Users' Perspective on Knowledge Constructs About Covid-19 on Social Media

Perspectiva dos Usuários Sobre a Covid-19 nas Mídias Sociais

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ABSTRACT

Objective: (a) to identify the Social Media Platform (SMP) most used to search for information about the Covid-19 pandemic and its users' profiles; and (b) to identify the relationship between the constructs of Knowledge Quality (KQ), Knowledge Donation (KD), and Knowledge Collection (KC) in the scope of the Covid-19 pandemic and using a knowledge quality scale and a knowledge donation and collection scale. Design/methodology/approach: Data was collected through a survey with 295 answers. First, we analyze the profile of SMP users through exploratory factor analysis and reliability, which was used to test the hypotheses, followed by multigroup analysis. Findings: Most participants are women between 25 to 34 years with complete post-graduation. The results suggest that the most used SMP to search for or receive information about Covid-19 was Facebook. Most of the respondents identified fake news on SMP but ignored them. The model presents reliability and adequate convergent and discriminant validity. KC represented a medium effect on KQ and KD. The multigroup analysis shows that there is a difference between age groups. Originality: This is the first study to test the relation between the constructs KQ, KC, and KD using data from the Covid-19 pandemic on SMPs.

Keywords: Knowledge Quality. Knowledge Donation, Knowledge Collection. Fake News. Social Media Platforms. Social Networks.

RESUMO

Objetivo: (a) identificar a Plataforma de Mídia Social (PMS) mais usada para pesquisar informações sobre a pandemia de Covid-19 e os perfis dos usuários; e (b) identificar a relação entre os construtos de Qualidade do Conhecimento (KQ), Doação de Conhecimento (KD) e Coleta de Conhecimento (KC) no âmbito da pandemia de Covid-19 usando uma escala de qualidade do conhecimento e uma escala de doação e coleta de conhecimento. Metodologia/abordagem: Os dados foram coletados por meio de uma pesquisa com 295 respondentes. Primeiramente, analisamos o perfil dos usuários de PMS por meio de análise fatorial exploratória e de confiabilidade. Também foi realizado teste de hipóteses, seguido de análise multigrupo. Resultados: A maioria dos participantes são mulheres entre 25 e 34 anos com pós-graduação completa. A SMP mais usada para pesquisar ou receber informações sobre a Covid-19 foi o Facebook. A maioria dos entrevistados identificou fake news no Facebook, mas ignorou. O modelo apresentou confiabilidade e validade convergente e discriminante adequadas. O KC representou um efeito médio no KQ e no KD. A análise multigrupo mostrou que há uma diferença entre as faixas etárias. Originalidade: Este é o primeiro estudo a testar a relação entre os construtos KQ, KC e KD usando dados da pandemia de Covid-19 em SMPs.

Palavras-chave: Qualidade do Conhecimento. Doação de Conhecimento. Coleta de Conhecimento. Notícias Falsas. Plataformas de Mídia Social. Redes Sociais.

1 INTRODUÇÃO

Sharing knowledge on Social Media Platforms (SMPs) enables people to access a more open and connected world. It allows people to establish social connections in new ways, collaborate with others and provides the power to self-publish their knowledge to users anywhere in the world (HEMSLEY; MASON, 2012; KALIYAR; GOSWAMI; NARANG, 2021). In addition, the users of SMPs can explore many possibilities of interaction from social activities to sharing content (OKPARA *et al.*, 2021), and the contemporary ecosystem drive like-minded users into groups (GUERRA *et al.*, 2013). Conversely, the lack of critique on thoughts and the amplification of radical ideas by the virtual echo chambers created by SMP boosts the increase of false content. Hence, Alwreikat (2021) and Van den Broucke (2021) also highlight the importance of users having information literacy skills that enables them to navigate through the waves of fake news on SMP.

Hence, one of the main limitations of SMPs in the health area is the lack of quality content (LOPEZ; BLOBEL; GONZALEZ, 2016). With the arrival of the Covid-19 pandemic, there was an abundance of unclear, ambiguous, and inaccurate information caused by an overload of information and accelerated false content sharing (KUMAR; BHATIA; SANGWAN, 2021; LAATO *et al.*, 2020). Moreover, this kind of information is shared on SMP, collected, and donated to others frequently without verifying its veracity.

Thus, this paper used the information quality scale (YOO; VONDEREMBSE; RAGU-NATHAN, 2011) to understand how users lead with the quality of information they share on SMP. Hence, high-quality of information is defined as information accuracy, currency, accessibility, relevance, timeliness, completeness, and consistency (YOO; VONDEREMBSE; RAGU-NATHAN, 2011). In addition, we used the donation and collect scale of DeVries et al. (2006) because knowledge sharing is defined as two knowledge-sharing behaviors (donating and collecting). So, the behavior of knowledge sharing consists of both bringing (or donating) and getting (or collecting) knowledge (DE VRIES; VAN DEN HOOFF; DE RIDDER, 2006).

