, T., Silva, R. R., & Mello, J. (2016). Judging the truth-value of a statement in and out of a deep processing context. *Social Cognition*, 34, 40–54. <https://doi.org/10.1521/soco.2016.34.1.40>
- Goldsmith, R. E. e Horowitz, D. (2006). Measuring motivations for online opinion seeking. *Journal of Interactive Advertising*, 6(2), 2-14. <https://doi.org/10.1080/15252019.2006.10722114>
- Haddock, G. (2002). It's easy to like or dislike Tony Blair: Accessibility experiences and the favorability of attitude judgments. *British Journal of Social Psychology*, 93(2), 257-267. <https://doi.org/10.1348/000712602162571>
- Hayes, A. F. (2018). *Introduction to mediation, moderation, and conditional process analysis*. New York: The Guilford Press.
- Hartman, K.B.; Hunt, J.B. e Childers, C.Y. (2013). Effects of eWOM valence: examining consumer choice using evaluations of teaching. *Journal of Behavioral Studies in Business*, 6, 1-12. <https://www.aabri.com/manuscripts/131623.pdf>
- Hennig-Thurau, T., Gwinner, K. P., Walsh, G., & Gremler, D. D. (2004). Electronic word-of-mouth via consumer-opinion platforms: What motivates consumers to articulate themselves on the Internet? *Journal of Interactive Marketing*, 18(1), 38-52. <https://doi.org/10.1002/dir.10073>
- Hernandez, I. & Preston, J. L. (2013). Disfluency disrupts the confirmation bias. *Journal of Experimental Social Psychology*, 49(1), 178–182. <https://doi.org/10.1016/j.jesp.2012.08.010>
- Herr, P. M., Kardes, F. R., & Kim, J. (1991). The effects of word-of-mouth and product-attribute information on persuasion: An accessibility-diagnosticity perspective. *Journal of Consumer Research*, 17, 454–462. <https://doi.org/10.1086/208570>

- Herr, P. M. & Page, C. M (2004). Asymmetric association of liking and disliking judgments: So what's not to like? *Journal of Consumer Research*, 30(4), 588–601.
<https://doi.org/10.1086/380291>
- Herr, P. M., Page, C. M., Pfeiffer, B. E., & Davis, F. D. (2012). Affective influences on evaluative processing. *Journal of Consumer Research*, 38(5), 833-845.
<https://doi.org/10.1086/660844>
- Izogo, E.E., Jayawardhena, C. and Karjaluoto, H. (2022), "Negative eWOM and perceived credibility: a potent mix in consumer relationships", *International Journal of Retail & Distribution Management*, Vol. ahead-of-print No. ahead-of-print.
<https://doi.org/10.1108/IJRDM-01-2022-0039>
- Kahneman, D. (2011). *Rápido e Devagar: Duas formas de pensar*. Rio de Janeiro: Objetiva.
- Kensinger, E. A., & Schacter, D. L. (2008). Neural processes supporting young and older adults' emotional memories. *Journal of Cognitive Neuroscience*, 20(7), 1161-1173.
<https://doi.org/10.1162/jocn.2008.20080>
- Kensinger, E. A. (2009). Remembering the details: Effects of emotion. *Emotion Review*, 1(2), 99–113. <https://doi.org/10.1177%2F1754073908100432>
- Kensinger, E. A., & Mark, S. M. (2018). Emotion and memory. In *Stevens' handbook of experimental psychology and cognitive neuroscience*. New York: John Wiley & Sons, inc. <https://doi.org/10.1002/9781119170174.epcn101>
- Kim, J.; Naylor, G.; Sivadas, E. & Sugumaran, V. (2016). The unrealized value of incentivized eWOM recommendations. *Mark Lett*, Springer Science+Business Media, 27, p.411–421. <http://dx.doi.org/10.1007/s11002-015-9360-3>
- Kim, J., & Gupta, P. (2012). Emotional expressions in online user reviews: How they influence consumers' product evaluations. *Journal of Business Research*, 65(7), 104–115. <https://doi.org/10.1016/J.JBUSRES.2011.04.013>
- Kornell, N., Rhodes, M. G., Castel, A. D., & Tauber, S. K. (2011). The ease-of-processing heuristic and the stability bias dissociating memory, memory beliefs, and memory judgments. *Psychological Science*, 22(6), 787-794.
<https://doi.org/10.1177/0956797611407929>
- Korfiatis, N., García-Bariocanal, E., & Sánchez-Alonso, S. (2012). Evaluating content quality and helpfulness of online product reviews: The interplay of review helpfulness vs. review content. *Electronic Commerce Research and Applications*, 11(3), 205–217.
<http://dx.doi.org/10.1016/j.elrap.2011.10.003>
- Kozinets, R. V. (1999). E-tribalized marketing? The strategic implications of virtual communities of consumption. *European Management Journal*, 17, 252–264.
[https://doi.org/10.1016/S0263-2373\(99\)00004-3](https://doi.org/10.1016/S0263-2373(99)00004-3)

- Labroo, A. A., Dhar, R., & Schwarz, N. (2008). Of frog wines and frowning watches: Semantic priming, perceptual fluency, and brand evaluation. *Journal of Consumer Research*, 34(6), 819-831. <https://doi.org/10.1086/523290>
- Labroo, A. A., & Pocheptsova, A. (2016). Metacognition and consumer judgment: Fluency is pleasant but disfluency ignites interest. *Current Opinion in Psychology*, 10, 154-159. <https://doi.org/10.1016/j.copsyc.2016.01.008>
- Landwehr, J. R., Golla, B., & Reber, R. (2017). Processing fluency: An inevitable side effect of evaluative conditioning. *Journal of Experimental Social Psychology*, 70, 124–128. <https://doi.org/10.1016/j.jesp.2017.01.004>
- Lazarus, R. S. (1991). *Emotion and adaptation*. New York: Oxford University Press.
- Lazer, D. M, Baum, M. Benkler, Y., Berinsky, A. J., Greenhill, K. M, Menczer, F. & Metzge, M. J. (2018). The science of Fake News. *Science*, 9(359-6380), pp. 1094-1096. <https://doi.org/10.1126/science.aoa2998>
- Lee, S-H. (2009). How do online reviews affect purchasing intention? *African Journal of Business Management*, 3(10), 576-581. <https://doi.org/10.5897/AJBM09.204>
- Lee, E-J., & Shin, S.Y. (2014). When do consumers buy online product reviews? Effects of review quality, product type, and reviewer's photo. *Computers in Human Behavior*, 31, 356–366. <https://doi.org/10.1016/j.chb.2013.10.050>
- Lin, T.M. Y, Lu, K-Y. & Wu, J-J. (2012). The effects of visual information in eWOM communication. *Journal of Research in Interactive Marketing*, 6(1), 7–26 <http://dx.doi.org/10.1108/17505931211241341>
- Li, J.; Zhan, L. (2011). Online persuasion: How the written word drives WOM. *Journal of Advertising Research*, 51(1), 239–257. <https://doi.org/10.2501/JAR-51-1-239-257>
- Madan, C. R., Scott, S. M. E., & Kensinger, E. A. (2019). Positive emotion enhances association-memory. *Emotion*, 19(4), 733-740. <https://doi.org/10.1037/emo0000465>
- Maier, E., & Dost, F. (2018). The positive effect of contextual image backgrounds on fluency and liking. *Journal of Retailing and Consumer Services*, 40, 109-116. <http://dx.doi.org/10.1016/j.jretconser.2017.09.003>
- Mendes-Da-Silva, W., & Yu, A. S. O. (2009). Análise empírica do senso de controle: Buscando entender o excesso de confiança. *Revista de administração contemporânea*, 13(2), 247-271. <https://doi.org/10.1590/S1415-65552009000200006>
- Miele, D. B., & Molden, D. C. (2010). Naive theories of intelligence and the role of processing fluency in perceived comprehension. *Journal of Experimental Psychology: General*, 139(3), 535-557. <https://doi.org/10.1037/a0019745>

- Moran, G., Muzellec, L., & Nolan, E. (2014). Consumer moments of truth in the digital context: How "search" and "e-word of mouth" can fuel consumer decision-making. *Journal of Advertising Research*, 54(2), 200-204. <http://dx.doi.org/10.2501/JAR-54-2-200-204>
- Muda, M. and Hamzah, M.I. (2021), "Should I suggest this YouTube clip? The impact of UGC source credibility on eWOM and purchase intention", *Journal of Research in Interactive Marketing*, Vol. 15 No. 3, pp. 441-459. <https://doi.org/10.1108/JRIM-04-2020-0072>
- Newman, E.J., Sanson, M., Miller, E.K., Quigley-McBride, A., Foster, J.L., Bernstein, D.M., Garry, M., Bastian, B. (2014). People with easier to pronounce names promote truthiness of Claims. *PLoS ONE*, 9(2), e88671. <https://doi.org/10.1371/journal.pone.0088671>
- Oliver, R. L. (2010). Satisfaction, a behavioural perspective on the consumer (2. ed.). Nova Iorque: Irwin McGraw-Hill.
- Oppenheimer, D. M. (2004). Spontaneous discounting of availability in frequency judgment tasks. *Psychological Science*, 15(2), 100-105. <https://doi.org/10.1111/j.0963-7214.2004.0150200>
- Oppenheimer, D. M. (2006). Consequences of erudite vernacular utilized irrespective of necessity: Problems with using long words needlessly. *Applied Cognitive Psychology*, 20(2), 139–156. <https://doi.org/10.1002/acp.1178>
- Orita, R. & Hattori, M. (2018). Positive and negative affects facilitate insight problem-solving in different ways: A study with Implicit hints. *Japanese Psychological Research, Special issue: Implicit Cognition*, 61(2), 94–106. <https://doi.org/10.1111/jpr.12237>
- Park, S., Shin, W. and Xie, J. (2021) The Fateful First Consumer Review. *Marketing Science* 40(3):481-507. <https://doi.org/10.1287/mksc.2020.1264>
- Park, D.H, Lee, J. Han, I. (2007). The Effect of On-line Consumer Reviews on Consumer Purchasing Intention: The Moderating Role of Involvement. *International Journal of Electronic Commerce*, 11(4), 125-148. <https://doi.org/10.2753/JEC1086-4415110405>
- Park, Y., Herr, P. M., & Kim, B. C. (2016). The effect of disfluency on consumer perceptions of information security. *Marketing Letters*, 27(3), 525–535. <https://doi.org/10.1007/s11002-015-9359-9>
- Parks, C. M., & Toth, J. P. (2006). Fluency, familiarity, aging, and the illusion of truth. *Aging, Neuropsychology, and Cognition*, 13, 225–253. <https://doi.org/10.1080/138255890968691>
- Pennycook, G., Cannon, T. D., & Rand, D. G. (2018). Prior exposure increases perceived accuracy of fake news. *Journal of Experimental Psychology: General*, 147(12), 1865–1880. <https://doi.org/10.1037/xge0000465>

- Prato, F., & John, O. P. (1991). Automatic vigilance: The attention-grabbing power of negative social information. *Journal of Personality and Social Psychology*, 61(3), 380-391. <https://doi.org/10.1037/0022-3514.61.3.380>
- Reber, R., & Schwarz, N. (1999). Effects of perceptual fluency on judgments of truth. *Consciousness and Cognition*, 8(3), 338-342. <https://doi.org/10.1006/ccog.1999.0386>
- Rost, K., Stahel, L., & Frey, B.S. (2016). Digital social norm enforcement: Online firestorms in social media. *PLoS ONE*, 11(6), 1-26. <https://doi.org/10.1371/journal.pone.0155923>
- Rowe G, Hirsh, J. B., & Anderson A.K. (2007). Positive affect increases the breadth of attentional selection. *Proceedings of the National Academy of Sciences*, 104(1), 383-388. <https://doi.org/10.1073/pnas.0605198104>
- Ryffel, F. A., & Wirth, W. (2016). Heart versus mind: How affective and cognitive message frames change attitudes. *Social Psychology*, 47(1), 52-62. <https://doi.org/10.1027/1864-9335/a000257>
- Ryffel, F. A., & Wirth, W. (2018). How perceived processing fluency influences the illusion of knowing in learning from tv reports. *Journal of Media Psychology*, 32(1), 2-13. <https://doi.org/10.1027/1864-1105/a000250>
- Sanchez, C., & Jaeger, A. J. (2015). If it's hard to read, it changes how long you do it: Reading time as an explanation for perceptual fluency effects on judgment. *Psychonomic Bulletin & Review*, 22(1), 206–211. <https://doi.org/10.3758/s13423-014-0658-6>
- Silva, R. R., Chrobot, N., Newman, E., Schwarz, N., & Topolinski, S. (2017). Make it short and easy: Username complexity determines trustworthiness above and beyond objective reputation. *Frontiers in Psychology*, 8, 2200. <https://doi.org/10.3389/fpsyg.2017.02200>
- Schwarz, N. (2004). Metacognitive experiences in consumer judgment and decision making. *Journal of Consumer Psychology*, 14(4), 332-348. https://doi.org/10.1207/s15327663jcp1404_2
- Schwarz, N., Jalbert, M., Noah, T. and Zhang, L. (2020). Metacognitive experiences as information: Processing Fluency in consumer judgement and decision making. *Consumer Psychology Review*, 00, 1-22. <https://doi.org/10.1002/arcp.1067>
- Schindler, R, & Bickart, B. (2012). Perceived helpfulness of online consumer reviews: The role of message content and style. 11(3), 1–10. <https://doi.org/10.1002/cb.1372>
- Silva, R. R., Garcia-Marques, T., & Reber, R. (2017). The informative value of type of repetition: Perceptual and conceptual fluency influences on judgments of truth. *Consciousness and Cognition: An International Journal*, 51, 53-67. <https://doi.org/10.1016/j.concog.2017.02.016>

