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PAY OR LEAVE? THE ROLE OF SOCIAL MEDIA FATIGUE AND WILLINGNESS TO PAY TO AVOID FAKE NEWS IN SOCIAL NETWORKS USE

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Abstract. Social media networks are a technological phenomenon that has changed the entire social environment, as many real-world activities have shifted to posts or comments on social media. However, with this development several negative aspects have been revealed, such as information overload, privacy concerns and fake news. The aim of our research is to determine the impact fake news has on social media fatigue and discontinuous behavior and whether the willingness to pay to avoid fake news impacts this relationship. The results of two mediation models show that fake news positively affects social media fatique, but there is no direct effect on the discontinuous use of social media. However, social media fatique partly mediates the relationship between the awareness of fake news existence and discontinuous behavior. Furthermore, social media fatigue increases the willingness to pay for quality content, but contrary to our expectations, it does not reduce discontinuous behavior. This shows that the fake news phenomenon is far more complex, with other factors affecting it. Furthermore, imposing a price to avoid fake news is not a solution as users do not necessarily see value in this, but prefer to avoid social media so as not to have to deal with social media fatigue.

Keywords: social media networks, social media fatigue, willingness to pay, quality content, fake news, discontinuous behavior.

JEL Classification: M41, C83, L20.

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1. Introduction

The development of social media networks has substantially changed the way in which people communicate with each other (Tandoc et al., 2018a). Social media networks have brought several advantages by facilitating communication between people and entities, but by transposing the entire social world to the online environment, several negative aspects have been amplified (Bermes, 2021; Lee & Chae, 2012). The rapid distribution of fake news or distorted information is one of the negative consequences of social media development (Domenico et al., 2021; Visentin et al., 2019). The spreading of rumours has always been a social activity, but with the development of social media networks, it has reached an unprecedented level

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(Domenico et al., 2021). Moreover, fake, distorted or exaggerated information is increasingly used for ideological, political or financial gain. Starting with the political field, where much of the communication takes place on social media (Calvillo et al., 2021; van der Linden et al., 2020), influencers who intentionally create content to attract followers (Kondort et al., 2023), companies which have moved their advertising campaigns to the online field (Obada & Dabija, 2022) and other interest groups who communicate online (Dinga, 2022), their entire social activity takes place on social media (Jora et al., 2022). This shift has led to a large volume of new content that attempts to create buzz, attract users and influence consumer decisions, putting a pressure on both content creators and viewers to be permanently online and digest a huge quantity of information (Heiss et al., 2023; Liu et al., 2021). The pressure to attract users and determine ideological or commercial decisions, means that much of the information posted on social media is exaggerated, distorted or even fake (Beisecker et al., 2024; Pelau et al., 2023), making it even more difficult to digest the entire flow of information (Heiss et al., 2023; Liu et al., 2021). Information overload, as well as the existence of fake news on social media can lead to decreased interest in social media, also known as social media fatique (Xiao & Mou, 2019). The concept of social media fatigue has been increasingly discussed and researched in recent years, as it perfectly describes the situation perceived by many users about their relationship with the online environment (Dhir et al., 2019; Lin et al., 2021). In addition to the advantages that social media has for communication, it may also contain several stressors, such as privacy concerns, self-disclosing behavior, parental strategies (Dhir et al., 2019), exposure to fake news and information overload (Bermes, 2021; Heiss et al., 2023; Lee et al., 2017). These stressors diminish the satisfaction and pleasure of using social media and can lead to discontinuous behavior, reducing the frequency of staying online. Most studies are concerned with the discontinuous behavior associated with social media (Dhir et al., 2019; Lin et al., 2021; Zhang et al., 2016) and less with ways of diminishing social media fatigue.

Taking into consideration that much public communication has shifted towards social media networks and online platforms, it is important to analyze the effect fake news has on consumers' continuous behavior. The interference of fake news in political, advertising campaigns or other types of communication can be disturbing and can mislead the consumer in creating objective opinions or taking optimal buying decisions. In our paper, we focus on determining the effect that awareness of the existence of fake news has on diminishing the interest towards social media networks, known in the literature as discontinuous behavior (Lin et al., 2021; Zhang et al., 2016). We empirically test the mediating role of social media fatigue in this relationship and also the role of willingness to pay for quality content. Some users might be willing to pay to have access to certain information and to avoid fake information. The novelty of our paper lies in the consideration of fake news as a stressor that leads to social media fatigue and the role of willingness to pay in impacting discontinuous behavior. The paper starts with an introduction followed by analysis of the main constructs and hypotheses development. Afterwards, the methodology and results of the research are presented. The paper ends with discussion of the future implications for consumers and companies.