It is evident that the negative point of knowledge sharing on SMP is the lack of quality content. The lack of quality generates false stories with partial truths or speculative stories without evidence (LAVORGNA *et al.*, 2018), in other words, fake news. The term fake news is commonly used to refer to false stories containing partial truths or speculative stories that mimic news media content in form but not in organizational process or intent. Here, we use it as an umbrella term that includes the different types of misinformation and disinformation (MELCHIOR; OLIVEIRA, 2022)

There is a staggering amount of fake news propagating online. In the first four weeks of January 2020, there were 15 million Twitter posts about Covid-19, spanning from medicines for the SARS-CoV-2 to conspiracy theories that China created the virus with political or economic goals (GONÇALVES-SÁ, 2020).

However, it was not only Twitter that people used to interact with others. The number of SMPs' users increased by almost half a billion over 2020 (on average more than 1.3 million new users joined social media every day), bringing the total to 4.2 billion users at the end of the year. The SMP with the biggest user base among all platforms is Facebook, with 2.85 billion monthly active users worldwide as of July 2021 (KEMP, 2021). These platforms are especially important during a global pandemic to help users maintain social contact and share health information during a global pandemic (TSAO *et al.*, 2021). However, users frequently use the power provided by these platforms to share false content. Since its inception, SMPs have had an essential role in spreading false content (ALLCOTT; GENTZKOW, 2017), and there are actions that the platforms could adopt to prevent the spread of these false content (FIGUEIRA; OLIVEIRA, 2017).

Therefore, the aim of this study is twofold: (a) to identify the most used SMP to search for information about the Covid-19 pandemic and its users' profiles; and (b) to identify the relationship between the constructs Knowledge Quality (KQ), Knowledge Donation (KD), and Knowledge Collection (KC) in the scope of the Covid-19 pandemic and using two different scales.

To this end, a survey was performed to answer the following research questions:

RQ1: What is the most used SMP to search for information about the Covid-19 pandemic?

RQ2: What is the profile of the SMP users, and what is their behavior towards the Covid-19 pandemic?

RQ3: What is the relationship between KQ, KD, and KC in the scope of the Covid-19 pandemic through the lenses of the information quality scale of Yoo, Vonderembse and Ragu-Nathan (2011) and the donation and collect scale of DeVries (2006)?

2 METHOD

This paper used a survey to collect the data and prepared the answers for analysis as illustrated in Figure 1. We spread the survey link in all the major SMPs (WhatsApp, Facebook, Instagram, Twitter, and Snapchat) and sent by e-mail to closer contacts. We ran the

survey with 14 questions from June 5th to July 25th of 2020 and collected a total of 295 answers. The full questionnaire is available in Appendix A.

Figure 1 – Data preparation
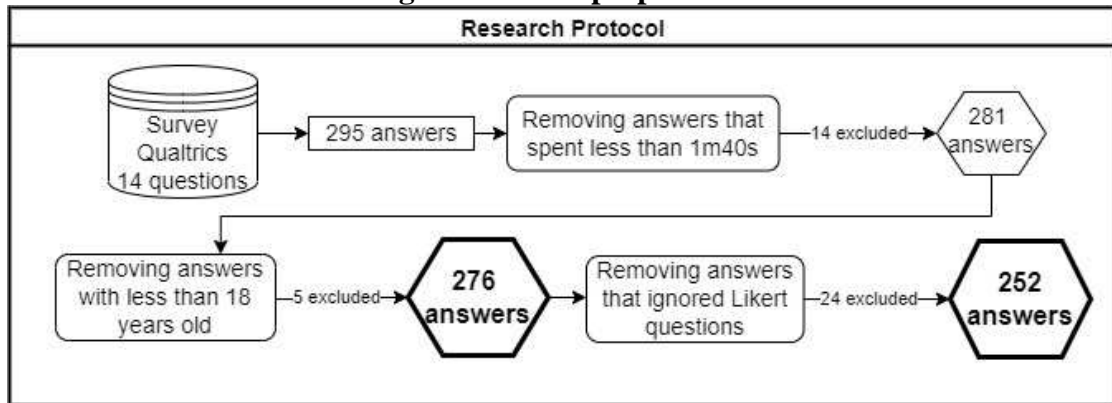
The full text of the survey text contains around 600 words. However, some of the questions are not shown to the user according to their previous answers so we will consider 550 words for this analysis. The study of Castro, Kallie and Salomão (2005) found that readers of the Portuguese language can read up to 238 words per minute, but for safety, we will consider that a person may be able to read 330 words per minute in our survey. Therefore, a user must spend at least 1 minute and 40 seconds to complete the survey, so we ignored the 14 answers which completed the survey faster than this threshold. The eligible audience for answering this survey was SMP users over 18 years old because, in Brazil, this is the age of majority (BRASIL, 2002). Thus, we also removed 5 answers from younger people.

For the analysis of the profile of respondents, the Covid-19 pandemic and the fake news, and social media platforms and education, we used 276 eligible answers that completed the first 12 questions. Among these, 24 answers did not complete or answered the same value for all the 14 options in the last two questions (7-point Likert scale). Therefore, for the analysis presented in Sections 0 and 0 we used 252 eligible answers that completed the entire survey.

We used the software Qualtrics XM to collect and analyze the survey answers. Moreover, for analysis we also used the SPSS 17.0®, Smart PLS and the R language version 3.5.3

3 RESULTS AND DISCUSSION

In this section, we present a profile of the respondents, a descriptive analysis of the Covid-19's quality of information and the users' behavior in relation to Covid-19 information, as well as the exploratory factor analysis and reliability and multigroup analysis.

