A study of modelling the antecedent factors of fake news sharing and the moderating effect of SNS dependency

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To cite this article: Choi, Y. (2024). A study of modelling the antecedent factors of fake news sharing and the moderating effect of SNS dependency. *World of Media. Journal of Russian Media and Journalism Studies*, 1: 31-49. DOI: 10.30547/worldofmedia.1.2024.2

Abstract

The purpose of the present study is to examine the relationships between behavioral factors and fake news sharing and explore the moderating effect of social networking sites (SNS) dependency on those relationships. For this, the study collected data from 352 social media users in South Korea through a survey method and used hierarchical multiple regression analyses. The results show that the more self-expression, social tie strength, or parasocial interaction participants perceive online, the more favorable fake news sharing they have. Conversely, status-seeking was not significantly associated with fake news sharing in this study. A positive relationship between self-expression and fake news sharing is stronger for participants with high rather than low SNS dependency. However, SNS dependency was found to have no significance on the relationship between other behavioral factors and fake news sharing. This study is believed to be the first to model the behavior of social media users in sharing fake news and authenticating it before sharing it online.

Keywords

Affordance theory, social impact theory, SNS dependency theory, fake news sharing.

Introduction

Fake news, as defined by Mustafaraj and Metaxas (2017) and Ali et al. (2022), refers to deceptive information spread online in a manner that gives the

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impression of being genuine and credible to the audience. Despite its existence in various forms throughout history, fake news has gained unprecedented popularity in recent times, as indicated by recent studies by Dewey (2016) and Miró-Llinares & Aguerri (2023). The interest of scholars in studying it has also increased during the past few years. A large number of the existing fake news studies are conceptual and qualitative (Jin et al., 2016; Mustafaraj, & Metaxas, 2017). For example, Mustafaraj & Metaxas (2017) study the details of the use of anonymous Twitter handles to spread misinformation about an electoral candidate, Martha Coakley, to understand the spread of fake news on social networks. The study reveals that the news was spread through the infiltration of groups of users already conversing online to use them to share misinformation organically across their networks.

A lot of empirical researches about news also exist on the subject of fake news, primarily focusing on analyzing newsfeeds, tweets, and Facebook² posts to comprehend how fake news is disseminated (Jang et al., 2018; Shin et al., 2018; Peterson, 2020). Shin et al. (2018) analyze tweets representing rumors related to politics that were tweeted and shared on Twitter during the 2012 U.S. election. The study reveals that rumor tends to reverberate and resurface many times after the initial publications, whereas factual news does not come up again and again. Jang et al. (2018) analyzed a large number of tweets about both fake and real news related to the 2016 U.S. presidential election from January 1, 2016, to April 30, 2017. The study reveals that Twitter users had generated fake news root tweets, but these tweets included links to dubious news websites. The study also highlights differences between the evolution of real and fake news stories.

Most of the other prior empirical studies are based on text analysis using time series, examination of the root content, writing style analysis of people, analysis of sharing history of the identified fake story, evaluation of the information presented in the form of tweets, comments and articles, and randomized controlled trial of political mobilization messages (Allcott, & Gentzkow, 2017; Bond et al., 2012; Potthast et al., 2017). In a study based on survey data encompassing 12 US states and 8,000 high school and college students, researchers found that most respondents were unable to distinguish between fake and real information (McGrew et al., 2018). There is a gap as far as studies related to behavioral aspects of sharing fake news by social media users are concerned.

Therefore, this study developed a comprehensive model from the perspective of affordance theory, social impact theory, and social networking sites (SNS)

² Belongs to Meta company, banned on the territory of the Russian Federation.

dependency theory to understand the predictors of fake news shared on social media. Specifically, status-seeking and self-expression were categorized under the affordance theory. Social impact is defined as any influence on individual feelings, thoughts, or behavior that is created from the real, implied, or imagined presence or actions of others (Latane, 1981). According to Handarkho (2020), the choice to use and share information is generally influenced by one's acceptance of others' views, and this is also based on the quality of the social experience that occurred on the platform.