2. Literature review

2.1. Fake news phenomenon

Fake news is a phenomenon that has been amplified with the development of social media networks (Liu et al., 2016). Rumors and distorted information have always existed in our social world (Domenico et al., 2021; Burkhardt, 2017; Vista, 2015), but with the development of

social media, this phenomenon has reached an unprecedented level (Vista, 2015), affecting the image of several entities (Bastick, 2021) and creating confusion and doubt (Berthon & Pitt, 2018; Allcott et al., 2019). One reason for the rapid development and spread of fake news is the fact that the information posted on social media does not have to pass an editorial check (Verma et al., 2017), which allows any user to post anything they like. The multitude of users who create and post information increases the amount of available online data. Furthermore, both human and machine algorithms are responsible for the rapid spread of information on social media (Thompson et al., 2019; Zhang & Ghorbani, 2020), making it even more difficult for users to cope with this vast amount of information. Not being able to cope with the huge amount of data can provoke unpleasant feelings towards social media platforms and may encourage users to avoid them (Dhir et al., 2019; Ahmed et al., 2022). Furthermore, the existence of fake news increases the sentiments of doubt and uncertainty, which can be an additional source of stress (Van Duyn & Collier, 2019).

2.2. Social media fatigue

The feeling of tiredness and boredom related to the overwhelming feeling of misinformation or information overload is known as social media fatigue (Xiao & Mou, 2019; Lin et al., 2021). Fatigue is a concept that has also been studied in an offline context and describes the situation in which someone is not able to achieve certain goals although he/she is expected to do so (Dhir et al., 2019; Hardy et al., 1997). Fatigue arises when a person does not have the necessary ability, competence or personality to do a certain task (Hardy et al., 1997) or if there is a work or informational overload and the activity becomes overwhelming (Lee et al., 2016).

Social media fatigue is frequently associated with a stressful situation and it can be determined by several factors (Lin et al., 2019). According to Maier et al. (2015) the stress of using technology is associated with four situations, namely overload, technology invasion, insecurity and disturbances. This is confirmed by other studies, in which safety, security and privacy are among the main factors of concern when using social media networks (Bright et al., 2015; Dhir et al., 2019; Özgür & Türkay, 2014). Other authors are concerned with risky online behavior on social media, especially in the context of children being online (Lee & Chae, 2012), but it can also have important implications for adults.

In this context, fake news dissemination can be seen as risky online behavior that can produce disturbance in the values of consumers, creating confusion and doubt and therefore, can be considered as a stressor. The entire process of conceiving fake news can be stressful for users and can lead to social media fatigue.

On one hand, the different forms that fake news can take, with different levels of facticity (Tandoc et al., 2018b; Berkowitz & Schwartz, 2016) is a source of stress, as it requires intense cognitive involvement for the determination of its veracity (Petty & Cacioppo, 1986; Kang & Namkung, 2019). Fake news posts frequently contain different fallacies or rhetorical devices to distort or exaggerate the content of a piece of information (Beisecker et al., 2024). With the use of satire, parody or alternated fabrication, it is difficult to evaluate the veracity of a piece of information (Steenbuch Traberg & van der Linden, 2022; Gentzkow & Shapiro, 2010; Shibutani, 1966). One example of news distortion is sensational headlines (Visentin et al., 2019; Pelau et al., 2023), where the focus is placed on attractive headlines and not necessarily on the veracity of their content (Keersmaecker & Roets, 2017; Lazar & Pop, 2021).