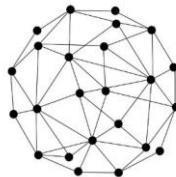


- Simmons, J.P., Nelson, L.D. (2006). Intuitive confidence: Choosing between intuitive and nonintuitive alternatives. *Journal of Experimental Psychology*, 35(3), 409-428.
<https://doi.org/10.1037/0096-3445.135.3.409>
- Simmons, J. P., & Nelson, L. D. (2007). Intuitive confidence: When consumer choices are sensitive to matching prices. *Association for Consumer Research*, 34, 265-268.
<http://www.acrwebsite.org/volumes/12610/volumes/v34/NA-34>
- Sirgy, J. M. A. (1984). Social cognition model of consumer satisfaction/dissatisfaction: An experiment. *Psychology & Marketing*, 1(2), 27- 44.
<https://doi.org/10.1002/mar.4220010205>
- Sohn, D (2009). Disentangling the effects of social network density on electronic word-of-mouth (eWOM) intention. *Journal of Computer-mediated Communication*, 14, 352-367. <http://dx.doi.org/10.1111/j.1083-6101.2009.01444.x>
- Song, H., & Schwarz, N. (2008). If it's hard to read, it's hard to do: Processing fluency affects effort prediction and motivation. *Psychological Science*, 19(10), 986-988.
<https://doi.org/10.1111/j.1467-9280.2008.02189.x>
- Song, H., & Schwarz, N. (2009). If it's difficult to pronounce, it must be risky. *Psychological Science*, 20(2), 135–138. <https://doi.org/10.1111/j.1467-9280.2009.02267.x>
- Su, N., Li, T., Zheng, J., Hu, X., Fan, T., & Lu L. (2018). How font size affects judgments of learning: Simultaneous mediating effect of item-specific beliefs about fluency and moderating effect of beliefs about font size and memory. *PLOS ONE* 13, 1-14.
<https://doi.org/10.1371/journal.pone.0200888>
- Sussman, S. W., and W. S. Siegal. (2003) Informational Influence in Organizations: An Integrated Approach to Knowledge Adoption." *Information Systems Research* 14, 1, 47–65. <https://doi.org/10.1287/isre.14.1.47.14767>
- Talarico, J. M., Berntsen, D., & Rubin, D. C. (2009). Positive emotions enhance recall of peripheral details. *Cognition and Emotion*, 23(2), 380-398.
<https://doi.org/10.1080%2F02699930801993999>
- TECNOBLOG, 2021. (<https://tecnoblog.net/279054/como-ativar-o-dark-mode-do-android-pie-e-economizar-bateria/> consulted at Feb 03, 2021)
- Verma, D. and Dewani, P.P. (2021), "eWOM credibility: a comprehensive framework and literature review", *Online Information Review*, Vol. 45 No. 3, pp. 481-500.
<https://doi.org/10.1108/OIR-06-2020-0263>
- Visentin, M., Pizzi, G. & Pichierri, M. (2019) Fake news, real problems for brands: The impact of content truthfulness and source credibility on consumers' behavioral intentions toward the advertised brands. *Journal of Interactive Marketing*, 45, 99-112.
<https://doi.org/10.1016/j.intmar.2018.09.001>
- Yang, C., Huang, T. E., & Shanks, D. R. (2018). Perceptual fluency affects judgments of learning: The font size effect. *Journal of Memory and Language*, 99(1), 99-110.
<https://doi.org/10.1016/J.JML.2017.11.005>



Weissgerber, C. S., & Reinhard, M. A. (2017). Is disfluency desirable for learning? *Learning and Instruction*, 49, 199-217.
<https://doi.org/10.1016/J.LEARNINSTRUC.2017.02.004>

Wu, Y., Ngai, E. W. T., Wu, P. & Wu, C. (2020). Fake online reviews: Literature review, synthesis, and directions for future research, *Decision Support Systems*, v132,113280, pp 1-15. <https://doi.org/10.1016/j.dss.2020.113280>



“DIFÍCIL DE LER, DIFÍCIL DE ACREDITAR”: EFEITOS DA (DIS)FLUÊNCIA NA CREDIBILIDADE DE EWOMS E INTENÇÕES DE COMPRA

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Objetivo: investigar o impacto da Fluência (Facilidade) e Disfluência (Dificuldade) Perceptiva (características físico-visuais) e Conceitual (conteúdo/significados) na credibilidade dos eWOMs (*Electronic Word-of-Mouth*) e nas intenções de compra.

Metodologia: em dois experimentos *on-line* manipulamos a valência dos eWOMs (negativo *versus* positivo) e a (Dis)Fluência, testando os efeitos diretos dos eWOMs positivos nas intenções de compra (H3) e os efeitos mediadores da credibilidade (H1) de eWOMs negativos disfluentes (H2).

Relevância/originalidade: até onde sabemos, este é o primeiro estudo a verificar os efeitos da (Dis)Fluência dos eWOMs nas intenções de compra e os efeitos mediadores de sua credibilidade.

Principais resultados: embora estudos anteriores indiquem efeitos gerais simétricos da (Dis)Fluência em avaliações positivas e negativas, aqui demonstramos que apenas a credibilidade dos eWOMs negativos foi impactada pela Disfluência, resultando em um efeito indireto nas intenções de compra. A Disfluência não reduziu a credibilidade dos eWOMs positivos, mantendo um efeito direto enviesado. Ainda, esses resultados são válidos mesmo com consenso e múltiplas evidências de eWOMs.

Contribuição teórica: Demonstramos que os efeitos da (Dis)Fluência na credibilidade dos eWOMs (e intenções de compra) dependem da valência dos eWOMs. Especificamente, enquanto a Disfluência (legibilidade, ou dificuldade de recordação) afetou a percepção dos eWOMs negativos, esta não afetou os eWOMs positivos, mantendo sua credibilidade e induzindo deliberações mais rápidas.

Contribuições Sociais/Gerenciais: Ainda, essas manipulações de (Dis)Fluência são semelhantes às que ocorrem diariamente (como “tema/modo escuro” de *smartphones* e, variações de cores/tipos de fontes) com ou sem intenção do gestor, aumentando as intenções de compra.

Palavras-chave: eWOM. Valência. Fluência. Credibilidade. Intenção de compra.

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<https://doi.org/10.5585/remark.v22i1.21421>.



1 Introdução

O WOM (*word-of-mouth* – boca-a-boca) se consolidou como uma das fontes de informação mais relevante para a tomada de decisão do consumidor devido a confiança em comentários feitos por pessoas próximas (Reicheld, 1998). Importância também tem sido dada ao eWOM (*electronic word-of-mouth* – boca-a-boca eletrônico), considerado essencial para consumidores, empresas, políticos, celebridades, *etc.* (Pfeffer, Zorbach, & Carley, 2014). Os primeiros estudos de eWOM se concentraram na influência nas atitudes dos consumidores, dado seu alcance e capilarização (Cheung *et al.*, 2009), bem como nas principais motivações para fazer (Hennig-Thurau *et al.*, 2004), procurar e utilizar eWOMs (Goldsmith & Horowitz, 2006). Mas, apesar dos resultados congruentes com estudos de WOM, o eWOM é percebido como mais confiável e aceito mesmo por pessoas com quem o consumidor teve pouco ou nenhum contato prévio (Dellarocas, 2003; Park, Lee & Han, 2007).

Como a aceitação do eWOM depende de sua credibilidade — se o eWOM pode ser confiável, crível —, isso se tornou um foco de pesquisa, procurando compreender seu conteúdo, o comunicador, o contexto e o próprio consumidor, aquele que lê e adotará a informação (Verma & Dewani, 2020). Estudos anteriores verificaram que a credibilidade do eWOM pode ser impactada por sua fonte e plataforma (Chen, Yang & Wang, 2016), presença de argumentos sólidos e fatos que o sustentem (Park *et al.*, 2007; Lee, 2009), pontos de vista opostos, número de fatos discutidos, comprimento da frase e do texto (Li & Zhan, 2011), qualidade do argumento (Lee & Shin, 2014), precisão, integridade, relevância, consistência (Sussman & Siegal, 2014), o impacto do conteúdo gerado pelo usuário (Muda & Hamzah, 2021) e a experiência anterior do consumidor (Izogo, Jayawardhena & Karjaluoto, 2022). Diferentemente, aqui propomos que a credibilidade do eWOM pode ser impactada pela (Dis)Fluência — facilidade (*versus* dificuldade) percebida para ler/processar os significados dos eWOMs — influenciando as intenções de compra.

A Fluência pode ser compreendida como a facilidade ou o conforto percebido no processamento cognitivo, que leva a uma série de vieses, como: intensificar os efeitos do que está sendo interpretado (Claypool, Mackie & Garcia-Marques, 2015; Landwehr, Golla & Reber, 2017); tomadas de decisão mais intuitivas e confiantes (Aydin, 2016; Schwarz *et al.*, 2020); criando uma maior percepção de veracidade, familiaridade, valor (Miele & Molden, 2010; Yang, Huang & Shanks, 2018; Reber & Schwarz, 1999) que propomos, impactaria positivamente a credibilidade do eWOM. Em contraste, a Disfluência está ligada ao desconforto

cognitivo, tendo efeitos gerais opostos (Sanchez & Jaeger, 2015; Ryffel & Wirth, 2018) que impactariam negativamente na credibilidade do eWOM.

Ainda, focando no contexto dos comentários/opiniões disponíveis *online*, demonstramos que a (Dis)Fluência impacta a credibilidade dos eWOMs diferentemente nas valências positivas e negativas, enquanto outros focam em um impacto geral da (Dis)Fluência na percepção da verdade (Garcia-Marques *et al.*, 2016; Silva *et al.*, 2016). Ao fazê-lo, também demonstramos que as informações fornecidas por outros (eWOMs) alteram o efeito simétrico geral da (Dis)Fluência nas avaliações negativas e positivas (Scharz, 2004). Resumidamente, isso ocorreria devido a diferentes efeitos de informações positivas e negativas sobre a confiança (Sorbeck & Clore, 2005; Kensinger & Schacter, 2008), prevenção e atenção (Prato & John, 1991; Herr, Kardes & Kim, 1991) e uso de heurísticas (Rowe *et al.*, 2007; Herr, Page, Pfeiffer & Davis, 2012). Para demonstrar esses resultados, o artigo começa com uma revisão dos eWOMs e da credibilidade. Em seguida, abordamos a (Dis)Fluência e seu impacto no processamento e adoção da informação, seguido dos efeitos das informações positivas e negativas. Depois, dois experimentos são apresentados para testar as hipóteses, discutindo seus resultados. Ao final, a conclusão busca fazer uma síntese com implicações teóricas e gerenciais.

2 Revisão da literatura

2.1 eWOM

O eWOM pode ser definido como qualquer declaração negativa ou positiva feita por clientes potenciais ou antigos sobre um produto ou empresa, disponível de forma ampla na *internet* (Hennig-Thurau *et al.*, 2004). Podem estar disponíveis de várias maneiras (revisões, comentários, avaliações, relatos de experiência), em vários locais/plataformas (fóruns, comunidades *online*, plataformas de opiniões, sites de boicote/reclamações, *etc.*), com informações que qualquer pessoa pode buscar e encontrar sobre quase qualquer assunto (Brown *et al.*, 2007). Além disso, permite aos consumidores ouvir e serem ouvidos por outros consumidores e instituições, ganhando poder nas relações (Sohn, 2009).