Especially, Evidence has shown that the emergence of COVID-19 as a global pandemic has brought with it an unprecedented amount of fake news which threatens global well-being (World Health Organization, 2020). It has been remarked that the world is fighting infodemic along with the pandemic. The abundance of imprecise, ambiguous, and inaccurate information during COVID-19 resulted in information overload and accelerated health anxiety and the sharing of incorrect information (Basch et al., 2020; Laato et al., 2020). Therefore, this study will examine social tie strength and parasocial interaction influence on sharing fake information related to COVID-19. The SNS dependency theory focuses on the degree an individual depends on SNS to carry out a daily task (Lee, & Choi, 2017). The theory assumes that the more an individual relies on the SNS platform, the easier it becomes for their conduct and beliefs to be influenced by the 'opinion' of others regarding specific issues (Baran, & Davis, 2009).

Theoretical background and hypothesis development

In 1966, psychologist James Gibson introduced the affordance theory, defining it as the potential actions available to an actor within a specific situation (Schandorf, 2019). For example, a door handle can be used to open a door as well as a clothing stand. Affordances as argued by Gibson (1977) are independent of the actor's ability to recognise them. In response to this view, Norman (1988) reconceptualized the affordance lens to focus on only the actions that an individual realizes to exist. In doing so, affordances were tied to the objectives, values, thoughts, and capabilities of individuals. This study adopted the postulation of technical affordances, which are the opportunities that social media platforms provide individual affordances, the opportunities given to the individual and contextual affordances, the opportunities provided by the context of COVID-19 pandemic.

Concerning technological affordance, it has been shown that social media allows users to read and share news as well as information (Najmul et al., 2020).

Research has also shown that via social media, people promote themselves (Thompson et al., 2019), which falls under the individual affordance. Furthermore, there is evidence to show that the COVID-19 pandemic resulted in a scenario where several news items emerged relating to the virus, policies, recommended health measures, and various others, providing contextual affordances to share, comment, and express oneself (Najmul et al., 2020). From these streams of investigations, the constructs of self-expression (Plume, & Slade, 2018) and status-seeking (Thompson et al., 2019) are likely to be salient in explaining misinformation.

The ability of social media to allow individuals to share news to achieve status within their network is referred to as "status seeking" in this study. Previous research by Thompson et al. (2019) and Drummond et al. (2020) has demonstrated that social media empowers people to share content to gain recognition. It has also been suggested that social media allow people to contribute to their society, which offers them a sense of self-importance and self-status (Ma et al., 2014). The affordance social media provides has encouraged people to use such medium to seek status (Lee et al., 2011). Thus, evidence suggests that the desire for status-seeking is the strongest predictor of news sharing on social media (Najmul et al., 2011). However, when individual reputation is at stake, users will be more mindful of what they share (Talwar et al., 2019). This indicates that status-seeking is associated with building a positive image before others and sharing fake news can damage users' image (Talwar et al., 2019; Simons, & Manoilo, 2021). Najmul et al. (2011) argued that social media users who are moved by the desire to seek status online because of the affordance provided by the medium, would be more cautious not to circulate misinformation, as that may end up ridiculing themselves in the case the news they shared was fake. Thus, this study hypothesized the following:

H1: Status seeking will be negatively associated with fake news sharing.

Research indicates that self-expression values have reached a peak, and social media platforms are increasingly becoming a popular medium for individuals to convey their thoughts and feelings (Orehek, & Human, 2017; Senanu et al., 2023). Self-expression relates to the need for expression of oneself (Plume, & Slade, 2018). In this current study, self-expression involves social media's ability to permit the expression of one's feelings, thoughts, or ideas pertaining to COVID-19. It has been shown that social media enabling self-expression leads to unintentional fake news sharing (Chen et al., 2015). This is consistent with recent research that argued that the affordance of self-expression on social

media encourages people to disseminate false information. Drawing from these pieces of literature, we argue that social media which permits people to freely express their views regarding the COVID-19 pandemic could lead many to share unverified information. This has resulted in millions of tweets and posts on the pandemic which have turned out to be false (Hou et al., 2020). This study thus proposed that:

H2: Self-expression will be positively associated with fake news.