On the other hand, the dissemination of information on social media can be perceived as invasive and intrusive. Some social media users spread fake news for ideological, political or financial purposes (Domenico et al., 2021; Hernon, 1995; Zannettou et al., 2019). There

are also machine algorithms which are programmed to identify users with similar interests based on a news-finds-me principle (Zhang & Ghorbani, 2020; Diehl & Lee, 2022; Gil de Zuniga et al., 2017; Georgescu et al., 2022). Besides, there is a category of users who share online information because of social norms such as need for acceptance, gratification and conformity with the social group (Bronstein et al., 2019; Beyens et al., 2016; Colliander, 2019). In this case, users mainly spread posts that are funny (Westerman et al., 2014), contribute to a good purpose (Balakrishnan et al., 2021) or just as an activity for passing the time (Sampat & Raj, 2022; Apuke & Omar, 2021). However, the huge amount of information, as well as the social conformity of responding to all these messages, can result in boredom, tiredness and stress in the long run, leading to avoidance behavior (Lin et al., 2021).

The need for constant evaluation of the veracity of online news, combined with the huge volume of information, can lead to frustration and emotional overload (Liu et al., 2021; Xiao & Mou, 2019) tempting the consumer to avoid logging in to social media. There are several reasons relating to the complexity of the fake news phenomenon that can create stress, leading to social media fatigue. The very presence of fake news can provoke users to associate it with stress and wanting to avoid it. Based on this, we formulate our first hypotheses:

H1a: Awareness of the existence of fake news leads to discontinuous behavior in social media usage.

H1b: Social media fatigue mediates the relationship between awareness of the existence of fake news and discontinuous behavior in social media usage.

2.3. Avoidance and discontinuous behavior

Avoidance behavior towards social media is also known as discontinuous behavior and is characterized by the decreased use of social media or even closure of social media accounts (Liu et al., 2021; Lo, 2019; Xiao & Mou, 2019). Each consumer facing a stressful situation develops coping strategies that aim to eliminate the negative outcome of an unpleasant situation (Lazarus, 1993; Pirkkalainen et al., 2019). Discontinuous behavior is a type of coping strategy, by which the consumer avoids the unpleasant situation of information overload or fake news by ignoring it (Lin et al., 2021). According to Gaudioso et al. (2017) there are two types of coping strategies namely adaptive and maladaptive. Adaptive strategies refer to changing factors in order to reduce a stressful situation, while maladaptive strategies refer to the avoidance or ignorance of the stressful situation (Gaudioso et al., 2017; Lin et al., 2021). Although, in theory, adaptive coping strategies are considered more efficient (Lin et al., 2021), it probably depends on the outcome of the interaction if a user is willing to invest time and effort in order to change the context to reduce stress (Maier et al., 2015). If the outcome is not worth it, he/she will just ignore the situation. For instance, extroverted people, with a higher degree of narcissism (Mishra & Samu, 2021) depend more on the social world as they perceive a higher outcome in the appreciation and social status received in the online world (Wei et al., 2023; Fu et al., 2017). Validation of one's own beliefs (Domenico et al., 2021; Calvillo et al., 2021) as well as fear of missing out (Jabeen et al., 2023; Hattingh et al., 2022) are other reasons to remain active on social media networks (Sampat & Raj, 2022). The probability of these groups of people showing discontinuous behavior is lower.

In opposition to these groups, more introverted people may perceive social online activity as stress-inducing and annoying and are more likely to show discontinuous behavior. Social media involves several types of stressors, such as information, communication and

social overload (Cao & Sun, 2018) that can lead to discontinuous behavior. Starting from this premise, it might be expected that the presence of fake news is another type of stressor. Users who are confronted with fake news need time and effort to evaluate the degree of truthfulness of information, which in the long run can be annoying and stressful. Studies show that consumers with a higher level of education (Brisson et al., 2018), higher cognitive capabilities (Annisette & Lafreniere, 2017) and good social media literacy (Wei et al., 2023) have an increased capacity to evaluate fake news and, therefore, will be more easily annoyed by the distorted content, unless they read it for fun or heuristics (Westerman et al., 2014). Personality (Sampat & Raj, 2022; Mishra & Samu, 2021) and the emotional state of the user (Martel et al., 2020; Trifan & Pantea, 2023) are other factors that affect the willingness to continue using social media. Introverted people with a higher degree of agreeability and conscientiousness (Sampat & Raj, 2022) have a greater tendency to check information before sharing it with other users. This requires time and effort and therefore they are more likely to have discontinuous behavior.