The survey was divided into two steps: the first section contains questions to characterize the respondents: gender, education, respondent's job, most used SMP, and questions about the user's behavior towards the Covid-19 pandemic. The second section was composed of questions designed to measure the knowledge-related constructs, for which we used two 7-point Likert scale questions ranging from 1 (strongly disagree) to 7 (strongly agree). The Likert scale was used because it simplifies the sensitive measurement of the variance (COOPER; SCHINDLER; SUN., 2006). The questionnaire was validated by applying it to potential respondents.

The scale used to measure the quality of information that SMPs users receive was taken from Yoo, Vonderembse, and Ragu☐Nathan (2011). It evaluates if the information is accurate, reliable, objective, unbiased, believable, current, and updated. The scale used to measure knowledge donation and collection was taken from De Vries et al. (2006). Knowledge donation includes the following four categories: the first is when I learn something new, and I tell it to my colleagues; the second is when I share the information I have with my colleagues; the third is that I think it is important that my colleagues know what I am doing; and the fourth, I usually tell my colleagues what I am doing. On the other hand, knowledge collection seeks to identify how individuals behave in certain situations and it includes the following four categories: the first is when I need certain knowledge, I ask my colleagues about it; the second is when I like to be informed about what my colleagues know; the third is that I ask my colleagues about their skills when I need to learn something; and the fourth when a colleague is good at something, I ask them to teach me how to do it (DE VRIES; VAN DEN HOOFF; DE RIDDER, 2006).

4 PROFILE OF RESPONDENTS

Table 1 presents the age group and gender of the 276 respondents, the most representative age group, with 99 (35.9%) answers, was 25 to 34 years old, mostly woman (57 or 20.7%). It was followed by the group 35 to 44 years old (62 respondents or 22,8%), and people 18 to 24 years old (51 respondents or 18.5%). One respondent of 65 years or more chose not to answer their gender.

Table 1 – Age group and gender of answers

Age group	Gender		Total
	Female	**Male**	
18 to 24 years	32 (11.6%)	19 (6.9%)	51 (18.5%)
25 to 34 years	57 (20.7%)	42 (15.2%)	99 (35.9%
35 to 44 years	30 (10.9%)	32 (11.9%)	62 (22.8%)
45 to 54 years	20 (7.2%)	9 (3.3%)	29 (10.5%)
55 to 64 years	17 (6.2%)	8 (2.9%)	25 (9.1%)
65 years or more	8 (2.9%)	1 (0.4%)	9 (3.3%)
	Other or I prefer not to answer		1 (0.4%)
			276

Regarding the country, 272 answers are from Brazil, 3 from Portugal and 1 from Italy. Regarding education, the highest number is 115 (42%) people with complete post-graduation, followed by 57 (21%) people with incomplete higher education and 41 (15%) people who have complete higher education. Furthermore, 31 (11%) have completed high school, 23 (8%) have incomplete post-graduation, and the others represent less than 5%.

Overall, the public that responded to this survey has high levels of education, which is explained because the authors are part of the academic environment. However, this level of education is very far from the level of education in Brazil. According to IBGE (2020), 2019 46.6% of the population aged 25 and over was concentrated in the levels of education up to complete elementary school or equivalent. Only 17.4% of the people aged 25 and over had a complete undergraduate degree (IBGE, 2020), while 27.4% of those in this same age group have completed high school and 32.2% of the people aged 25 and over had incomplete elementary education (IBGE, 2020). Furthermore, in 2019 in Brazil, only 48.8% of people completed primary compulsory education (high school) (IBGE, 2020).