Social impact is defined as any influence on individual feelings, thoughts, or behaviors that are created from the real, implied, or imagined presence or actions of others (Latane', 1981). The theory assists us in comprehending the circumstances where we exert more significant influence within society. Consequently, the social effect will rely on social pressures, the proximity of the event, and the quantity of sources generating that influence (Afshan et al., 2023). According to Handarkho (2020), the choice to use and share information received is generally influenced by one's acceptance of others' views, and this is also based on the quality of the social experience that occurred on the platform. Therefore, we examined social tie strength, parasocial interaction, and perceived herd influence on sharing fake information related to COVID-19.

Tie strength is the level of intensity of the social relationship, or the degree of overlap between two individuals' scope of friendship (Steffes, & Burgee, 2009). It has been proven that information obtained from a strong tie strength source is perceived as more trustworthy (Yu et al., 2018). This study thus contends that the ideas or information relating to COVID-19 shared by individuals that are familiar to the users may cause them to trust the information, without necessarily verifying such information. Consequently, we propose the following hypothesis:

H3: Social tie strength is positively associated with fake news sharing.

Parasocial interaction, as described by Tsai & Men (2017) and Brodie & Ingram (2021), pertains to the extent or likelihood of an individual forming an emotional bond with a person perceived as a mentor or role model. Handarkho (2020) remarked that emotional tie is not only formed among friends and relatives but also among individuals who are admired and respected, such as politicians, public figures, and idolized personalities. In this view, we assume that people would believe any COVID-19 information disseminated on SNS by public figures they hold in high esteem. Drawing from this, this study proposed that:

H4: Parasocial interaction is positively associated with fake news sharing.

The SNS dependency theory focuses on the degree an individual depends on SNS to carry out a daily task (Lee, & Choi, 2018). The theory assumes that the more an individual relies on the SNS platform, the easier it becomes for their conduct and beliefs to be influenced by the 'opinion' of others regarding specific issues (Baran, 2009). Those who consider social media (SNS) as their main information or news outlet believe that the information shared on these platforms is credible and dependable (Huynh, 2020; Chatterjee, & Dsilva, 2021). This study believes that dependency on social media may lead to fake news sharing.

The high level of SNS dependency is likely to cause users to lend more support to the information shared with them by sharing it further on their social networks. Consequently, the association between SNS dependency and fake news-sharing behavior can be anticipated. Therefore, it can be argued that social media users who have a high dependency on the information and news shared on SNS are likely to share fake news with others, and are less likely to authenticate the news before sharing. Furthermore, high SNS dependency can be anticipated to prevent users from authenticating news received from trusted sources since users feel comfortable sharing any news received from trusted sources, even if it seems to be fake. This study suggests that SNS dependency with these characteristics will affect fake news sharing according to the user's temperament. According to the affordance theory, social impact theory, and SNS dependency theory, this study suggests that the behavioral factors of users will increase the sharing of fake news. This relationship will be strengthened by the user's SNS dependency.

This study suggests that users' status seeking will have a positive effect on fake news sharing. Users who value such status seeking will try to gain status seeking through self-satisfaction by further spreading fake news. In this process, SNS is an important medium, and dependency on this medium will further strengthen this process. This study suggests that users' self-expression will have a positive effect on fake news sharing. Users who want such self-expression will try to gain self-expression through recognition from others by further disseminating fake news. In this process, SNS is a very effective medium, and dependency on this medium will further strengthen this process. This study suggests that users' pass-time gratification will have a positive effect on fake news sharing. Users during this social tie strength will try to increase social tie strength through time consumption by further disseminating fake news. In this process, SNS is a very efficient medium, and dependency on this medium will further strengthen this process. It was suggested that users' parasocial interaction would have a positive effect on fake news sharing. Users who are in the process of parasocial interaction can collect other information by spreading fake news more, so parasocial interaction can be increased. In this process, SNS is a highly optimized medium, and dependency on this medium will further strengthen this process. Therefore, this study proposes:

H5-1: SNS dependency strengthens the influence of status-seeking on fake news sharing.