Os indivíduos buscariam eWOMs para aprender sobre produtos/empresas e, obter facilmente informações valiosas para reduzir os riscos de decisão (Goldsmith & Horowitz, 2006; Brown *et al.*, 2007). Os consumidores seriam afetados pelas experiências positivas (ou negativas) dos outros porque induziriam expectativas de satisfação, emoções e desempenho semelhantes (Sirgy, 1984; Oliver, 2010). Nesse sentido, consumidores satisfeitos produziriam eWOMs positivos (com emoções positivas, fatos/resultados positivos, *etc.*), aumentando as



intenções de compra do leitor. Por outro lado, consumidores insatisfeitos produziriam eWOMs negativos (com emoções negativas, fatos/resultados negativos, *etc.*), diminuindo as intenções de compra do leitor (Oliver, 2010; Agnihotri, Dingus, Hu & Krush, 2016). Os consumidores têm relatado essas experiências para expressar sua identidade, compartilhar sua alegria, empatia, gratidão, descontentamento com um produto/marca ou até mesmo “ventilar” seus sentimentos negativos, recebendo apoio emocional e alcançando fechamento psicológico. Portanto, outros consumidores acreditam estar recebendo informações imparciais feitas com responsabilidade, aumentando sua confiança, resultando na credibilidade do eWOM (Hennig-Thurau *et al.*, 2004; Akyüz, 2013; Lee & Shin, 2014; Balaji, Khong & Chong 2016).

A credibilidade do eWOM pode ser impactada por vários fatores: fonte (pessoa, comunidades, plataformas); classificações; quantidade; consenso, *etc.* Também pode ser afetada pela qualidade percebida e clareza do argumento (Cheung *et al.*, 2007; Li & Zhan, 2011; Willemse *et al.*, 2011; Lee & Shin, 2014; Moran & Muzellec, 2017). Mesmo elementos estilísticos (ortografia, erros gramaticais) podem reduzir seu valor percebido (Schindler & Bickart, 2012), mas a presença de argumentos sólidos, evidências e mesmo a presença de pontos de vista opostos aumentam a aceitação (Park *et al.*, 2007; Lee, 2009; Li & Zhan, 2011). A acurácia dos argumentos, relevância, consistência (Sussman & Siegal, 2014) ou mesmo a aparência da web (atratividade, uso adequado de fontes, gráficos e cores, *etc.*) impactaria a sua influência (Aladawani & Palvia, 2002). Portanto, não apenas o conteúdo do eWOM pode influenciar a credibilidade, mas também a compreensão do eWOM — e isso pode ser impactado pela facilidade (e dificuldade) de processar a informação em si.

2.1 (DIS)FLUENCIA

Os indivíduos podem experenciar facilidade ou dificuldade no processamento de informações. Embora isso possa estar relacionado às características dos indivíduos (como inteligência ou aprendizado prévio), pode estar também relacionado a pistas periféricas e à própria situação (como uma difícil tarefa de matemática) (Schwarz *et al.*, 2020). Segundo Alter e Oppenheimer (2007) e Kahneman (2011), o raciocínio humano envolve dois sistemas distintos de processamento: um rápido, sem esforço, associativo e intuitivo — portanto associado a heurísticas; e outro lento, trabalhoso, analítico e deliberativo. Schwarz (2004) vincula esse sistema de processamento rápido à Fluência, à facilidade com que um indivíduo pode processar novas informações. Do outro lado do *continuum*, Disfluência refere-se à dificuldade de processar informações. Tanto a Fluência quanto a Disfluência podem ser



influenciadas por experiências metacognitivas que afetam: recuperação de memórias, decisões, familiaridade, emoções e, aqui, mais importante, percepção da verdade/veracidade (Schwarz *et al.*, 2020) que afetaria a credibilidade. Quando esta (Dis)Fluência fosse resultado de características físico-visuais (brilho, contraste, cores, qualidade de impressão, *etc.*) pode ser entendida como (Dis)Fluência Perceptiva (Labroo, Dhar & Schwarz, 2008). Diferentemente, (Dis)Fluência Conceitual estaria relacionada à facilidade/dificuldade de processar significados (palavras complexas, conceitos, recuperação de memória, *etc.*) (Song & Schwarz, 2008).

O indivíduo tem preferência pela fluência (*vs* disfluência), pois tende a ser processada de forma hedônica (Maier & Dost, 2018). Os indivíduos alcançariam conforto cognitivo a partir da facilidade percebida, reduzindo incertezas (Labroo & Pocheptsova, 2016) e maior percepção de veracidade (Silva, Garcia-Marques & Reber, 2017), atuando como pistas periféricas que poderiam influenciar atitudes (Ryffel & Wirth, 2016) induzindo deliberações mais rápidas e menos elaboradas (Kahneman, 2011; Ryffel & Wirth, 2018) porque os indivíduos não teriam que lidar com inconsistências ou novas interpretações (Bajšanski, Žauhar & Valerjev, 2019). Esses efeitos ocorreriam diariamente. Por exemplo: testes entre palavras técnicas (difícil) *vs* palavras comuns (fácil) (Alter, Oppenheimer, Epley & Eyre, 2007) ou fontes fáceis *vs* difíceis de ler (Song & Schwarz, 2008) indicaram que a fluência leva as pessoas a mal interpretar instruções e usar mais heurísticas. Ainda, a dificuldade está associada a uma maior percepção de risco (Song, & Schwarz, 2009), enquanto a percepção de facilidade está associada a uma maior confiança na informação (Park, Herr & Kim, 2016). Principalmente, Fluência (*vs* Disfluência) levaria os indivíduos a avaliações mais favoráveis (Alter & Oppenheimer, 2009; Schwarz *et al.*, 2020): textos com disfluência (com vocabulário complexo) estão ligados a menor inteligência percebida do autor (Oppenheimer, 2006); informações de pessoas com nomes mais fáceis de pronunciar eram percebidas mais verdadeiras (Newman *et al.*, 2014); avaliações *online* mais legíveis foram percebidas como mais úteis (Korfiatis *et al.*, 2012).

Não só a fluência ajudaria a formar preferências (Bayliss, Constable, Tipper & Kritikos, 2013), mas também estimularia a manutenção de crenças (mesmo errôneas), excesso de confiança e intensificaria seus efeitos em decisões futuras (Claypool *et al.*, 2015; Landwehr *et al.*, 2017). De fato, a fluência pela repetição (Silva, Garcia-Marques & Reber, 2017), facilidade de leitura (contraste: fonte *vs* cor de fundo — Reber, & Schwarz, 1999; Garcia-Marques *et al.*, 2016), ou complexidade de nomes (Silva *et al.*, 2017) induziriam maiores ilusões de verdade.

Em contraste, a Disfluência ajudaria a evitar esses equívocos. A dificuldade percebida funcionaria como um alerta, forçando um processamento mais deliberativo e a codificação

detalhada de memória (Alter *et al.*, 2007; Alter, 2013; Weissgerber & Reinhard, 2017). Além disso, ajudaria a prevenir vieses confirmatórios e uso de *defaults*, a reduzir o impacto de heurísticas, expectativas anteriores, crenças, preconceitos (Alter, 2013; Alter *et al.*, 2007; Hernandez & Preston, 2013) e a melhorar a recuperação de informações (Diemand-Yauman, Oppenheimer & Vaughan, 2011). Consequentemente, Simons e Nelson (2006, 2007) e Aydin (2016) demonstraram que opiniões, intuições ou escolhas feitas com maior facilidade tiveram maior confiança, influenciando decisões subsequentes. No entanto, se os indivíduos enfrentassem dificuldades, passariam a considerar outras opções — ainda que menos intuitivas.

Portanto, se a aceitação do eWOM depende de sua credibilidade, isso pode ser afetado pela qualidade percebida, clareza do argumento (Cheung *et al.*, 2007; Li & Zhan, 2011; Willemse *et al.*, 2011; Lee & Shin, 2014; Moran & Muzellec, 2017) porque os consumidores precisam entender seus conteúdos. Isso dependeria de aspectos situacionais e da capacidade dos indivíduos de processar seus significados, com confiança e utilidade percebida nos eWOMs e, posteriormente, afetando as intenções de compra (Li & Zhan, 2011; Willemse *et al.*, 2011; Lee & Shin, 2014). Se a Fluência produz tomadas de decisão com excesso de confiança (Simons & Nelson, 2006; 2007; Aydin, 2016); maior percepção de familiaridade, inteligência percebida do autor e valor percebido (Openhaimer, 2006; Alter & Openhaimer, 2006, 2008, 2009; Kornell *et al.*, 2011; Miele & Molden, 2010; Openhaimer, 2004; Yang *et al.*, 2018) e percepções de verdade/veracidade (Garcia-Marques *et al.*, 2016; Parks & Toth, 2006; Reber & Schwarz, 1999; Silva *et al.*, 2016) então esta Fluência impactará positivamente na credibilidade do eWOM. Por outro lado, a Disfluência tem efeitos opostos e impactará negativamente na credibilidade do eWOM. Portanto: **H1: A Disfluência impacta negativamente na credibilidade do eWOM, reduzindo a influência do eWOM nas intenções de compra.**

Ao lidar com diferentes valências de informação (positiva/negativa), vários estudos de (Dis)Fluência verificaram um padrão de avaliação simétrico. Como exemplo, Haddock (2002) demonstrou um efeito de disfluência conceitual manipulada por uma tarefa de recuperação. Indivíduos que precisavam se lembrar de seis fatos positivos (vs negativos) sobre um político foram mais (menos) favoráveis a ele. Por outro lado, lembrar de mais fatos não aumentou o efeito. Lembrar 12 fatos positivos (vs seis positivos) produziu opiniões menos favoráveis, enquanto a tarefa de lembrar 12 fatos negativos (vs seis negativos) produziu opiniões mais favoráveis. Isso, semelhante a Aarts & Dijksterhuis (1999) sobre o uso de bicicletas e a Winkielman & Schwarz (2001) sobre aspectos da infância. Apesar desses resultados simétricos nos julgamentos, propomos que isso acontecerá para a credibilidade e impacto do eWOM nas



intenções de compra, mas, apenas para os eWOMs negativos devido aos diferentes efeitos da informação positiva/negativa na confiança, prevenção e uso de heurísticas.

2.3 Efeitos das informações positivas/negativas

Os eWOMs podem ser vistos como experiências autorrelatadas por meio de narrativas de alegria, gratidão e satisfação — ou o contrário, com insatisfação e necessidade de “ventilar” seus sentimentos negativos (Hennig-Thurau *et al.*, 2004; Kozinets *et al.*, 2010; Kim & Gupta, 2012). Geralmente, o eWOM positivo terá influência positiva em relação ao produto/marca, enquanto o eWOM negativo terá influência negativa. Mas, os indivíduos teriam diferentes percepção de valor e poder da influência dependendo da valência da informação. Os eWOMs positivos estariam associados a maior valor percebido (Sohn, 2009; Kim *et al.*, 2016), e maior confiança, fortalecendo a confiança na decisão (Hartman *et al.*, 2013). Em contraste, os eWOMs negativos teriam fortes impactos na tomada de decisão devido ao seu vínculo com emoções negativas (Kim *et al.*, 2016) com maior saliência e conteúdo informativo (Herr *et al.*, 1991).