Regarding the impact of the pandemic on jobs (Figure 2), people were advised to respond to all the options that apply. 140 (36.3%) people answered that they are or have been in the home office, followed by 79 (20.5%) respondents that marked that their job was not affected and are usually working. 18 (6%) are entrepreneurs that had to close the company temporarily, and 2 (1%) have permanently closed their company. Moreover, 40 (13%) people are retired, were already working at home, were not working, are farmers, or even were suspended from work or had their workload and salary reduced. There are also 16 (5%) that had to take a vacation and 12 (4%) that lost their job.
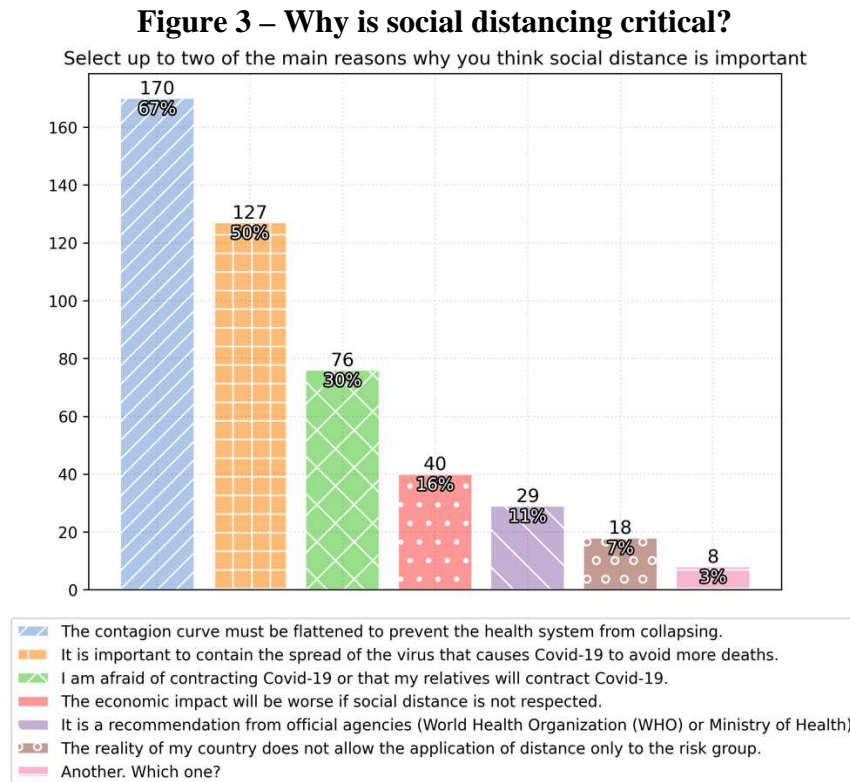
Figure 2 – Impact of the pandemic on jobs
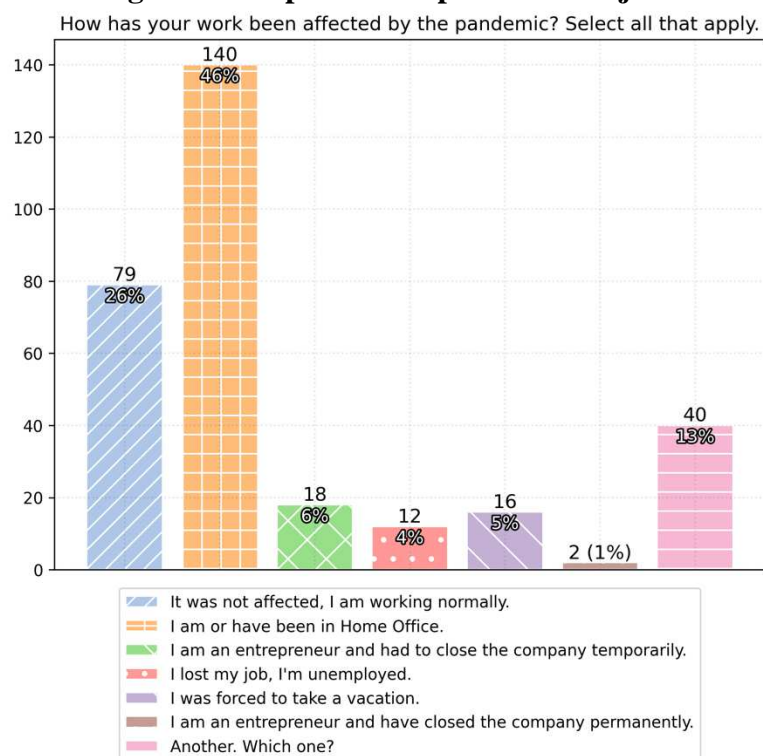
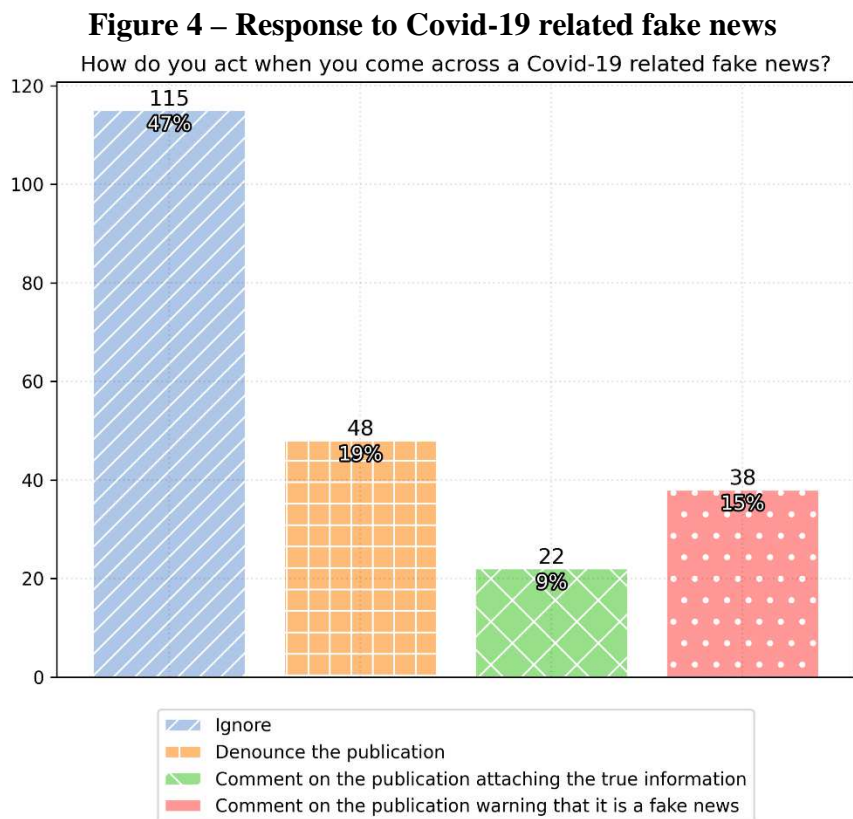COVID-19 PANDEMIC AND THE FAKE NEWS CONTENT