H5-2: SNS dependency the influence of self-expression on fake news sharing.

H5-3: SNS dependency strengthens the influence of social tie strength on fake news sharing.

H5-4: SNS dependency strengthens the influence of parasocial interaction on fake news sharing.

Methodology

Sample

Survey research is very useful in collecting data from a large number of individuals in a relatively short time and at a better cost. Hence, for the current study, the questionnaire survey was chosen for data collection. This study is based on responses from consumers using social media in South Korea.

This study used and paid a professional survey company for this survey. This survey was conducted from March 1, 2023, to April 30, 2023. A professional survey company sent a survey link through e-mail based on the information they had from the people they had surveyed. The professional survey company gave an electronic gift card to respondents to increase the response rate and reduce the non-response bias.

There can be many reasons why surveys give out electronic gift cards. Common reasons why companies or research organizations provide electronic gift cards when conducting surveys include. Electronic gift cards are one way to motivate participants to participate. Rewards can increase participation rates and ensure the reliability of survey results. Participating in a survey is an activity that requires time and effort from participants, so we encourage participation by providing rewards or incentives. Electronic gift cards make participants more likely to take surveys seriously and respond in detail. This might improve the quality of the data collected. For these reasons, companies and research organizations can provide electronic gift cards to survey participants to effectively manage the survey process and achieve desired results.

Out of 431 responses collected, 352 responses (81.6% of total responses) were usable for analysis. Among the participants, 264 (75.0%) were women and 88

(25.0%) were men. The age distribution of survey respondents is as follows: 125 (35.5%) people in their 10's, 101 (28.7%) people in their 20s, 72 (20.4%) people in their 30s, and 54 (15.3%) people in their 40s. Also, 125 (35.5%) respondents to the survey are in high school, 173 (49.1%) are university graduates, and 154 (43.7%) are graduates of graduate schools. Among respondents, 38.9% had experience of being infected with COVID-19.

Before measure validation and model testing, the responses were analyzed to identify the response set (Rennie, 1982). A response set is a tendency among subjects to respond to questions in a particular way independently of the content of the items (Kerlinger, 1973). No cases of response set were detected. Additionally, two tests of common methods variance were employed. First, Harman's one-factor test of common methods was conducted. An additional test of partial correlation was also conducted (Podsakoff, & Organ, 1986). This procedure stipulates that the first factor from the principal components analysis should be introduced into the partial least squares (PLS) model as a control variable. This is based on the assumption that the first factor is the most likely to approximate common method variance, it is assumed that CMV is present (ibid). There were no significant changes in explained variance. Thus, it appears that common methods bias is not problematic.

Measurement

This study had six constructs: four independent variables, one moderating variable, and one dependent variable, which is fake news sharing. All the items were adapted from prior studies. Status-seeking was adapted from the study of Thompson et al. (2019). For example, "I share content related to COVID-19 because it helps me feel important when sharing." Self-expression was adapted from Plume & Slade (2018). For example, "I share COVID-19 content on social media to show my personality." Social tie strength was adapted from the study of Shim & Altman (2016). For example, "I feel my friends would share true information related to COVID-19 in SNS." Parasocial interaction was adapted from Tsai & Men (2017). For example, "I have no problem using COVID-19 information shared in SNS by someone that I admire and respect." SNS dependency was adapted from recent studies (Lee & Choi, 2017). For example, "I frequently obtain COVID-19 information through SNS." Fake news sharing was adapted from recent studies (Khan & Idris, 2019). For example, "I have shared information related to COVID-19 information through SNS." Fake news sharing was adapted from recent studies (Khan & Idris, 2019). For example, "I have shared information related to COVID-19 virus that I later found out as a hoax."