One possible adaptive coping strategy to avoid fake news is the willingness to pay for content. In order to avoid the unpleasant exposure to fake news, some users might be willing to pay for access to verified and pre-checked content. The willingness to pay is defined as the amount of money a consumer is ready to give in order to own or use a product or service. It usually involves valuation of the product (Sindermann et al., 2022).

Studies show that, depending on the characteristics of consumers, there are disparities in the willingness to pay (Sindermann et al., 2022), depending on a buyers' perceived value. In the case of our research, it expresses the willingness to pay in order to avoid fake news, describing the importance it has for the consumer. It is known that there are still publications that charge a price for accessing their content. In our research, we have empirically investigated the effects of putting a price on quality content and thus avoiding fake news. Willingness to pay shows how important the item is for the buyer, depending on his/her financial situation. The higher the price the consumer is willing to pay for a product or service, the more important is that product to the consumer. In the case of fake news, the willingness to pay shows how important it is for the consumer to avoid this phenomenon. Moreover, it shows that the consumer is willing to do something in order to cope with this phenomenon. We hypothesized that social media fatigue and the desire to avoid unpleasant fake news will encourage consumers to pay for quality content. Having the possibility to pay for quality content will reduce discontinuous behavior. Starting from this idea, we formulate the following hypotheses:

H2a: Social media fatigue positively impacts discontinuous use of social media.

H2b: The willingness to pay for quality content mediates the relationship between social media fatigue and discontinuous use of social media.

3. Methodology and data collection

The objective of our research was to determine whether the perception of the existence of fake news leads to social media fatigue and discontinuous behavior. To test this objective, we developed two mediation models. In the first mediation model, we tested the mediation effect of social media fatigue on the relation between the perception of fake news and discontinuous behavior. In the second mediation model, we included the willingness to pay for content and its effect on the relationship between social media fatigue and discontinuous behavior.

In order to test the two mediation models, an online survey was carried out, having the above-mentioned constructs as variables. The online questionnaire began with a post about a possible energy blackout. Based on this potential fake news, the respondents had to evaluate the mentioned constructs. The perception of fake news was measured based on four self-determined items relating to the existence of fake news in the public space. The reliability of this construct was given by the values of Cronbach-Alpha = 0.735, CR = 0.832, AVE = 0.554. Social media fatique was measured based on four items adapted after Liu et al. (2021), Xiao and Mou (2019), Lin et al. (2021), Zhang et al. (2016). It was measured according to whether fake information posted on social media led to boredom, emotional drain, frustration and tiredness. This construct was reliable by having Cronbach-Alpha = 0.857, CR = 0.905 and AVE = 0.705. Willingness to pay for quality content was measured with only one self-determined item. Discontinuous behavior regarding the use of social media was measured with three items adapted after Liu et al. (2021) and Lo (2019). This construct was reliable by having Cronbach-Alpha = 0.733, CR = 0.843 and AVE = 0.647. The confirmatory factor analysis presented in Table 1 shows that all items have adequate loadings, showing the validity of the model. All items were measured with 7-point Likert scales, where 1 is total disagreement and 7 is total agreement. Data collection was carried out with the help of an online survey. A convenience sample of 422 valid responses was collected. Most of the respondents have ages between 20-30 years, of whom 56% were female and 44% were men. The reliability of data and mediation models was tested empirically with the help of structural equation models, using the bootstrapping procedure based on 5000 distinct samples, in Smart-PLS 4.0 (Ringle et al., 2022).

Table 1. Confirmatory factor analysis and constructs reliability (source: own research results)

ltem	CFA	М				
Perception of fake news (Cronbach-Alpha = 0.735; CR = 0.832; AVE = 0.554) Self-determined items						
I believe that public space is invaded by fake news	0.741	5.595				
I know people who are the victims of fake news	0.742	5.583				
Public opinion is manipulated by fake news	0.814	5.953				
Social media is responsible for the development of fake news	0.672	5.246				
Social media fatigue (Cronbach-Alpha = 0.857; CR = 0.905; AVE = 0.705) Adapted after Liu et al. (2021), Xiao and Mou (2019), Lin et al. (2021), Zhang et al. (2016)						
I feel bored about the fake information posted on social media	0.709	5.751				
I feel emotionally drained about the fake information posted on social media	0.913	5.078				
I feel frustrated about the fake information posted on social media	0.799	4.976				
I feel tired about the fake information posted on social media	0.920	5.185				
Willingness to pay (Cronbach-Alpha = 1.0; CR = 1.0; AVE = 1.0) Self-determined item						
I am willing to pay to have access to quality content	1.000	4.815				
Discontinuous behavio r (Cronbach-Alpha = 0.733; CR = 0.843; AVE = 0.647) Adapted after Liu et al. (2021), Lo (2019)						
I intend to close all social media accounts to avoid fake news	0.626	2.294				
I would rather do other things than spend time on social media to avoid fake news	0.834	4.699				
I will use social media much less in the future to avoid fake news	0.923	4.009				