A informação negativa seria mais distinta e, portanto, mais acessível na memória, aumentando a recordação de fatos centrais e essenciais (Kensinger & Schacter, 2008; Kensinger, 2009; Bookbinder & Brainerd, 2017; Kensinger & Marks, 2018; Brewin & Langley, 2019). A informação negativa estaria associada à maior atenção e a um processamento adaptativo mais concreto, levando à prevenção por períodos mais longos (Prato & John, 1991) com maior foco na resolução de problemas (Orita & Hattori, 2018) e melhor recuperação de memória para evitar erros e resultados indesejados (Bowen, Kark e Kensinger, 2017). Assim, se a disfluência diminuísse a percepção de veracidade, familiaridade, inteligência percebida do autor e percepção de valor, ela desencadearia esses estados de prevenção por períodos mais longos de atenção, aumentando as intenções de compra, mas, não muito, apenas a um nível em que indivíduos passariam a considerar uma opção menos intuitiva (Schwarz, 2004; Simons & Nelson, 2006; 2007; Aydin, 2016). Portanto: **H2: A Disfluência diminuirá a credibilidade do eWOM negativo, resultando em um efeito indireto, aumentando as intenções de compra.**

Diferentemente, informações positivas exigiriam mais associações para serem lembradas (Madan, Scott & Kensinger, 2019), e levariam à atenção periférica e concentração em resultados gerais e aspectos abstratos, portanto, prestando menos atenção às informações externas/novas (Talarico, Berntsen & Rubin, 2009). A informação positiva não seria tão vívida (Sorbeck & Clore, 2005) assim indivíduos recordariam apenas a “essência” dos eventos positivos — esquecendo detalhes (Kensinger, 2009). Desse modo, recuperar informações

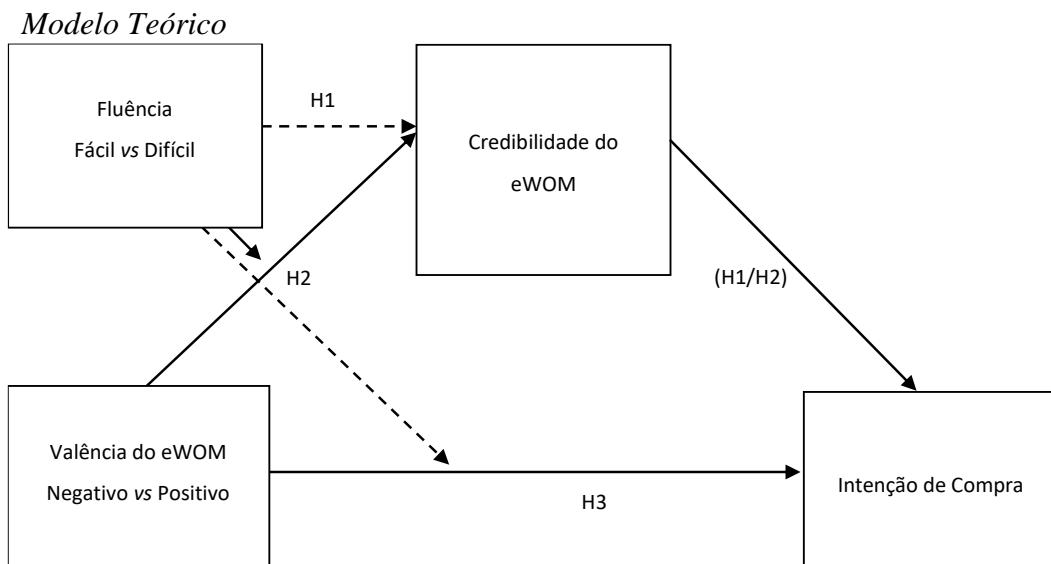


positivas resultaria em mais inconsistências (erros de recordação) (Brewin & Langley, 2018), mas, também estaria associado à maior confiança (Kensinger, 2009), sentir-se “mais seguro” (Lazarus, 1991) e com um relaxamento de controle inibitório (Rowe, Hirsh & Anderson, 2007), aumentando o valor percebido, a confiabilidade na informação e a decisão (Sohn, 2009; Hartman *et al.*, 2013; Kim *et al.*, 2016). Além disso, avaliações positivas seriam mais rápidas e espontâneas e, relativamente mais automáticas, levando a decisões de menor qualidade e mais tendenciosas (Herr & Page, 2004; Herr, Page, Pfeiffer & Davis, 2012). Em suma, faria com que os indivíduos se concentrassem menos em detalhes, deliberassem menos e aumentassem o uso de esquemas ou heurísticas (Rowe *et al.*, 2007). Portanto, esperamos que a disfluência não afete significativamente a credibilidade do eWOM positivo — e, portanto, não afete as intenções de compra. Portanto: **H3: A disfluência NÃO diminuirá a credibilidade do eWOM positivo, portanto, os eWOMs positivos influenciarão diretamente as intenções de compra.**

3 Procedimentos metodológicos

Dois experimentos (com amostragem não probabilística por conveniência e sujeitos aleatoriamente designados nas condições) foram desenvolvidos para testar as hipóteses (Figura 1 – Modelo Teórico). Os indivíduos foram convidados a participar por e-mail e redes sociais. Os *designs* e procedimentos são apresentados dentro de cada experimento.

Figura 1



5.1 Experimento 1

Procedimentos: o experimento 1 consistiu em um *single factor* (eWOM Positivo vs Negativo), moderado pela dificuldade percebida em ler um eWOM. 102 indivíduos completaram um questionário *on-line* no Qualtrics, e 101 foram considerados válidos (37.6% homens, $M_{idade} = 28,16$ anos, $DP = 9,03$) (um indivíduo foi excluído porque leu o eWOM muito rápido, <10s). Depois de uma breve explicação sobre o estudo, os indivíduos responderam questões sociodemográficas e leram o eWOM fictício. Este consistia em um relato de compra na loja fictícia “O Fundador”. No cenário positivo, o consumidor recebeu o livro errado, fez uma reclamação e o problema foi resolvido rapidamente. No cenário negativo, o cliente recebeu o livro errado, fez uma reclamação e, semanas depois, o problema não havia sido resolvido.

Figura 2

Experimento 1 – Cenários de eWOM Positivo e Negativo

<p>Olá, comprei um livro de nome “Caroline” na versão de colecionador, com capa dura e maior, no site da Livrarias O Fundador. Porém, quando recebi o pedido, percebi que na verdade era a versão econômica, com as páginas de folhas mais simples, sem capa dura e menor. Entrei no site da loja através do chat para avisar e procurar resolver, mas a atendente falou que o produto chegou de acordo com o pedido e valor pago, em seguida me mandou um link mostrando o livro em capa dura (que era o que pensei ter comprado) porém com um valor semelhante mas acima do meu. Ou seja, ela entendeu meu problema onde na verdade eu havia feito a compra de forma incorreta e me deu opção de realizar a troca pagando apenas a diferença.</p> <p>Enquanto eu a aguardava para realizar os procedimentos do processo de troca, a atendente me informou que falou com o pessoal a respeito da minha coleção e que diante disso eles assumiriam o prejuízo da compra, realizando a troca dos meus livros sem a necessidade do pagamento da diferença para a versão do livro que eu queria. Ela falou que eu receberia um e-mail com os códigos do correio para reenvio do produto que recebi e após receber o e-mail, encerramos o atendimento.</p> <p>Por fim, depois desse excelente atendimento, meu pedido chegou, fazem 10 dias que estou desfrutando de uma leitura maravilhosa. Já liguei na central agradecendo pelo atendimento prestado e afirmando que continuarei comprando com a loja.</p>	<p>Olá, comprei um livro de nome “Caroline” na versão de colecionador, com capa dura e maior, no site da Livrarias O Fundador. Porém, quando recebi o pedido, percebi que na verdade era a versão econômica, com as páginas de folhas mais simples, sem capa dura e menor. Entrei no site da loja através do chat para avisar e procurar resolver, mas a atendente falou que o produto chegou de acordo com o pedido e valor pago, em seguida me mandou um link mostrando o livro em capa dura (que era o que eu comprei) porém com um valor bem maior. Ou seja, ela não entendeu minha reclamação, não é que eu não havia gostado da qualidade, eu simplesmente não recebi o livro com a qualidade que comprei. Se eles erraram na hora de colocar o preço, a culpa não é minha.</p> <p>Depois de insistir muito, ela me disse que falou com o pessoal e que houve sim um problema no site com a especificação e com o produto e que fariam a minha troca. Ela não me passou muita credibilidade mas tudo bem, seguimos com as orientações de troca. Ela falou que eu receberia um e-mail com os códigos do correio para reenvio do produto que veio errado e então encerramos o atendimento.</p> <p>Por fim, depois desse péssimo atendimento, meu pedido está atrasado, fazem 10 dias que estou aguardando e nada. Já liguei na central pedindo o código de rastreio, porém me informaram que esse código não existe e ninguém resolve nada.</p>
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Todos leram um eWOM (positivo ou negativo) com letras cinzas em um fundo preto (Figura 2) baseado em Alter e Oppenheimer (2009) (semelhante ao tema “Escuro/Dark Theme” de smartphones e computadores) para produzir uma amplitude de disfluência (fácil – difícil), como resultados de pré-testes (resultados dos pré-testes também indicaram que indivíduos que já utilizam configurações semelhantes perceberam a tarefa como mais fácil). Em seguida, eles responderam se, quando necessário, comprariam um livro da livraria “O Fundador” (intenção de compra, “INT”: 1 — Certamente NÃO / 10 — Certamente SIM) e responderam a escala de



credibilidade global (Cheung *et al.*, 2007; Akyüz, 2013) (“Acredito que este comentário *on-line* é uma fonte de informação confiável.” / “Acredito que este comentário *on-line* é uma importante fonte de informação.” / “Acredito que o comentário *on-line* que li é escrito sob responsabilidade”) (1 — Discordo Totalmente / 10 — Concordo Totalmente). Por último, avaliaram a dificuldade de leitura (“Quão difícil foi para você ler o post/comentário? 1 — Muito fácil / 10 — Muito difícil) e checagens dos cenários (avaliação geral do comentário/eWOM: 1 — Muito negativo / 10 — Muito positivo; compreensão geral do comentário/eWOM: 0 — O problema foi resolvido, 1 — O problema foi parcialmente resolvido / 2 — Não foi resolvido).

Checagens: testes *t* independentes revelaram que indivíduos no cenário Positivo tiveram uma percepção mais positiva do eWOM ($t(1,99)=11,883 p<0,001$, $M_{positivo}=8,10 DP=1,74$, $M_{negativo}=3,52 DP=2,12$). Os cenários não impactaram a percepção geral de dificuldade ($t(1,99)=0,150 p=0,881$, $M=2,91 DP=2,040$). Não houve efeitos diretos ou de interação sobre o tempo de leitura (todos $p>0,609$), e tampouco de compreensão do eWOM (todos $p>0,170$).

Resultados: as primeiras análises de regressões indicaram que quanto maior a dificuldade percebida de ler o eWOM menor era a sua credibilidade percebida (Alpha de Cronbach = 0,847) ($F(1,99)=8,757 p=0,004 r=-0,285$). Ainda, um teste inicial de mediação da credibilidade do eWOM indicou uma interação com a valência do cenário ($F(1,97)=14,9787 p<0,001$), em que a maior credibilidade do eWOM negativo diminuía a intenção de compra (INT) ($r=-0,530 p<0,001$), mas sem efeitos significativos da credibilidade na INT no cenário positivo ($r=+0,194 p=0,173$). Ainda que corroborasse H1, isso demonstrou a necessidade de dividir a amostra de acordo com a valência dos eWOMs para testar os efeitos indiretos.

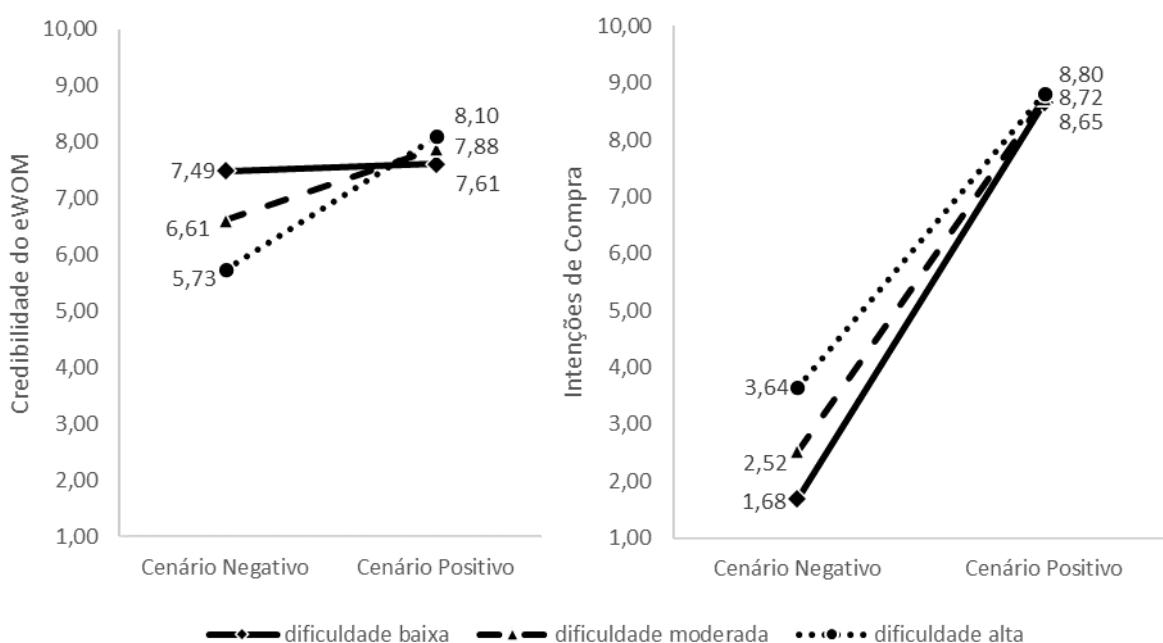
Análises (PROCESS_3.5.3: Modelo 1, Bootstrapping 10.000, Hayes, 2018) indicaram ($R^2=0,7430$) que a INT era impactada positivamente pela dificuldade de ler (Coeff=+0,2461 $p=0,0479$ LLCI=+0,0023 ULCI=+0,4900), pelos cenários de eWOM (Negativo=0, Positivo=1) (Coeff=+7,1378 $p<0,0001$ LLCI=+5,8671 ULCI=+8,4084) e sua interação (Coeff=-0,3697 $p=0,0432$ LLCI=-0,7279 ULCI=-0,0115, incremento do $R^2 =0,0432$). Análises de efeitos condicionais indicaram que a disfluência (dificuldade de ler) aumentava significativamente as intenções de compra no cenário de eWOM negativo (Coeff=+0,2461 $p=0,0479$ LLCI=+0,0023 ULCI=+0,4900), mas não impactava a INT no cenário positivo (Coeff =-0,1236 $p=0,3523$ LLCI=-0,3859 ULCI=+0,1388). Ainda, houve uma interação significativa dos fatores no tempo de decisão (responder INT) (Coeff=-2,0558 $p=0,0344$ LLCI=-3,9577 ULCI=-0,1540), indicando que a dificuldade de ler o eWOM negativo fez com que indivíduos deliberassem por

mais tempo ($\text{Coeff}=+3,1404 \ p<0,0001 \ \text{LLCI}=+1,8457 \ \text{ULCI}=+4,4351$), mas sem efeito significativo no cenário positivo ($\text{Coeff}=+1,0846 \ p=0,1256 \ \text{LLCI}=-0,3086 \ \text{ULCI}=+2,4777$).