All items were gauged using a 5-point Likert scale in which 1 represents Strongly Disagree, and 5 indicates Strongly Agree. To decrease the vagueness of the items, we conducted a pilot study with (n = 30) participants before the actual data collection. This study also consulted some experts to validate our items. Based on the outcome, this study obtained from the pilot study and the recommendations from the experts; we reworded some items to increase clarity.

Results

Verification of reliability and validity

The validity of variables was verified through the principal components method and factor analysis with the varimax method. The criteria for determining the number of factors is de ned as a 1.0 eigenvalue. The researchers applied factors for analysis only if the factor loading was greater than 0.5 (factor loading represents the correlation scale between a factor and other variables). The reliability of variables was judged by internal consistency as assessed by Cronbach's alpha. The researchers used surveys and regarded each as one measure only if their Cronbach's alpha values were 0.7 or higher. Four independent variables including status-seeking, self-expression, social tie strength, and parasocial interaction yielded Cronbach's alphas of 0.85, 0.81, 0.82, and 0.89, respectively. Cronbach's alpha for SNS dependency was 0.80. Cronbach's alpha for fake news sharing was 0.84.

Common method bias

As with all self-reported data, there is the potential for the occurrence of common method variance (CMV) (MacKenzie, & Podsakoff, 2012; Podsakoff et al., 2003). To alleviate and assess the magnitude of common method bias, The researcher adopted several procedural and statistical remedies that Podsakoff et al. (2003) suggest. First, during the survey, respondents were guaranteed anonymity and confidentiality to reduce evaluation apprehension. Further, we paid careful attention to the wording of the items and developed the questionnaire carefully to reduce item ambiguity. These procedures would make them less likely to edit their responses to be more socially desirable, acquiescent, and consistent with how they think the researcher wanted them to respond when answering the questionnaire (Podsakoff et al., 2003; Tourangeau, Rips, & Rasinski, 2000). Second, this study conducted Harman's one-factor test on all of the items. A principle components factor analysis revealed that the first factor only explained 34.1 percent of the variance. Thus, no single factor emerged, nor did one factor account for most of the variance. Furthermore, the measurement model was reassessed with the addition of a latent common method variance factor (Podsakoff et al., 2003). All indicator variables in the measurement

model were loaded on this factor. The addition of the common variance factor did not improve the fit over the measurement model without that factor with all indicators remaining significant. These results do suggest that common method variance is not of great concern in this study.

Relationship between variables

Table 1 summarizes the Pearson correlation test results between variables and reports the degree of multi-collinearity between independent variables. The minimum tolerance of 0.827 and the maximum variance inflation factor of 1.209 show that the statistical significance of the data analysis was not compromised by multi-collinearity.

Table 1

	1	2	3	4	5
Status seeking	1				
Self-expression	042	1			
Social tie strength	.021	.101	1		
Parasocial interaction	.101	.021	.011	1	
SNS dependency	.022	.021	.120	.101	1
Fake news sharing	.011**	.061**	.020	.081**	.021*

Variables' correlation coefficient

p < .05, p < .01

Hypothesis testing

This research employed hierarchical multiple regression analyses using a three-step approach to examine the proposed hypotheses. In the initial step, demographic variables were taken into account to control for their influence. Subsequently, behavioral factors were introduced in the second step. Finally, to directly investigate the current hypothesis regarding the moderating effect, the multiplicative interaction terms between behavioral factors and SNS dependency were included in the last step. The outcomes of these analyses are presented in *Table 2*. Firstly, concerning the control variables, it was observed that sex and age exhibited a negative correlation with the propensity to share fake news. This implies that women ($\beta = -.021$, p < .01) are more likely to engage in sharing fake news compared to men (as depicted in Model 1 of *Table 2*).