4. Results

The results of our research show that social media fatigue and the willingness to pay for content fully mediate the relation between the perception of fake news and the discontinuous behavior of social media. In the first mediation model, we tested the mediating effect of social media fatique on the relation between the perception of fake news and discontinuous behavior in using social media. The results show that perception of the existence of fake news positively impacts social media fatique ($\beta = 0.419$, t = 9.374, p = 0.000, CI = [0.336; 0.509]) and social media fatique positively influences discontinuous behavior on social media (β = 0.135, t = 2.536, p = 0.011, CI = [0.031; 0.238]). However, there is no direct effect between the impact of the perception of fake news and discontinuous behavior in social media use (p = 0.673 > 0.10). Although the indirect effect is significant ($\beta = 0.081$, t = 3.331, p = 0.001, CI = [0.036; 0.132]), the p-value for the total effect shows significant values (t = 1.880, p = 0.060), but the confidence interval CI = [-0.007; 0.212] contains the value 0. The indirect effect shows that awareness of the existence of fake news does not determine discontinuous behavior, unless there is social media fatique. People do not avoid social media just because it contains fake news, but only when this process becomes boring, frustrating, tiring or emotionally draining. The confidence interval of the total effect shows that there are other variables that influence the total effect between perception on social media and discontinuous behavior. A specific mediation model, having both social media fatigue and willingness to pay as mediators, shows low but significant values ($\beta = 0.024$, t = 2.985, p = 0.003, CI = [0.012; 0.044]), which confirms that a coping strategy, such as willingness to pay for avoiding fake news, can influence the process. Taking these results into account, it can be stated that the perception of fake news alone does not influence discontinuous behavior regarding the use of social media, but there are other factors that influence it. Table 2 presents the results for the first mediation model.

Table 2. Mediation model 1 (source: own research results)

Relation	β	T	р	CI
Perception FN → SM fatigue (a-path)	0.419	9.374	0.000	[0.336; 0.509]
SM fatigue → Discontinuous behavior (b-path)	0.135	2.536	0.011	[0.031; 0.238]
Perception FN → Discontinuous behavior (direct effect)	0.024	0.422	0.673	[-0.091; 0.134]
Perception FN → Discontinuous behavior (total effect)	0.105	1.880	0.060	[-0.007; 0.212]
Perception FN → Discontinuous behavior (indirect effect)	0.081	3.331	0.001	[0.036; 0.132]

In the second mediation model, we tested the mediating effect of willingness to pay on the relationship between social media fatigue and discontinuous behavior in the use of social media. Our results show that social media fatigue positively impacts the willingness to pay to avoid fake news (β = 0.261, t = 5.481, p = 0.000, CI = [0.168; 0.354] and the willingness to pay positively influences discontinuous behavior on social media (β = 0.224, t = 4.534, p = 0.000, CI = [0.128; 0.318]. This shows that being tired and bored of social media develops the need to pay for avoiding fake news, but this negatively influences the desire to continue using social media. This result confirms that users feel the need for a coping strategy such as the willingness to pay, but instead of paying, they rather show discontinuous behavior.

Social media fatigue also has a direct effect on discontinuous behavior in using social media (β = 0.135, t = 2.536, p = 0.011, CI = [0.031; 0.238], but the indirect effect is also significant (ab = 0.059, t = 3.360, p = 0.001, CI = [0.029; 0.096]), thereby increasing the total effect (β = 0.194, t = 3.712, p = 0.000, CI = [0.088; 0.295]. This result confirms that the need for a coping strategy, such as the willingness to pay, leads to suspending the use of social media networks. Instead of doing something to avoid fake news, people prefer to avoid the use of social media. This somehow confirms that the value brought by the presence on social media is lower than the potentially stress-inducing situation created by the existence of fake news. These results can be observed in Table 3.