Em seguida foram testados os efeitos indiretos da credibilidade percebida do eWOM (Alpha de Cronbach = 0,847) na INT (PROCESS_3.5.3: Modelo 4, Bootstrapping 10.000, Hayes, 2018) dividindo a amostra de acordo com os cenários. Análises dentro do cenário de eWOM negativo indicaram que a credibilidade foi afetada pela dificuldade de ler ($R^2=0,1550$, $\text{Coeff}=-0,3435 \ p=0,0047 \ \text{LLCI}=-0,5762 \ \text{ULCI}=-0,1108$). Corroborando com H2, a credibilidade teve um efeito indireto significativo na INT ($R^2=0,2849$ — efeito 0,1821 BootLLCI=+0,0057 BootULCI=+0,4308) indicando que, quanto maior a credibilidade, menor era INT ($\text{Coeff}=-0,5303 \ p=0,0005 \ \text{LLCI}=-0,8151 \ \text{ULCI}=-0,2454$) (efeitos diretos da dificuldade de ler $p=0,6068$). Análises no cenário de eWOM positivo indicaram que a credibilidade não foi influenciada pela dificuldade de ler ($R^2=0,0336$, $\text{Coeff}=-0,1712 \ p=0,1453 \ \text{LLCI}=-0,4038 \ \text{ULCI}=+0,0613$). Corroborando H3, não houve efeitos indiretos significativos na INT ($R^2=0,0477$ — efeito -0,0319 BootLLCI=-0,1257 BootULCI=+0,0448). Ainda, a INT não foi impactada pela credibilidade ($p=0,2360$) ou dificuldade de leitura ($p=0,4802$).

Figura 3 e 4

Experimento 1 – Efeitos da (Dis)Fluência e Valência do eWOM na Credibilidade do eWOM e Intenções de Compra



Discussão: Encontramos suporte inicial para as hipóteses. Em geral, a credibilidade do eWOM foi influenciada pela dificuldade percebida, mas significativamente apenas no cenário negativo — resultando em um efeito indireto na INT (figura 3 e 4). Isso ocorreu devido à dificuldade percebida, com ambos eWOMs com argumentos sólidos e consistência de fatos (Park *et al.*, 2007; Lee, 2009; Sussman & Siegal, 2014), com evidências e características/conteúdo similares (parágrafo/frases/tamanho) (Li & Zhan, 2011). Como limitações, apesar de uma simples avaliação negativa poder induzir intenções de compra baixas (Park, Shin & Xie, 2021), alguns indivíduos podem ter considerado apenas uma avaliação menos persuasiva, diminuindo seu valor informacional, buscando então múltiplas evidências (Kim & Gupta, 2012) e consenso que poderia afetar a credibilidade (Hartman *et al.*, 2013). Também, muitas decisões de compra são baseadas em empresas sobre as quais os consumidores teriam pouco conhecimento prévio, afetando as intenções de compra. Mais importante, testamos os efeitos usando apenas a dificuldade percebida — não manipulando as condições de (Dis)fluência. Assim, em seguida, utilizamos manipulações de (Dis)Fluência Perceptiva, mas também de (Dis)Fluência Conceitual para demonstrar que o efeito não é simplesmente baseado na “aparência da web” ou legibilidade, mas na dificuldade de processar seus significados.

5.2 Experimento 2

O objetivo do experimento 2 foi buscar resultados congruentes com o experimento 1 e resolver suas limitações. Neste os indivíduos responderam um questionário similar sobre a empresa AliExpress (um *marketplace* chinês que vende produtos no Brasil). Nós evitamos marcas muito conhecidas (como Amazon) porque as pessoas podem ter comprado diversas vezes ou mesmo ter opiniões prévias muito fortes e/ou extremas.

Procedimentos: o experimento 2 apresentou um *design* fatorial 2 ((Dis)Fluência: tarefa “Fácil” vs “Difícil”) x 2 (eWOMs Positivos vs Negativos) x 2 (tipo de (Dis)Fluência: Conceitual vs Perceptiva). 290 indivíduos foram considerados válidos ao completar um questionário do Qualtrics (34,5% homens, $M_{idade} = 27,89$ anos, $DP = 8,23$). Primeiro, foram aleatoriamente designados a um dos dois tipos de (Dis)Fluência (Conceitual ou Perceptiva) e depois, para uma das quatro condições. Todos leram 12 eWOMs (12 positivos ou 12 negativos — baseados em eWOMs reais sobre a Amazon) com narrativas similares, controlando a quantidade básica de fatos, parágrafos, tamanho, *etc.* A (Dis)Fluência conceitual foi manipulada ao solicitar, depois da leitura dos eWOMs (fonte *Times New Roman*, com boa impressão), que recordassem e escrevessem 6 fatos — tarefa fácil (vs 12 fatos — tarefa difícil) dos 12 eWOMs previamente



apresentados (adaptado de Schwarz *et al.*, 1991; Aarts & Dijketrhuis, 1999; Haddock, 2002). A (Dis)Fluência perceptiva foi manipulada diretamente na apresentação dos eWOMs (tarefa de leitura). Os participantes na tarefa fácil leram 12 eWOMs (fonte *Times New Roman*) com boa impressão, enquanto na tarefa de difícil os 12 eWOMs estavam borradinhos (Schwarz, 2004) e em negrito (Diemand-Yauman *et al.*, 2011) (pré-testes indicaram aumento significativo de dificuldade apenas com as duas manipulações em conjunto). Ainda, para garantir maior realismo foi adicionada uma classificação por “estrelas”. Em geral, comentários positivos tiveram quatro ou cinco estrelas, enquanto comentários negativos com uma ou duas estrelas (exemplos na Figura 5). Em seguida, os procedimentos do experimento 1 foram adaptados. Perguntamos sobre a atenção geral quanto liam os eWOMs, a compreensão percebida e, no final no questionário, sua percepção geral prévia com a empresa AliExpress (1 — Muito negativa/ 10 — Muito positiva).

Figura 5

Experimento 2 – Exemplos de eWOMs Positivo/Fluente e Negativo/Disfluente



Checagens: testes *t* independentes indicaram que indivíduos no cenário Positivo tiveram uma percepção mais positiva dos eWOMs ($t(1,288)=37,803 p<0,001$, $M_{positivo}=8,89$ DP=1,47, $M_{negativo}=1,87$ DP=1,69) e, a Disfluência aumentou a percepção de dificuldade da tarefa (leitura/perceptiva ou recordação/conceitual) ($t(1,288)=3,998 p<0,001$, $M_{difícil}=5,01$ DP=2,71, $M_{fácil}=3,78$ DP=2,53). Testes ANOVA de três fatores não indicaram efeitos na atenção (todos $p>0,200$), e que apenas o cenário positivo teve um pequeno incremento na compreensão ($F(1,282)=8,570 p=0,004 \eta_p^2=0,029$ / $M_{positivo}=5,33$ DP=1,65, $M_{negativo}=4,78$ DP=1,70). O tempo para ler os eWOMs foi menor no cenário positivo ($F(1,282)=4,520 p=0,034 \eta_p^2=0,016$ / $M_{positivo}=153,92s$ DP=60,27, $M_{negativo}=169,58s$ DP=69,59), e também ao decidir na INT ($F(1,282)=4,318 p=0,039 \eta_p^2=0,016$ / $M_{positivo}=12,08s$ DP=6,83, $M_{negativo}=13,98s$ DP=8,14) (demais $p=ns.$). Ainda, análises indicaram uma interação significativa do tempo de decisão (em INT) e da valência dos eWOMs ($R^2=0,3604, p=0,0180$) em que aqueles no cenário de eWOMs negativos que tomaram mais tempo para decidir tiveram intenções de compra maiores

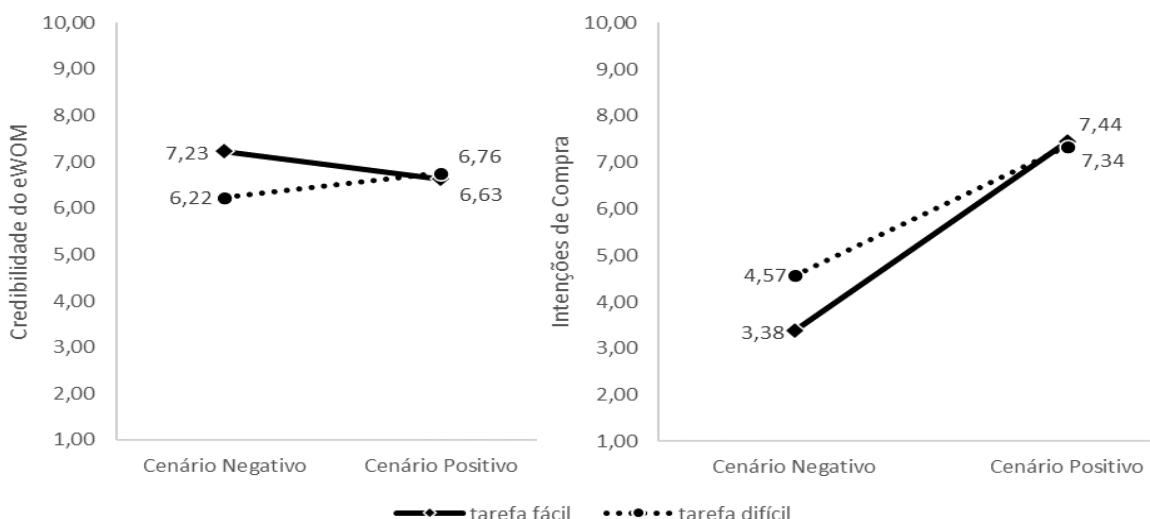
($M_{18,53s}=4,09$, $M_{7,62s}=3,71$), enquanto aqueles no cenário de eWOM positivo que tomaram mais tempo para decidir tiveram menores intenções de compra ($M_{18,53s}=7,05$, $M_{7,62s}=7,63$).

Resultados: uma ANCOVA de três fatores (covariável: percepção prévia da AliExpress $p=0,087$ $\eta_p^2=0,010$) indicou uma interação significativa entre a (Dis)Fluência e os cenários de eWOM ($F(1,281)=8,036$ $p=0,005$ $\eta_p^2=0,028$) sobre a credibilidade dos eWOMs (Alpha de Cronbach = 0,821) (demais interações $p>0,156$). O resultado também indicou que a Disfluência diminuiu significativamente a credibilidade dos eWOMs ($F(1,281)=4,119$ $p=0,043$ $\eta_p^2=0,014$ $CRED_{difícil}=6,49$ DP=1,82 / $CRED_{fácil}=6,92$ DP=1,74) (demais efeitos diretos ns.) corroborando inicialmente H1. Foram verificadas diferenças significativas apenas dentro do cenário negativo ($p=0,001$, $M_{difícil}=6,22$ DP=1,86, $M_{fácil}=7,23$ DP=1,52) (cenário positivo $p=0,567$, $M_{difícil}=6,76$ DP=1,64, $M_{fácil}=6,63$ DP=1,88) (Figura 6) também corroborando inicialmente H2 e H3.