Secondly, when exploring the association between behavioral factors and fake news sharing (as depicted in Model 2 of *Table 2*), all work-related support factors demonstrated statistical significance. Specifically, self-expression

Table 2

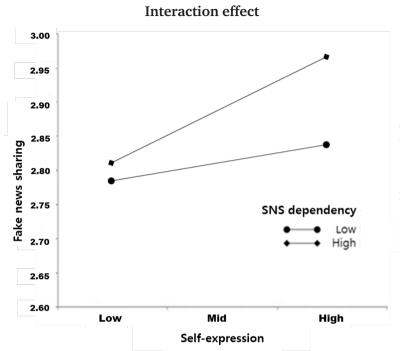
(β = .048, p < .01), social tie strength (β = .018, p < .01), and parasocial interaction (β = .029, p < .01) displayed positive relationships with fake news sharing. However, the variable of status-seeking did not show any significant correlation. As a result, Hypotheses 2, 3, and 4 were found to be supported.

	Fak	Fake news sharing			
	Model 1	Model 2	Model 3		
Gender	021*	011*	002*		
Age	015*	011*	009*		
Educational level	.022	.020	.012		
Status seeking		.040	.030		
Self-expression		.048**	.041**		
Social tie strength		.018**	.012**		
Parasocial interaction		.029**	.013**		
SNS dependency			.012**		
Status seeking * SNS dependency			.060		
Self-expression* SNS dependency			.014*		
Social tie strength* SNS dependency			.021		
Parasocial interaction* SNS dependency			.011		
Adj. R ²	.108	.157	.178		
F	4.805**	9.998**	12.121**		

Analysis 1

p < .05, p < .01

Finally, the third model, which includes moderator variables, examines the connections between behavioral factors and SNS dependency concerning the sharing of fake news. The study reveals that SNS dependency has a favorable influence on the association between self-expression and fake news sharing (β = .011, p < .01). However, no statistically significant relationship is observed between other behavioral factors and fake news sharing when considering SNS dependency. These findings indicate that when individuals exhibit higher levels of SNS dependency, their self-expression plays a more substantial role in their engagement with fake news, aligning with hypothesis H3 (refer to *Figure 1*).



Discussion

The purpose of the present study was to examine the relationships between behavioral factors and fake news sharing and explore the moderating effect of SNS dependency on that relationship. Concerning technological affordance, it has been shown that social media allows users to read and share news as well as information (Najmul et al., 2020). The results show that the more self-expression, social tie strength, or parasocial interaction participants perceive online, the more favorable fake news sharing they have. Conversely, status-seeking was not significantly associated with fake news sharing in this study. It should be noted that our conclusion is based on the analyzed selective constructs. There are other possible attributes of fake news spreading such as ignorance, unawareness, peer pressure, and attention-seeking. Nevertheless, based on the outcomes of this study and the increasing health risk false information proliferation is causing during the outbreak of COVID-19, this study infers there is a need for social media users to confirm the authenticity of the information they come across as well as share on social media. This can be achieved by considering the source of information, reading beyond the headlines, investigating a news article by checking the dates, examining evidence to confirm enough facts and figures, searching other sources, and asking professionals when in doubt.

The positive relationship between self-expression and fake news sharing is stronger for online participants high rather than low in SNS dependency. However, SNS dependency was found to have no significance on the relationship between other behavioral factors and fake news sharing. This study suggests that people with a high level of SNS dependency can have a high level of trust in those participating in social media. Based on this suggestion, this study anticipates that these people can show enhanced participant behavior during the fake newssharing process. Therefore, the results show that the higher the level of SNS dependency, the more favorable fake news-sharing participants have because they think that others will participate in fake news-sharing as they consider online social media as important. The analysis results of this study showed that the higher the SNS dependency, the higher the self-expression increased the fake news sharing. These results are inferred to be because the desire for selfexpression is easily realized online. Since it is non-face-to-face and anonymity is possible online, people can express their opinions freely, and easily become friendly with others. Therefore, people who trust that such exchanges are easy online can consider fake news sharing as an important means of training to increase their desire to socialize.