Relation	β	Т	р	CI
SM fatigue → Willingness pay (a-path)	0.261	5.481	0.000	[0.168; 0.354]
Willingness pay → Discontinuous behavior (b-path)	0.224	4.534	0.000	[0.128; 0.318]
SM fatigue → Discontinuous behavior (direct effect)	0.135	2.536	0.011	[0.031; 0.238]
SM fatigue → Discontinuous behavior (total effect)	0.194	3.712	0.000	[0.088; 0.295]
SM fatigue → Discontinuous behavior (indirect effect)	0.059	3.360	0.001	[0.029; 0.096]

Table 3. Mediation model 2 (source: own research results)

The entire model can be observed in Figure 1.

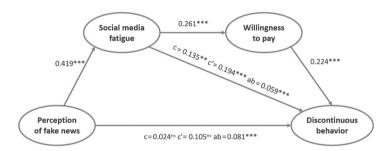


Figure 1. The role of social media fatigue and willingness to pay in the relation between fake news perception and discontinuous behavior on social media (own research results)

5. Discussion

The results of our research extend existing theory by analyzing the particular case of the impact of fake news on social media fatigue and discontinuous behavior. Most of the existing studies focus on the impact of information overload (Lin et al., 2021; Heiss et al., 2023; Lee et al., 2017; Zhang et al., 2016), privacy concerns or risky behavior (Dhir et al., 2019; Lee & Chae, 2012) on social media fatigue and discontinuous behavior. The presence of fake news is frequently associated with information overload (Bermes, 2021), but research related to fake news focuses more on the motives and dissemination methods of fake news (Domenico et al., 2021; Visentin et al., 2019) and less on the effects it has on social media networks.

Our research confirms that, similar to the case of information overload (Lin et al., 2021), users tend to react to the presence of fake news, leading indirectly to discontinuous behavior. Although the perception of the existence of fake news does not directly influence

discontinuous behavior on social media, social media fatique and willingness to pay for avoiding fake news mediate this relationship. The indirect effect of the first mediation model shows that only people who get tired of the use of social media, due to fake news have the tendency to avoid or reduce their use of social media. The significant total effect of this relationship combined with a confidence interval that includes 0, shows that there are also other reasons that influence discontinuous behavior. On one hand there are coping strategies, such as the willingness to pay for avoiding fake news, that might affect this result. On the other hand, there is a category of users for whom this relationship is not valid. Both results are in line with other studies. Different studies show that the personality of people probably impacts this relationship (Xiao & Mou, 2019; Mishra & Samu, 2021; Sampat & Raj, 2022). People who use social media for social purposes, such as receiving gratification or social acceptance or people who use it for financial purposes (such as influencers) have a lower probability of getting tired of social media. In opposition to this, people who are more introverted and focus more on intellectual subjects or socialization may become emotionally drained by the increasing amount of fake or distorted news (Annisette & Lafreniere, 2017; Brisson et al., 2018). There is also an opportunity cost for the time spent reading, commenting, liking and sharing all these types of information, which allows people to focus less on the really important aspects. As long as the outcome (such as social acceptance) of using social media is higher than its costs (such as fatigue), people will continue using it, while in the opposite situation there will be a discontinuous behavior.

Coping strategies such as the willingness to pay for avoiding fake news is another factor that affects the relationship between awareness of the existence of fake news, social media fatigue and discontinuous behavior. Social media fatigue positively influences the willingness to pay for avoiding fake news, but at the same time, the payment for quality content positively impacts discontinuous behavior. This shows that social media fatigue creates the need for a coping strategy such as the willingness to pay to avoid fake news. However, this is not sufficient to keep using social media. Furthermore, the total effect of the mediation of willingness to pay is greater than the direct positive effect of social media fatigue on discontinuous behavior. This means that the need to pay increases even more the avoidance behavior of social media. This implies that users may prefer to avoid social media due to fake news, but they are not willing to pay to avoid fake news. Not being willing to pay for the avoidance of fake news can have some limitations. On one hand, there is the possibility of a restricted consumers' budget. The consumer might not have the available money to pay for avoiding fake news. On the other hand, there might be no alternatives. The consumer might not be willing to pay, as he/she considers that the alternatives have no sufficient credibility. Although the effect of willingness to pay to avoid fake news has been not extensively tested, other studies have shown similar results for the impact of information overload on coping strategies and discontinuous behavior (Lin et al., 2021).