Uma ANCOVA de três fatores (covariável: percepção prévia da AliExpress $p<0,001$ $\eta_p^2=0,307$) indicou uma interação significativa entre a (Dis)Fluência e os Cenários ($F(1,281)=6,481$ $p=0,011$ $\eta_p^2=0,023$) sobre a INT (demais interações $p>0,413$). O resultado também indicou uma maior INT para o cenário de eWOM positivo ($F(1,281)=152,087$ $p<0,001$ $\eta_p^2=0,351$ $INT_{positivo}=7,39$ DP=2,19 / $INT_{negativo}=3,94$ DP=2,58). A Disfluência impactou positivamente a INT no cenário de eWOM negativo ($p=0,001$, $M_{difícil}=4,57$ DP=2,48, $M_{fácil}=3,38$ DP=2,56), mas sem diferenças significativas no cenário de eWOM positivo ($p=0,878$, $M_{difícil}=7,34$ DP=2,08, $M_{fácil}=7,44$ DP=2,24), também corroborando H2 e H3.

Figura 6 e 7

Experimento 2 – Efeitos da (Dis)Fluência e Valência dos eWOMs na Credibilidade do eWOM e Intenções de Compra



Novamente, um primeiro teste de mediação indicou uma interação com os cenários ($F(1,285)=60,4718 p<0,001$). Regressão lineares controlando a percepção prévia da empresa ($p<0,001$) indicaram que, a maior credibilidade percebida dos eWOMs negativos reduzia a INT ($r=-0,460 p<0,001$) e a maior credibilidade dos eWOMs positivos aumentava a INT ($r=+0,218 p<0,001$). Isso indicou a necessidade de dividir a amostra de acordo com os cenários para testar os efeitos indiretos da Credibilidade dos eWOMs (Alpha de Cronbach = 0,821) sobre a INT. As análises (PROCESS_3.5.3: Modelo 8, Bootstrapping 10.000, Hayes, 2018) para o cenário de eWOM negativo indicaram que a credibilidade foi afetada significativamente apenas pela dificuldade da tarefa (leitura/perceptiva ou recordação/conceitual) ($R^2=0,1092$, Coeff=-1,7369 $p=0,0491$ LLCI=-3,4665 ULCI=-0,0072) (percepção prévia da AliExpress Coeff=-0,1170 $p=0,0830$ LLCI=-0,2496 ULCI=+0,0155). Corroborando H2, a credibilidade teve efeitos indiretos significativos sobre a INT ($R^2=0,4184$) (Perceptiva: efeito=0,7826 BootLLCI=+0,2320 BootULCI=+1,4268, Conceitual: efeito=0,4660 BootLLCI=+0,0002 BootULCI=+1,0107) indicando que, quanto maior a credibilidade, menor era a INT (Coeff=-0,6329 $p<0,0001$ LLCI=-0,8336 ULCI=-0,4322) no cenário de eWOMs negativos (percepção prévia da AliExpress Coeff=+0,4716 $p<0,0001$ LLCI=+0,3118 ULCI=+0,6313) (demais $p>0,6500$). Análises dentro do cenário de eWOMs positivos indicaram que a credibilidade foi afetada significativamente apenas pela percepção prévia da AliExpress ($R^2=0,1178$, Coeff=+0,2488 $p=0,0001$ LLCI=+0,1232 ULCI=+0,3745) (demais $p>0,2950$). Ainda que a credibilidade aumentasse significativamente a INT ($R^2=0,4839$) (Coeff=+0,2632 $p=0,0008$ LLCI=+0,1120 ULCI=+0,445), não foram verificados efeitos indiretos significativos (Perceptiva: efeito= -0,0330 BootLLCI=-0,2847 BootULCI=+0,1907, Conceitual: efeito= 0,1264 BootLLCI=-0,0647 BootULCI=+0,3905) corroborando H3 (percepção prévia da AliExpress Coeff=+0,5694 $p<0,0001$ LLCI=+0,4487 ULCI=+0,6900) (demais $p>0,5800$).

6 Discussão geral

Os resultados de ambos os experimentos corroboraram as hipóteses, mas devem ser feitos apontamentos. Primeiro, os resultados sobre a credibilidade e INT corroboram estudos anteriores. Aqui o eWOM também foi percebido como confiável e foi aceito por pessoas sem contato anterior (Dellarocas, 2003; Park, Lee & Han, 2007), pois acreditavam estar recebendo informações com responsabilidade e imparciais (Hennig-Thurau *et al.*, 2004). No entanto, apesar de termos encontrado apenas efeitos indiretos da credibilidade do eWOM negativos em INT, no geral, a credibilidade impactou a INT (Verma & Dewani, 2020). Assim, se os eWOMs



em geral podem ser facilmente obtidos, reduzindo os riscos de decisão (Goldsmith & Horowitz, 2006; Brown *et al.*, 2007; Sohn, 2009) por si só pode induzir credibilidade. Os resultados também mostraram uma tendência de a Fluência intensificar os efeitos do que está sendo interpretado (Landwehr *et al.*, 2017). Ainda, foram encontradas deliberações mais rápidas em cenários de eWOMs positivos. Indivíduos que deliberaram mais rapidamente intensificaram a influência dos eWOMs, enquanto aqueles que deliberaram por mais tempo diminuíram os seus. Ao perceber a facilidade (vs dificuldade) os indivíduos não teriam que lidar com inconsistências ou novas interpretações (Bajšanski, Žauhar & Valerjev, 2019), estimulando a manutenção de crenças anteriores, gerando excesso de confiança e intensificando seus efeitos em decisões (Claypool *et al.*, 2015; Landwehr *et al.*, 2017). Mas, é importante dizer que, apesar desses resultados congruentes, aqui demonstramos que a credibilidade dos eWOMs positivas (e INT) não foi afetada de forma significativa pela Disfluência por causa do viés de informações positivas e do uso de heurísticas (Rowe *et al.*, 2007; Herr, Page, Pfeiffer & Davis, 2012).

7 Considerações finais

Dois estudos demonstraram os efeitos da disfluência perceptual na credibilidade dos eWOMs (evidência convergente com Garcia-Marques *et al.*, 2016; Parks & Toth, 2006; Reber & Schwarz, 1999; Silva *et al.*, 2016) e subsequente INT — com efeito indireto para eWOM negativo e viés direto para eWOM positivo. O eWOM do 1º e os 12 eWOMs do 2º experimento forneceram argumentos sólidos, fatos e consistência (Park *et al.*, 2007; Lee, 2009; Sussman & Siegal, 2014), mantendo características constantes (como parágrafo/frase/comprimento — Li & Zhan, 2011), mas, mesmo assim, foram impactados pela Disfluência. Ainda, o experimento 2 demonstrou que: esse efeito não foi causado pela simples legibilidade, ao também testar os efeitos da (Dis)Fluência Conceitual; a disfluência diminuiu a credibilidade dos eWOMs, mesmo com múltiplas evidências (Kim & Gupta, 2012) e consenso de que deveria aumentar a credibilidade (Hartman *et al.*, 2013). Corroborando as hipóteses, eWOMs positivos induziram decisões mais automáticas (menor tempo de deliberação), enquanto aqueles com Disfluência no cenário Negativo precisaram de mais tempo para avaliar as intenções de compra.

Os resultados foram alcançados com manipulações (conceituais e perceptivas) previamente validadas, semelhantes às encontradas na *internet*, mesmo sem que gestores e usuários percebessem. Na primeira, ao alterar as cores de fundo branco e fonte preta, para fundo preto e fonte cinza (como em Alter & Oppenheimer, 2009), semelhante ao que chamamos de “Dark Mode” (ou “tema escuro”) de *smartphones* e computadores (opções semelhantes também



em computadores com iOS/Apple e Windows). Para economizar bateria, muitos usuários estão começando a mudar o fundo para preto (ou cores escuras) e usar fontes de cores mais escuras. Enquanto, em geral, a mídia de tecnologia tende a dizer que é “mais agradável aos olhos” (TECHNOBLOG.NET, 2021), alguns usuários podem estar se automanipulando a Disfluência, mas também auto adaptando com o tempo (Schwarz *et al.*, 2020).

Dessa forma, foi possível contribuir para a teoria demonstrando que informações fornecidas por outros (eWOMs) alteram o efeito simétrico geral da (dis)fluência para avaliações negativas e positivas (Scharz, 2004; Haddock, 2002). E, não só a (dis)fluência pode impactar a credibilidade (se pensarmos no efeito geral sobre a percepção da verdade — Silva *et al.*, 2016), mas impacta a credibilidade do eWOM de forma diferente de acordo com sua valência.

Apesar dos resultados, algumas limitações devem ser apontadas. Foi usada uma abordagem experimental com amostras relativamente pequenas, portanto, outros estudos com diferentes abordagens e/ou com colaboração de *sites* de vendas podem coletar (e testar) bancos de dados reais e maiores. Por exemplo, *sites* de vendas como a Amazon, que já possuem avaliações positivas/negativas podem fazer testes A/B de (dis)fluência. Outra limitação pode ser encontrada no segundo experimento, quando duas manipulações de (Dis)fluência precisaram ser usadas (fontes borradas — Schwarz, 2004; e em negrito — Diemand-Yauman *et al.*, 2011). Mas, estudos semelhantes também usaram combinações; Miele e Molden (2010) usaram a fonte *Juice ITC* em itálico para disfluência. E, embora essa combinação possa parecer muito agressiva, “peculiar” ou difícil de acontecer, a escrita de eWOMs semelhantes pode ser identificada no Facebook e no Instagram, onde os usuários podem usar fontes em negrito e até “brincar” com a forma como as frases são apresentadas para serem assustadoras ou parecer “legal” — tornando a leitura muito mais difícil. De fato, os resultados aqui indicam que esse padrão (aumento da disfluência/dificuldade) pode ser incentivado pelas empresas.

A Disfluência Perceptiva pode ser manipulada de várias formas que já podem estar induzindo esses efeitos (textos em itálico — Miele & Moden, 2010; Diemand-Yauman *et al.*, 2011; letras pequenas — Su *et al.*, 2018; verde/amarelo claro ou, fontes azuis sobre fundo branco — Reber & Schwarz, 1999; fontes *Brusch*, *Juice ITC* ou *Mistral* — Song & Schwarz, 2008; Miele & Molden, 2010). Resultados semelhantes poderiam ser encontrados solicitando aos revisores que inserissem palavras-chave mais técnicas (Oppenheimer, 2004) — já verificado em *sites* de resenhas e *blogs* especializados. Contra intuitivamente, os resultados indicam que um eWOM negativo escrito com fontes em negrito, frases/parágrafos longos

(descrição completa) e com muitas palavras técnicas terá menos impacto devido à sua disfluência (mas não afetará significativamente os eWOMs positivos).

Apesar dos resultados das hipóteses, aqui a valência dos eWOMs teve a maior influência nas intenções de compra. Assim, mesmo que a disfluência possa começar a induzir mudanças nas decisões de compra, a maior parte do efeito ainda é baseada na qualidade e melhores serviços que levariam à satisfação/insatisfação e eWOMs positivos/negativos (Oliver, 2010).

Embora tenhamos manipulado a (Dis)Fluência, estudos futuros também podem verificar o impacto da dificuldade percebida relacionada a diferentes níveis educacionais ou efeitos da idade no excesso de confiança (Mendes-da-Silva & Yu, 2009). Além disso, testes podem ser feitos para observar se pessoas com nomes mais fáceis de pronunciar — que podem induzir maior veracidade percebida das afirmações (Newman *et al.*, 2014) — afetarão significativamente a credibilidade do eWOM. Ainda, Lee (2009) verificou que a qualidade percebida do eWOM teria mais influência nos consumidores com alto envolvimento, enquanto a quantidade de eWOMs influenciaria mais os consumidores com baixo envolvimento.

Ao analisarmos os efeitos com base nas diferentes valências/cenários dos eWOM utilizados, outras limitações devem ser mencionadas. As hipóteses foram testadas usando eWOMs de pessoas com quem os consumidores não tiveram contato anterior (Dellarocas, 2003). Então, os resultados seriam válidos para eWOMs negativos disfluentes de amigos próximos, familiares ou outras pessoas com laços fortes? Possivelmente, a percepção de veracidade e a credibilidade da fonte seriam maiores, sustentando o impacto negativo do eWOM negativo. Adicionalmente como limitação, usamos apenas uma valência para cada cenário, mas é comum encontrarmos tanto informações positivas quanto negativas (Chatterje, 2001). Outros estudos (Moran & Muzellec, 2017; Hartman *et al.*, 2013) revelaram que o *mix* e o consenso do eWOM podem melhorar a aceitação dos eWOMs e, portanto, potencialmente impactar nossos resultados. Além disso, os efeitos sobre a intenção de compra podem diferir em diferentes setores, produtos (indústria) e tipos de serviços alterando esses resultados.