Most respondents (237 or 86%) answered that they practice social distancing, and even more (253 or 92%) understand that it is crucial. When asked to select up to two reasons why they think social distance is essential (Figure 5), 170 (67%) answered that it is because the contagion curve must be flattened to prevent the health system from collapsing, 127 (50%) understand that it is important to contain the spread of the virus that causes Covid-19 to avoid more deaths, and 76 (30%) are afraid of contracting Covid-19 or that their relatives contract Covid-19. In addition, 40 (16%) answered that social distancing is vital because the economic impact will be worse if the social distance is not respected, 29 (11%). After all, it is a recommendation from official agencies (World Health Organization (WHO) or Ministry of Health) and 18 (7%) replied that the reality of my country does not allow the application of social distancing only to the risk group. Finally, 8 (3%) of the people filled in custom answers saying that they defend the risk group's isolation, have direct contact with people in the health area, have religious reasons, or are pregnant.

Figure 3 – Why is social distancing critical?

Select up to two of the main reasons why you think social distance is important

- The contagion curve must be flattened to prevent the health system from collapsing.
- It is important to contain the spread of the virus that causes Covid-19 to avoid more deaths.
- I am afraid of contracting Covid-19 or that my relatives will contract Covid-19.
- The economic impact will be worse if social distance is not respected.
- It is a recommendation from official agencies (World Health Organization (WHO) or Ministry of Health)
- The reality of my country does not allow the application of distance only to the risk group.
- Another. Which one?

On the other hand, 39 (14%) do not practice social distance, and 23 (8%) of respondents do not think that social distancing is important due to the following reasons: 13 (57%) respondents believe that the economic impact of social distancing brings more serious consequences than the deaths caused by Covid-19, followed by 10 (43%) people who think that social distancing should be applied only to the risk group. Another 6 (26%) responded that Covid-19 is a mild disease used by some groups with a political imprint. In addition, 5 (22%) people believe that social distancing will not prevent deaths by Covid-19 but only postpone them, 4 (17%) responded that there is no way to avoid contagion and everyone will be infected with Covid-19.

In addition, when asked about the Covid-19 fake news content (Figure 4), 247 people answered that they had already identified fake news about Covid-19 on SMPs. However, most people (115 or 47%) ignore the posts containing fake news about Covid-19. Only 48 (19%) respondents flag the publications, and 60 (24%) comment on the posts.

Figure 4 – Response to Covid-19 related fake news

How do you act when you come across a Covid-19 related fake news?

This fact makes it very difficult to combat fake news on SMPs, mainly because after the mass propagation it is necessary firstly to correct the false information and then spread the correction to all the people that were exposed to the fake news, which hardly ever happens. So, the most efficient to combat fake news spreading is the early detection of fake news with help of the users to avoid further propagation on the platform (SHU *et al.*, 2017). Another option is that health professionals and healthcare institutions can be protagonists in the health education of users (MANDROLA, 2015) to help them to identify earlier the fake news content and flag it as false.

SOCIAL MEDIA PLATFORMS AND EDUCATION

Figure 5 shows the answers collected when respondents were asked what the main SMP is they use to search or receive information about Covid-19, stratified by education. The most selected answer (84 or 31%) is that respondents have not been searching for or receiving information about Covid-19 through social networks. Among these, 38 (13.7%) have complete post-graduation, followed by 20 (7.2%) who with unfinished college, and 13 (4.7%) have bachelor's degrees. Facebook was the SMP that 70 (26%) respondents used to search for or receive information about Covid-19. Among these, 23 (8.3%) have complete post-graduation, followed by 18 (6.5%) who completed high school, and 13 (4.7%) have a

bachelor's degree. WhatsApp was used to search for or receive information about Covid-19 by 36 (13%) respondents. Among these, 21 (7.6%) have complete post-graduation, followed by 5 (1.8%) that have a bachelor's degree, and 5 (1.8%) with unfinished college.

Figure 5 – Respondents' leading social network and education
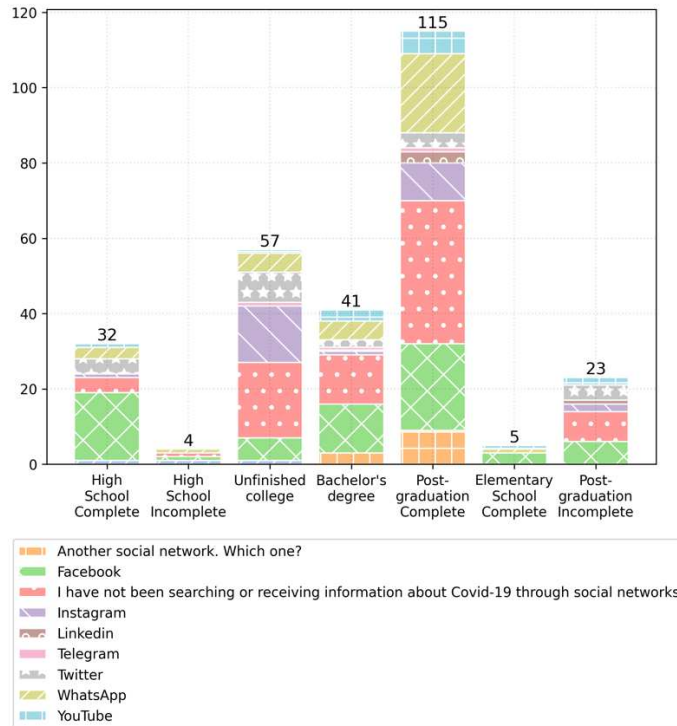
Instagram is used to receive information about Covid-19 by 29 (11%) people. Most of them (15 or 5.4%) have unfinished college, followed by 10 (3.6%) respondents that have completed post-graduation. Twitter is used by 22 (8%) respondents to receive information about Covid-19, and YouTube is used by 14 (5%) respondents. The other social network the respondents used to search for information about Covid-19 represented 4% of the answers or less.