6. Conclusions

The beginning of the social media era was associated with the development of a platform where people could meet and interact with each other. Since then, it has turned into a place where political polemics and other debates take place. In addition to this, it is a show-off place for users trying to find social gratification or attract followers for financial gain. Under this permanent pressure to attract followers and create buzz, fake or distorted news is frequently posted on social media. The topic of the fake news effect is more current than

ever as it appears that the spreading of fake news has crossed the borders of social media. Much of the information posted on social networks is taken over by online publications and television stations, so it has effects on the entire online community. In addition to this, the development of artificial intelligence has led to development of deep fake, which are fake videos created with the help of AI that feature celebrities promoting fake messages. Deep fake not only promotes fake messages or misleading investments, but also affect in a negative way the image of public persons. In this context, the analysis of the effect of fake news on fatigue and discontinuous behavior is more actual than ever.

Our research results have important implications for both theory and practice. From a theoretical point of view, it extends the present models describing the particular case of the impact of fake news on social media fatigue and discontinuous behavior. Our research confirms that the presence of fake news can cause emotional drain and social media fatigue, leading to discontinuous behavior. The permanent interaction with fake news can be disturbing and can mislead the consumer into forming distorted opinions or making wrong buying decisions. For this reason, some consumers might find it annoying and their avoidance is a possible coping strategy. However, due to social pressure and other reasons, not all users are ready to stop using it. There are still categories of users who still enjoy the socialization that takes place on social media or users who have a particular interest in using it. As being up-to-date with news is a normal human and social trait, some users might search for alternatives to avoid fake news. Willingness to pay for quality content can be a way of trying to avoid fake news. However, our results show that the willingness to pay to avoid fake news is not necessarily efficient as users do not perceive any increased value by adopting it. On the contrary they are likely to increase even more their discontinuous behavior.

From a practical point of view, social media companies or companies that promote their products and services online as well as other users present on the platforms should reconsider their strategy, as the huge amount of fake and distorted news might chase away the real intellectual activity of social media. In order to avoid discontinuous behavior, all these actors should focus more on the content displayed on social media platforms. Perhaps it is better to create less, but more qualitative content in order to attract consumers. Companies that promote their products on social media, should reconsider their target groups, as some groups of consumers see the information from social media as boring and tiring. The overwhelming effect of the existence of fake news can persuade users to avoid all types of information in order not to be influenced by the fake content. In addition, the association of social media with fake news can reduce the credibility of information and advertising posted on social media. Consumers should also reconsider their presence and social activities on the platforms. If social media has become just a place to show off and a manipulation platform for interest groups, consumers should think twice if they still want to participate in this "social competition" or if they wish to enrich their social life in other places. Our research shows that there are groups of consumers for which social media leads to tiredness (fatigue) and frustration, so for this reason they reduce their presence on such platforms.

The limitations of our study refer to the fact that we only addressed some general aspects related to fake news. We tried to introduce the idea of fake news by presenting a post about the alarming situation of a possible energy blackout. Depending on the personality, profile or interest of the user this information might be more or less associated with fake news. However, this is a general problem when studying fake news, as each user has its own views of the world and what is fake for one user, may not be fake for others. Being a behavioral study, the sample structure containing mainly young consumers is not necessarily a limitation.

In future research, we aim to further investigate several aspects related to consumer groups who still use social media and their characterization in terms of personality, profiles, motives or other interests. There is no doubt that, fake news remains an important topic that needs to be further investigated as it has important implications for consumers and society, especially at a time when the spreading of fake news has gone to another level with the creation and distribution of deep fake and with the promotion of social media content in the classic media.

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Author contributions

VD and CP were responsible for the design and development of the data analysis. VD, CP, RL and CB were responsible for data collection. VD and CP were responsible for data analysis and interpretation. VD, CP, RL and CB wrote the first draft and the revisions of the article.

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