Semelhante a Schwarz *et al.* (2020), pensamos que esses resultados também podem ser usados contra notícias falsas. *Fake news* são notícias, informações ou artigos falsos que simulam conteúdo credível com efeitos negativos que enganam os leitores (Allcott & Gentzkow, 2017; Lazer *et al.*, 2018). Hoje, as mídias sociais são o principal motor de notícias falsas, principalmente Facebook e Twitter por seu grande número de usuários e capilaridade (Allcott & Gentzkow, 2017; Lazer *et al.*, 2018). Seria interessante testar os efeitos da (Dis)Fluência em notícias falsas com conteúdo positivo (falso endosso ou apoio com fatos ou



argumentos falsos) ou conteúdo negativo (falsas acusações depreciativas). Além disso, se a Disfluência pode afetar a credibilidade do eWOM, pode ajudar a prevenir as chamadas “tempestades online” (Rost *et al.*, 2016) que disseminam rapidamente conteúdo negativo (real ou falso) sobre uma ideia, produto, marca ou pessoa (Visentin *et al.*, 2019; Wu *et al.*, 2020). No entanto, é importante pensar que essa valência “positiva” ou “negativa” pode depender das crenças prévias (Lazer *et al.*, 2018). Nesta linha, Pennycook *et al.* (2018) já avaliaram que *fake news* fluentes tem maior credibilidade, então, talvez possamos tornar as *fake news* menos críveis induzindo disfluência. Mesmo com pequenos efeitos, pode ajudar.

Contribuições dos autores

Contribuição	Viacava, J.J.C.	Andrade, G.K.M.	Lima, Y.A.
Contextualização	X	X	X
Metodologia	X	X	X
Software	X	X	X
Validação	X	X	X
Análise formal	X	X	X
Investigação	X	X	X
Recursos	X	X	X
Curadoria de dados	X	----	----
Original	X	X	X
Revisão e edição	X	X	X
Visualização	X	X	X
Supervisão	X	-----	-----
Administração do projeto	X	-----	-----
Aquisição de financiamento	X	-----	-----

Referências

- Aarts, H., & Dijksterhuis, A. (1999). How often did I do it? Experienced ease of retrieval and frequency estimates of past behavior. *Acta Psychologica*, 103(1-2), 77-89.
[https://doi.org/10.1016/S0001-6918\(99\)00035-9](https://doi.org/10.1016/S0001-6918(99)00035-9)
- Agnihotri, R., Dingus, R., Hu, M.Y., & Krush, M. (2016). Social media: Influencing customer satisfaction in B2B sales. *Industrial Marketing Management*, 53, 172–180.
<https://doi.org/10.1016/j.indmarman.2015.09.003>
- Alter, A.L., Oppenheimer, D. M., Epley, N., & Eyre, R. N. (2007). Overcoming intuition: Metacognitive difficulty activates analytic reasoning. *Journal of Experimental Psychology: General*, 136(4), 569-576. <https://doi.org/10.1037/0096-3445.136.4.569>



- Alter, A.L., & Oppenheimer, D.M. (2008). Easy on the mind, easy on the wallet: The roles of familiarity and processing fluency in valuation judgments. *Psychonomic Bulletin & Review*, 15(5), 985-990. <https://doi.org/10.3758/PBR.15.5.985>
- Alter, A.L., & Oppenheimer, D.M. (2009). Uniting the tribes of fluency to form a metacognitive nation. *Personality and Social Psychology Review*, 13(3), 219-235. <https://doi.org/10.1177/1088868309341564>
- Alter, A.L. (2013). The benefits of cognitive disfluency. *Current Directions in Psychological Science*, 22(6), 437–442. <https://doi.org/10.1177/0963721413498894>
- Allcott, H., & Gentzkow, M. (2017). Social media and fake news in the 2016 election. *Journal of Economic Perspectives*, 31(2), 211-236. <https://doi.org/10.1257/jep.31.2.211>
- Aydin, A.E. (2016). Processing fluency: Examining its relationship with thinking style and purchase intention, *Journal of Marketing Communications*, 24(6), 588-598. <https://doi.org/10.1080/13527266.2016.1167765>
- Balaji, M.S., Khong, K.W. & Chong, A.Y.L (2016). Determinants of negative word-of-mouth communication using social networking sites. *Information & Management*, 53, 528–540. <https://doi.org/10.1016/j.im.2015.12.002>
- Bajšanski, I., Žauhar, V., & Valerjev, P. (2019). Confidence judgments in syllogistic reasoning: The role of consistency and response cardinality, *Thinking & Reasoning*, 25(1), 14-47. <https://doi.org/10.1080/13546783.2018.1464506>
- Bowen, H. J., Kark, S. M. & Kensinger, E. A. (2018). NEVER forget: Negative emotional valence enhances recapitulation. *Psychonomic Bulletin & Review*, 25(3), 870-891. <https://doi.org/10.3758/s13423-017-1313-9>
- Bookbinder, S. H., & Brainerd, C. J. (2017). Emotionally negative pictures enhance gist memory. *Emotion*, 17(1), 102-119. <https://doi.org/10.1037/emo0000171>
- Brewin, C. R., & Langley, K. M. R. (2009). Imagery retrieval may explain why recall of negative scenes contains more accurate detail. *Memory & Cognition*, 47(3), 420-427. <https://doi.org/10.3758/s13421-018-0876-7>
- Brown, J.; Broderick, a. J. E, Lee, N. (2007). Word of mouth communication within on-line communities: conceptualizing the on-line social network. *Journal of Interactive Marketing*, 21(3), 2-20. <http://dx.doi.org/10.1002/dir.20082>
- Chen, Y., Yang, S., & Wang, Z. (2016). Service cooperation and marketing strategies of Infomediary and online retailer with eWOM effect. *Information and Technology Management* 17(2), 109-118. <http://dx.doi.org/10.1007/s10799-015-0237-1>
- Cheung, M. Y., Luo, C., Sia, C. L., & Chen, H. (2009). Credibility of electronic word-of-mouth: Informational and normative determinants of online consumer recommendations, *International Journal of Electronic Commerce*, 13(4), 9-38. <https://doi.org/10.2753/JEC1086-4415130402>



- Cheung, M.Y; Chuan, L.; Sia, C.L. & Huaping, C. (2007). How do People Evaluate Electronic Word-Of-Mouth? Informational and Normative Based Determinants of Perceived Credibility of Online Consumer Recommendations in China. *Pacific Asia Conference on Information Systems 2007*, Sections 1-6. Natl sun yat-sen univ, 2007. <https://aisel.aisnet.org/pacis2007/18/>
- Claypool, H. M., Mackie, D. M., & Garcia-Marques, T. (2015). Fluency and attitudes. *Social and Personality Psychology Compass*, 9(7), 370–382. <https://doi.org/10.1111/spc3.12179>
- Constable, M. D., Bayliss, A. P., Tipper, S. P., & Kritikos, A. (2013). Self-generated cognitive fluency as an alternative route to preference formation. *Consciousness and Cognition*, 22(1), 47–52. <https://doi.org/10.1016/j.concog.2012.11.006>
- Dellarocas, C. (2003). The digitization of word of mouth: promise and challenges of online feedback mechanisms. *Management Science*, 49(10), 1407-1424. <http://dx.doi.org/10.1287/mnsc.49.10.1407.17308>
- Diemand-Yauman, C., Oppenheimer, D. M., & Vaughan, E. B. (2011). Fortune favors the BOLD (and the Italicized): Effects of disfluency on educational outcomes. *Cognition*, 118(1), 111-5. <https://doi.org/10.1016/j.cognition.2010.09.012>
- Epley, N., & Gilovich, T. (2006). The anchoring-and-Adjustment Heuristic: Why the Adjustments Are Insufficient. *Psychological Science* 17(4), 311-318. <https://doi.org/10.1111/j.1467-9280.2006.01704.x>
- Garcia-Marques, T., Silva, R. R., & Mello, J. (2016). Judging the truth-value of a statement in and out of a deep processing context. *Social Cognition*, 34, 40–54. <https://doi.org/10.1521/soco.2016.34.1.40>
- Goldsmith, R. E. e Horowitz, D. (2006). Measuring motivations for online opinion seeking. *Journal of Interactive Advertising*, 6(2), 2-14. <https://doi.org/10.1080/15252019.2006.10722114>
- Haddock, G. (2002). It's easy to like or dislike Tony Blair: Accessibility experiences and the favorability of attitude judgments. *British Journal of Social Psychology*, 93(2), 257-267. <https://doi.org/10.1348/000712602162571>
- Hayes, A. F. (2018). *Introduction to mediation, moderation, and conditional process analysis*. New York: The Guilford Press.
- Hartman, K.B.; Hunt, J.B. e Childers, C.Y. (2013). Effects of eWOM valence: examining consumer choice using evaluations of teaching. *Journal of Behavioral Studies in Business*, 6, 1-12. <https://www.aabri.com/manuscripts/131623.pdf>
- Hennig-Thurau, T., Gwinner, K. P., Walsh, G., & Gremler, D. D. (2004). Electronic word-of-mouth via consumer-opinion platforms: What motivates consumers to articulate themselves on the Internet? *Journal of Interactive Marketing*, 18(1), 38-52. <https://doi.org/10.1002/dir.10073>



- Hernandez, I. & Preston, J. L. (2013). Disfluency disrupts the confirmation bias. *Journal of Experimental Social Psychology*, 49(1), 178–182.
<https://doi.org/10.1016/j.jesp.2012.08.010>
- Herr, P. M., Kardes, F. R., & Kim, J. (1991). The effects of word-of-mouth and product-attribute information on persuasion: An accessibility-diagnosticity perspective. *Journal of Consumer Research*, 17, 454–462. <https://doi.org/10.1086/208570>
- Herr, P. M. & Page, C. M (2004). Asymmetric association of liking and disliking judgments: So what's not to like? *Journal of Consumer Research*, 30(4), 588–601.
<https://doi.org/10.1086/380291>
- Herr, P. M., Page, C. M., Pfeiffer, B. E., & Davis, F. D. (2012). Affective influences on evaluative processing. *Journal of Consumer Research*, 38(5), 833-845.
<https://doi.org/10.1086/660844>
- Izogo, E.E., Jayawardhena, C. and Karjaluoto, H. (2022), "Negative eWOM and perceived credibility: a potent mix in consumer relationships", *International Journal of Retail & Distribution Management*, Vol. ahead-of-print No. ahead-of-print.
<https://doi.org/10.1108/IJRDM-01-2022-0039>
- Kahneman, D. (2011). *Rápido e Devagar: Duas formas de pensar*. Rio de Janeiro: Objetiva.
- Kensinger, E. A., & Schacter, D. L. (2008). Neural processes supporting young and older adults' emotional memories. *Journal of Cognitive Neuroscience*, 20(7), 1161-1173.
<https://doi.org/10.1162/jocn.2008.20080>
- Kensinger, E. A. (2009). Remembering the details: Effects of emotion. *Emotion Review*, 1(2), 99–113. <https://doi.org/10.1177%2F1754073908100432>
- Kensinger, E. A., & Mark, S. M. (2018). Emotion and memory. In *Stevens' handbook of experimental psychology and cognitive neuroscience*. New York: John Wiley & Sons, inc. <https://doi.org/10.1002/9781119170174.epcn101>
- Kim, J.; Naylor, G.; Sivadas, E. & Sugumaran, V. (2016). The unrealized value of incentivized eWOM recommendations. *Mark Lett*, Springer Science+Business Media, 27, p.411–421. <http://dx.doi.org/10.1007/s11002-015-9360-3>
- Kim, J., & Gupta, P. (2012). Emotional expressions in online user reviews: How they influence consumers' product evaluations. *Journal of Business Research*, 65(7), 104–115. <https://doi.org/10.1016/J.JBUSRES.2011.04.013>
- Kornell, N., Rhodes, M. G., Castel, A. D., & Tauber, S. K. (2011). The ease-of-processing heuristic and the stability bias dissociating memory, memory beliefs, and memory judgments. *Psychological Science*, 22(6), 787-794.
<https://doi.org/10.1177/0956797611407929>
- Korfiatis, N., García-Bariocanal, E., & Sánchez-Alonso, S. (2012). Evaluating content quality and helpfulness of online product reviews: The interplay of review helpfulness vs. review content. *Electronic Commerce Research and Applications*, 11(3), 205–217.
<http://dx.doi.org/10.1016/j.elerap.2011.10.003>