EXPLORATORY ANALYSIS

We show the answers of questions 13 and 14, both 7-point Likert scale questions, in Figure 6 and Figure 7, respectively. The focus is to know the variables before applying exploratory factor analysis to the data.

The answers indicated the agreement level ranging from totally disagree (number 1) to totally agree (number 7). The figures illustrate the answers meaning that the further to the right (green bar), the higher the agreement, and the further to the left (orange bar), the lower

the agreement. Therefore, five of the seven aspects of Yoo et al. (2011) quality scale of quality of information was perceived by the highest percentages of participants when evaluating the Covid-19 news on their main SMP.

Figure 6 – How do you perceive the quality of information about Covid-19 that you receive on the main social network you use (Q13)?
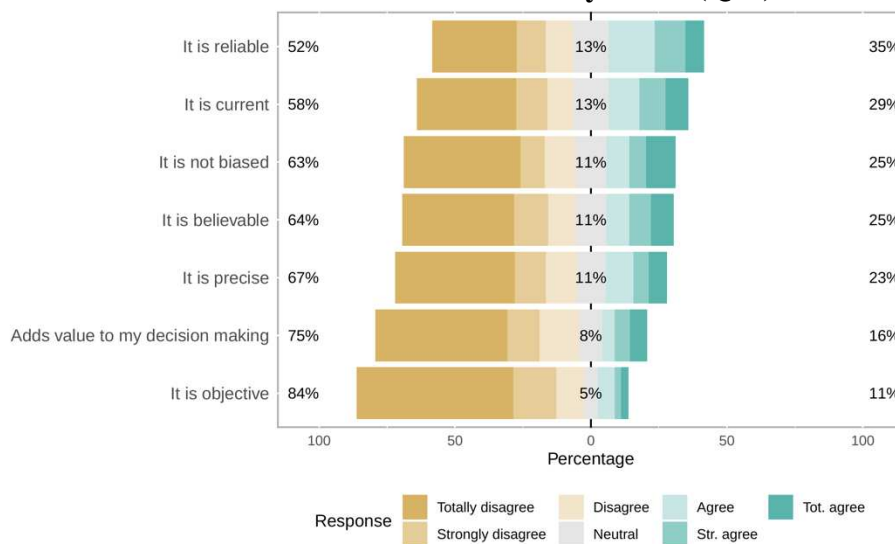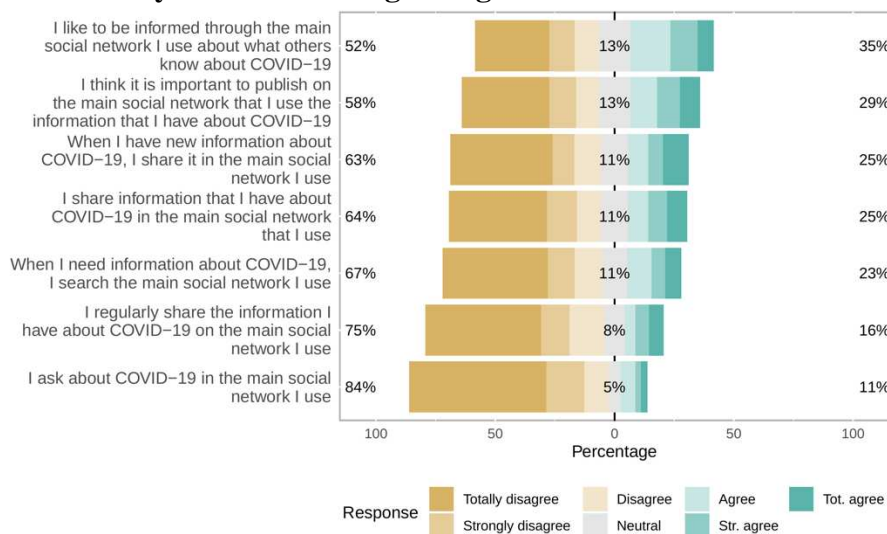

Figure 7 assesses knowledge sharing based on the De Vries et al. (2006) scale. Most participants showed that they dislike interacting with Covid-19 posts on their main SMP. Both knowledge collection and donation on this subject are not well regarded among participants.

Figure 7 – What is your behavior regarding information about Covid-19 (Q14)?

EXPLORATORY FACTOR ANALYSIS AND RELIABILITY

In the first moment, the knowledge constructs (knowledge quality or KQ, knowledge collection or KC, and knowledge donation or KD) were analyzed using exploratory factor analysis and Cronbach's Alpha.