Research contributions and practical implications

This study sought to investigate the association between different aspects of social media use and fake news-sharing behavior. This study has significant importance since it is believed to be one of the first to model the behavior of social media users in sharing fake news and authenticating it before sharing it online. The study has brought together key constructs that have been identified by the prior studies as important factors shaping social media usage. The important implications of the study for scholars follow. First, the study findings advance the current limited understanding of online fake news-sharing behavior. The findings will enable the scientific community to understand the factors that are positively and negatively associated with fake news-sharing behavior. New knowledge of its dynamics can catalyze the formulation of effective strategies for protecting society and firms from the threat of fake news spread.

Second, the study findings have brought a newer understanding of the association between the dark side of social media use and fake news-sharing behavior. It is important to mention that no known empirical study has examined such associations in the past. This new knowledge of the association of fake news, and social media use behavior can improve the understanding of marketers and analysts concerning consumer behavior in the era of fake news and social media. The fear of the potentially damaging role of social media in spreading fake news about society and firms is alarming; making the current study findings significant as they provide a foundational knowledge and understanding of the association between the two.

Third, the study has grounded the antecedents and the dependent variables in the existing seminal work, popular theories like affordance theory, social impact theory, and SNS dependency theory. Although prior literature on social media has used some of these theories to explain various aspects of behavior, this is the first known time that these theories are being extended in connection to sharing fake news. By doing so, the study has opened the scope for the application of the proven existing work to the research in the new area of fake news, which is raising concerns across the globe. The fact that most of the hypotheses, grounded in the existing work, are supported provides the basis for taking the exploration of these constructs further. Scholars can extend the conceptual model by exploring more complicated relationships of mediation and moderation to galvanize the research in the area further.

Finally, based on the affordance theory, this study empirically demonstrated that it is easy to spread fake news through social media. Affordance theory defines potential actions that an actor can use in a particular situation. In response, social media platforms offer technological affordances. Because users can read and share news as well as information, fake news can easily spread. In addition, according to personal affordances, users select and promote news that fits their goals and values, or take action to pursue status. In the context of the COVID-19 pandemic, contextual affordances are created, resulting in a variety of relevant news, allowing for contextual sharing, commentary, and expression. This situation influences the spread of fake news concerning self-expression and the pursuit of status. Therefore, these affordance factors can be understood as evidence that increases the possibility of fake news being more easily distributed through social media.

Limitations and future research directions

The current study has two main limitations. First, the study sample was selected from only one country, so generalizing the findings of the study to other geographies or cultural settings is difficult. Second, the study methodology was influenced by the cross-sectional design, which is prone to methodological

biases. Furthermore, in a cross-sectional design, causality is difficult to examine. Also, the low value of R² may be considered to be a limitation of the study, if interpreted in a general context where a value of 0.75 is considered substantial (Hair et al., 2013). However, this is not a limitation, as much lower values of variance explained are acceptable in consumer behavior studies (Hair et al., 2011). The low value of R2 can also be interpreted as an indication of the need to study asymmetrical relations amongst the constructs analyzed by the present study.

This study recommends that scholars should address the above limitations in future investigations. The study setup should be examined and validated by recruiting social media users from other countries. In addition, the dynamic and causal nature of the relationship among these variables should be examined through longitudinal and experimental studies. Further, future research could examine the association of fake news-sharing behavior with other social media use measures. Future research can also focus on uncovering the mediating and moderating effects of the independent variables and cultural differences, respectively, on authenticating news and sharing fake news online. Given the limitation regarding the low value of R², future researchers may study asymmetrical relations among these constructs by performing fuzzy set qualitative analysis (fsQCA) (Ragin, 2008), as applied by many recent studies (e.g., Pappas, 2018; Pappas et al., 2016). Despite its limitations, the study contributes insightful knowledge and provides a better understanding of the association between the dark side of social media use and fake news-sharing behavior.

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