- Kozinets, R. V. (1999). E-tribalized marketing? The strategic implications of virtual communities of consumption. *European Management Journal*, 17, 252–264. [https://doi.org/10.1016/S0263-2373\(99\)00004-3](https://doi.org/10.1016/S0263-2373(99)00004-3)
- Labroo, A. A., Dhar, R., & Schwarz, N. (2008). Of frog wines and frowning watches: Semantic priming, perceptual fluency, and brand evaluation. *Journal of Consumer Research*, 34(6), 819-831. <https://doi.org/10.1086/523290>
- Labroo, A. A., & Pocheptsova, A. (2016). Metacognition and consumer judgment: Fluency is pleasant but disfluency ignites interest. *Current Opinion in Psychology*, 10, 154-159. <https://doi.org/10.1016/j.copsyc.2016.01.008>
- Landwehr, J. R., Golla, B., & Reber, R. (2017). Processing fluency: An inevitable side effect of evaluative conditioning. *Journal of Experimental Social Psychology*, 70, 124–128. <https://doi.org/10.1016/j.jesp.2017.01.004>
- Lazarus, R. S. (1991). *Emotion and adaptation*. New York: Oxford University Press.
- Lazer, D. M., Baum, M., Benkler, Y., Berinsky, A. J., Greenhill, K. M., Menczer, F., & Metzger, M. J. (2018). The science of Fake News. *Science*, 9(359-6380), pp. 1094-1096. <https://doi.org/10.1126/science.aao2998>
- Lee, S-H. (2009). How do online reviews affect purchasing intention? *African Journal of Business Management*, 3(10), 576-581. <https://doi.org/10.5897/AJBM09.204>
- Lee, E-J., & Shin, S.Y. (2014). When do consumers buy online product reviews? Effects of review quality, product type, and reviewer's photo. *Computers in Human Behavior*, 31, 356–366. <https://doi.org/10.1016/j.chb.2013.10.050>
- Lin, T.M. Y., Lu, K-Y. & Wu, J-J. (2012). The effects of visual information in eWOM communication. *Journal of Research in Interactive Marketing*, 6(1), 7–26 <http://dx.doi.org/10.1108/17505931211241341>
- Li, J.; Zhan, L. (2011). Online persuasion: How the written word drives WOM. *Journal of Advertising Research*, 51(1), 239–257. <https://doi.org/10.2501/JAR-51-1-239-257>
- Madan, C. R., Scott, S. M. E., & Kensinger, E. A. (2019). Positive emotion enhances association-memory. *Emotion*, 19(4), 733-740. <https://doi.org/10.1037/emo0000465>
- Maier, E., & Dost, F. (2018). The positive effect of contextual image backgrounds on fluency and liking. *Journal of Retailing and Consumer Services*, 40, 109-116. <http://dx.doi.org/10.1016/j.jretconser.2017.09.003>
- Mendes-Da-Silva, W., & Yu, A. S. O. (2009). Análise empírica do senso de controle: Buscando entender o excesso de confiança. *Revista de administração contemporânea*, 13(2), 247-271. <https://doi.org/10.1590/S1415-65552009000200006>
- Miele, D. B., & Molden, D. C. (2010). Naive theories of intelligence and the role of processing fluency in perceived comprehension. *Journal of Experimental Psychology: General*, 139(3), 535-557. <https://doi.org/10.1037/a0019745>



- Moran, G., Muzellec, L., & Nolan, E. (2014). Consumer moments of truth in the digital context: How "search" and "e-word of mouth" can fuel consumer decision-making. *Journal of Advertising Research*, 54(2), 200-204. <http://dx.doi.org/10.2501/JAR-54-2-200-204>
- Muda, M. and Hamzah, M.I. (2021), "Should I suggest this YouTube clip? The impact of UGC source credibility on eWOM and purchase intention", *Journal of Research in Interactive Marketing*, Vol. 15 No. 3, pp. 441-459. <https://doi.org/10.1108/JRIM-04-2020-0072>
- Newman, E.J., Sanson, M., Miller, E.K., Quigley-McBride, A., Foster, J.L., Bernstein, D.M., Garry, M., Bastian, B. (2014). People with easier to pronounce names promote truthiness of Claims. *PLoS ONE*, 9(2), e88671. <https://doi.org/10.1371/journal.pone.0088671>
- Oliver, R. L. (2010). Satisfaction, a behavioural perspective on the consumer (2. ed.). Nova Iorque: Irwin McGraw-Hill.
- Oppenheimer, D. M. (2004). Spontaneous discounting of availability in frequency judgment tasks. *Psychological Science*, 15(2), 100-105. <https://doi.org/10.1111/j.0963-7214.2004.0150200>
- Oppenheimer, D. M. (2006). Consequences of erudite vernacular utilized irrespective of necessity: Problems with using long words needlessly. *Applied Cognitive Psychology*, 20(2), 139–156. <https://doi.org/10.1002/acp.1178>
- Orita, R. & Hattori, M. (2018). Positive and negative affects facilitate insight problem-solving in different ways: A study with Implicit hints. *Japanese Psychological Research, Special issue: Implicit Cognition*, 61(2), 94–106. <https://doi.org/10.1111/jpr.12237>
- Park, S., Shin, W. and Xie, J. (2021) The Fateful First Consumer Review. *Marketing Science* 40(3):481-507. <https://doi.org/10.1287/mksc.2020.1264>
- Park, D.H, Lee, J. Han, I. (2007). The Effect of On-line Consumer Reviews on Consumer Purchasing Intention: The Moderating Role of Involvement. *International Journal of Electronic Commerce*, 11(4), 125-148. <https://doi.org/10.2753/JEC1086-4415110405>
- Park, Y., Herr, P. M., & Kim, B. C. (2016). The effect of disfluency on consumer perceptions of information security. *Marketing Letters*, 27(3), 525–535. <https://doi.org/10.1007/s11002-015-9359-9>
- Parks, C. M., & Toth, J. P. (2006). Fluency, familiarity, aging, and the illusion of truth. *Aging, Neuropsychology, and Cognition*, 13, 225–253. <https://doi.org/10.1080/138255890968691>
- Pennycook, G., Cannon, T. D., & Rand, D. G. (2018). Prior exposure increases perceived accuracy of fake news. *Journal of Experimental Psychology: General*, 147(12), 1865–1880. <https://doi.org/10.1037/xge0000465>

- Prato, F., & John, O. P. (1991). Automatic vigilance: The attention-grabbing power of negative social information. *Journal of Personality and Social Psychology*, 61(3), 380-391. <https://doi.org/10.1037/0022-3514.61.3.380>
- Reber, R., & Schwarz, N. (1999). Effects of perceptual fluency on judgments of truth. *Consciousness and Cognition*, 8(3), 338-342. <https://doi.org/10.1006/ccog.1999.0386>
- Rost, K., Stahel, L., & Frey, B.S. (2016). Digital social norm enforcement: Online firestorms in social media. *PLoS ONE*, 11(6), 1-26. <https://doi.org/10.1371/journal.pone.0155923>
- Rowe G, Hirsh, J. B., & Anderson A.K. (2007). Positive affect increases the breadth of attentional selection. *Proceedings of the National Academy of Sciences*, 104(1), 383-388. <https://doi.org/10.1073/pnas.0605198104>
- Ryffel, F. A., & Wirth, W. (2016). Heart versus mind: How affective and cognitive message frames change attitudes. *Social Psychology*, 47(1), 52-62. <https://doi.org/10.1027/1864-9335/a000257>
- Ryffel, F. A., & Wirth, W. (2018). How perceived processing fluency influences the illusion of knowing in learning from tv reports. *Journal of Media Psychology*, 32(1), 2-13. <https://doi.org/10.1027/1864-1105/a000250>
- Sanchez, C., & Jaeger, A. J. (2015). If it's hard to read, it changes how long you do it: Reading time as an explanation for perceptual fluency effects on judgment. *Psychonomic Bulletin & Review*, 22(1), 206–211. <https://doi.org/10.3758/s13423-014-0658-6>
- Silva, R. R., Chrobot, N., Newman, E., Schwarz, N., & Topolinski, S. (2017). Make it short and easy: Username complexity determines trustworthiness above and beyond objective reputation. *Frontiers in Psychology*, 8, 2200. <https://doi.org/10.3389/fpsyg.2017.02200>
- Schwarz, N. (2004). Metacognitive experiences in consumer judgment and decision making. *Journal of Consumer Psychology*, 14(4), 332-348. https://doi.org/10.1207/s15327663jcp1404_2
- Schwarz, N., Jalbert, M., Noah, T. and Zhang, L. (2020). Metacognitive experiences as information: Processing Fluency in consumer judgement and decision making. *Consumer Psychology Review*, 00, 1-22. <https://doi.org/10.1002/arcp.1067>
- Schindler, R, & Bickart, B. (2012). Perceived helpfulness of online consumer reviews: The role of message content and style. 11(3), 1–10. <https://doi.org/10.1002/cb.1372>
- Silva, R. R., Garcia-Marques, T., & Reber, R. (2017). The informative value of type of repetition: Perceptual and conceptual fluency influences on judgments of truth. *Consciousness and Cognition: An International Journal*, 51, 53-67. <https://doi.org/10.1016/j.concog.2017.02.016>

- Simmons, J.P., Nelson, L.D. (2006). Intuitive confidence: Choosing between intuitive and nonintuitive alternatives. *Journal of Experimental Psychology*, 35(3), 409-428.
<https://doi.org/10.1037/0096-3445.135.3.409>
- Simmons, J. P., & Nelson, L. D. (2007). Intuitive confidence: When consumer choices are sensitive to matching prices. *Association for Consumer Research*, 34, 265-268.
<http://www.acrwebsite.org/volumes/12610/volumes/v34/NA-34>
- Sirgy, J. M. A. (1984). Social cognition model of consumer satisfaction/dissatisfaction: An experiment. *Psychology & Marketing*, 1(2), 27- 44.
<https://doi.org/10.1002/mar.4220010205>
- Sohn, D (2009). Disentangling the effects of social network density on electronic word-of-mouth (eWOM) intention. *Journal of Computer-mediated Communication*, 14, 352-367. <http://dx.doi.org/10.1111/j.1083-6101.2009.01444.x>
- Song, H., & Schwarz, N. (2008). If it's hard to read, it's hard to do: Processing fluency affects effort prediction and motivation. *Psychological Science*, 19(10), 986-988.
<https://doi.org/10.1111/j.1467-9280.2008.02189.x>
- Song, H., & Schwarz, N. (2009). If it's difficult to pronounce, it must be risky. *Psychological Science*, 20(2), 135–138. <https://doi.org/10.1111/j.1467-9280.2009.02267.x>
- Su, N., Li, T., Zheng, J., Hu, X., Fan, T., & Lu L. (2018). How font size affects judgments of learning: Simultaneous mediating effect of item-specific beliefs about fluency and moderating effect of beliefs about font size and memory. *PLOS ONE* 13, 1-14.
<https://doi.org/10.1371/journal.pone.0200888>
- Sussman, S. W., and W. S. Siegal. (2003) Informational Influence in Organizations: An Integrated Approach to Knowledge Adoption." *Information Systems Research* 14, 1, 47–65. <https://doi.org/10.1287/isre.14.1.47.14767>
- Talarico, J. M., Berntsen, D., & Rubin, D. C. (2009). Positive emotions enhance recall of peripheral details. *Cognition and Emotion*, 23(2), 380-398.
<https://doi.org/10.1080%2F02699930801993999>
- TECNOBLOG, 2021. (<https://tecnoblog.net/279054/como-ativar-o-dark-mode-do-android-pie-e-economizar-bateria/> consulted at Feb 03, 2021)
- Verma, D. and Dewani, P.P. (2021), "eWOM credibility: a comprehensive framework and literature review", *Online Information Review*, Vol. 45 No. 3, pp. 481-500.
<https://doi.org/10.1108/OIR-06-2020-0263>
- Visentin, M., Pizzi, G. & Pichierri, M. (2019) Fake news, real problems for brands: The impact of content truthfulness and source credibility on consumers' behavioral intentions toward the advertised brands. *Journal of Interactive Marketing*, 45, 99-112.
<https://doi.org/10.1016/j.intmar.2018.09.001>
- Yang, C., Huang, T. E., & Shanks, D. R. (2018). Perceptual fluency affects judgments of learning: The font size effect. *Journal of Memory and Language*, 99(1), 99-110.
<https://doi.org/10.1016/J.JML.2017.11.005>



Weissgerber, C. S., & Reinhard, M. A. (2017). Is disfluency desirable for learning? *Learning and Instruction*, 49, 199-217.
<https://doi.org/10.1016/J.LEARNINSTRUC.2017.02.004>

Wu, Y., Ngai, E. W. T., Wu, P. & Wu, C. (2020). Fake online reviews: Literature review, synthesis, and directions for future research, *Decision Support Systems*, v132,113280, pp 1-15. <https://doi.org/10.1016/j.dss.2020.113280>