The exploratory factor analysis used the Principal Component Analysis (PCA) with the varimax rotation method. The constructs were clustered in three factors, as shown in the table of Descriptive analysis, factor loadings and reliability of constructs available in Appendix B thus confirming that they are different constructs. In this case, the variance explained by the factors found in the analysis corresponds to 75.78%.

The factor loading of each item was more significant than the recommended 0.70, except KC3 (as illustrated in Table 2). In contrast, the variance explained by the factors found in the analysis corresponds to 71.22% KQ, 71.60% KC, and 83.45% KD of the instrument's variance, which is above the recommended value of 60%.

Structural Equation Modeling (SEM) was used to test hypotheses and validate the model, considering the measurement and structural models.

Table 2 - Descriptive analysis, factor loadings and reliability of constructs

Constructs -	Field	Min	Max	Mean	Std Deviation	Factor loading KQ	Factor loading KD	Factor loading KC	Cronbach's Alpha
KQ1 Q13-1	Is accurate	1	7	4.02	1.65	0.875			
KQ2 Q13-2	Is reliable	1	7	3.94	1.65	0.903			
KQ3 Q13-3	Is objective	1	7	4.21	1.73	0.868			
KQ4 Q13-4	Is unbiased	1	7	3.45	1.70	0.743			0.93
KQ5 Q13-5	Is believable	1	7	4.19	1.68	0.896			
KQ6 Q13-6	Is current	1	7	5.02	1.75	0.758			
KQ7 Q13-7	Adds value to my decision making	1	7	4.01	1.95	0.715			
KC1 Q14_1	When I need information about Covid-19, I search the main social network I use	1	7	2.76	1.99			0.864	
KC2 Q14_2	I like to be informed through the main social network I use about what others know about Covid-19	1	7	3.35	2.04			0.804	0.80

KC3 Q14_3	I ask about Covid-19 in the main social network I use	1	7	2.05	1,59			0.690	
KD1 Q14_4	When I have new information about Covid-19, I share it in the main social network I use	1	7	2.95	2,14		0.889		
KD2 Q14_5	I share information that I have about Covid-19 in the main social network that I use	1	7	2.91	2,08		0.950		
KD3 Q14_6	I think it is important to publish on the main social network that I use the information that I have about Covid-19	1	7	3.14	2,10		0.823		0.93
KD4 Q14_7	I regularly share the information I have about Covid-19 on the main social network I use	1	7	2.50	1,90		0.890		

The reliability was verified using Cronbach's Alpha and Composite Reliability (CR), which were higher than the minimums Hair Jr. recommended. (2014). The convergent validity was checked using the Analysis of Variation Extracted (AVE) and the Composite Reliability (CR), which were higher than the minimums recommended by Bagozzi and Yi (1988) (AVE is greater than 0.5 and CR is above 0.7). The results can be seen in Table 3. According to the AVE and CR measures, the model can be considered to have adequate convergent validity.

Table 3 – Reliability and Convergent Validity

	Cronbach's Alpha	CR	AVE
KC	0.800	0.883	0.716
KD	0.934	0.952	0.834
KQ	0.931	0.945	0.710

Moreover, the Discriminant Validity was checked using: a) the Fornell & Larcker criteria (Table 4); and b) the heterotrait-monotrait ratio of correlations (HTMT) (

Table 5). Discriminant validity was observed for this model using both criteria.

Table 4 – Fornell-Larcker

	KC	KD	KQ
KC	**0.846**		
KD	0.482	**0.913**	
KQ	0.435	0.264	**0.843**

Table 5 – The heterotrait-monotrait ratio of correlations (HTMT)

	KC	KD	KQ
KC			
KD	0.552		
KQ	0.485	0.263	

All the Variance Inflation Factor (VIF) values were under 1.0 in this model. The model did not present a collinearity problem as recommended by Hair Jr. et al. [27], and there is no Common Method Bias as recommended by Kock (2015). The significance of the relationships was assessed using a bootstrapping algorithm.

**Table 6 – Results of the hypothesis test**

Paths	Coefficients	t value	Result
KC → KQ	0.435	4.934	Supported
KC → KD	0.482	7.202	Supported
KD → KQ	-	0.804	Not Supported

Table 6 summarizes the results obtained in relation to the research hypotheses. The KC→KQ relationship have $f^2 = 0.233$, and the KC→KD relationship have $f^2 = 0.302$. Both values are considered a medium effect size by Hair Jr. et al. (2014).

According to the results, 18.9% of the variance in the KQ can be explained by the construct KC; and 23.2% of the variance in the KD can be explained by the construct KC, as it is also possible to observe in Figure 8.

Figure 8 – Path analysis using Structural Equation Modeling (SEM) on SmartPLS
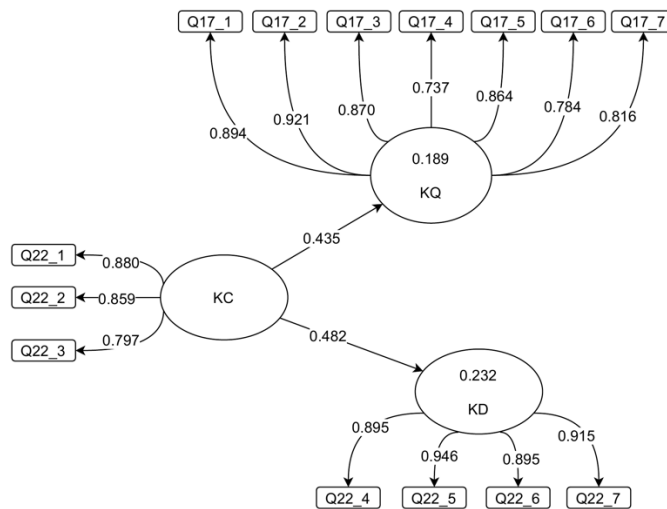
MULTIGROUP ANALYSIS

We used the multigroup analysis to examine parameter estimates specific for each group, such as outer weights and path coefficients, and check whether there are significant differences in these metrics. We used the Partial Least Squares Multigroup Analysis (PLS-MGA) approach based on bootstrapping results from every group.

We select the age of the respondents to verify the moderator effect in the relation between quality, donation, and collection of knowledge. The age groups are: (1) 18 to 24 years, (2) 25 to 34 years, (3) 35 to 44 years, (4) 45 to 54 years, (5) 55 to 64 years and (6) 65 years or older.

Table 7 – Age of respondent as a moderator variable of the relationship between entre knowledge collection and donation and between collection and quality of knowledge

Path	Coefficient	Group 2 x group 3	P-value
KC -> KQ	-0.311	H1	0.017*
Path	Coefficient	Groups 1 and 2 x groups 3, 4 and 5	P-value
KC -> KQ	-0.260	H2	0.025*

*p-value < 0.05.

It is possible to observe in Table 7 the age of respondents as a moderator variable of the relationship between entre knowledge collection and donation and between collection and

quality of knowledge. It can be seen that there is a difference between the age groups. Therefore, the KC influences KQ differently when comparing the age groups under 34 years and 35 years or older. In fact, this may be related to people's experiences.

THEORETICAL AND PRACTICAL IMPLICATIONS

Our research offers a theoretical contribution by offering an alternative perspective to understand people's online behaviors in the e-health literature. It highlights the need for further research into the online behavior of specific groups of users (e.g., health professionals). Moreover, in this study, we provide evidence for the influence of experience on users' online behaviors in the healthcare field by demonstrating the moderating effect of age on KC and KD. In the cases of health professionals, previous studies have shown that their online behavior is dominated by their professional experience (YANG *et al.*, 2021).

Practical implications include an updated overview of the user's perspective on fake news on SMPs. While many users would like to receive information on the SMPs, most of them understand that the information they receive through this media currently lacks quality. This highlights an opportunity for health government agencies to share reliable information and reach the intended audience, to provide healthcare services online, and to promote official online health communities (OHCs) (MELCHIOR; OLIVEIRA, 2023). This study also highlights that most people ignore fake news posts in SMP, which can indirectly help the propagation of fake news. It is important that the platforms start to act more effectively in combating fake news and urge their users to do the same.

CONCLUSION

Among the 276 respondents, 272 are from Brazil, most are between 25 to 34 years (99 or 35.9%) and women (57 or 20.7%). Regarding their education, most people (115 or 42%) have complete post-graduation, although this is not the most common education level of the Brazilian population (IBGE, 2020). Regarding the impact of the pandemic on the respondent's jobs, 140 (36.3%) people answered that they are or have been in the home office. Moreover, 237 (86%) answered that they are exercising social distancing due to the Covid-19 pandemic, and 253 (92%) understand that social distancing is important.

The most used SMP to search or receive information about Covid-19 was Facebook, with 70 (26%) answers, whereas 23 (8.3%) have post-Graduation complete. However,

although most respondents identified fake news content on SMP, the most common action is to ignore it.

On the other hand, this study used empirical data to investigate the effect of KQ on KD and KC, using two different scales. The main results show that the influence of KC on KQ and KD is medium. The construct KC was responsible for most of the variance explained.

Two of the three hypotheses in the study were supported. The model measurement in the study presents promising results for convergent and discriminant validity. Using two scales, the model of this study offers evidence that the KC emphasizes the key role of KQ and KD on SMP. Therefore, the more knowledge is collected on SMP, the more is donated, and the higher the quality of knowledge spread on SMP.

The multigroup analysis using age as a moderating variable shows that the KC influences KQ differently among people under 34 years and 35 years or older. Thus, people's experiences may have influenced this flow of knowledge, whether in KC or KQ construct (SUI; ZHANG, 2021).

This study is limited to a survey applied in 2020 when the pandemic of Covid-19 started in Brazil, and most of the respondents are from this country. Moreover, this study's sample does not represent the Brazilian population in terms of education. Therefore, it is impossible to generalize our findings to the entire country's population.

Further research is needed to understand the behavior of health professional and to explore whether knowledge sharing and the KQ in online health communities (OHCs) depends on social and economic rewards. This research may build upon the self-determination theory (SDT). Future works can be replicated and extended to other countries to test if the culture influences the KQ, KC, or KD of content by SMP users. It is also possible to deepen the understanding of the users' behavior through interviews with users to understand with more detail the motivation to collect and donate knowledge and understand how the users evaluate the quality of knowledge on SMP before spreading the content and why most of them ignore the fake news content.

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1) concepção e planejamento.	X	X
2) análise e interpretação dos dados.	X	X
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4) participação na aprovação da versão final do manuscrito.	X	X