Predictors of News Media Use in the COVID-19 Pandemic

A Brief Research Report

Magdalena Iwanowska[1]
University of Gdańsk, Institute of Psychology
https://orcid.org/0000-0002-0878-9523

Blanka Kondratowicz
University of Gdańsk, Institute of Psychology
https://orcid.org/0000-0002-8027-2924

Anna Maria Zawadzka
University of Gdańsk, Institute of Psychology
https://orcid.org/0000-0003-1350-3881

Abstract

Aim: The research aimed to explore personal goals and COVID-19-related fear & worries as predictors of news media use during a health crisis – the COVID-19 pandemic.

Method: A correlational online study was conducted with 371 subjects (M_{age} = 28.88, SD_{age} = 10.25).

Results: The results showed that, as expected, the importance of the health goal and the level of COVID-19 fear & worries positively predicted news media use, and the importance placed on the exciting life goal negatively predicted news media use during the COVID-19 pandemic. There was no significant relationship between the safety goal and news media use. However, the study revealed that COVID-19 fear & worries partially mediated the relationship between the safety goal and news media use.

Conclusions: Study confirms that personal goals and negative emotions related to a crisis play an important role in understanding how and why people use the news media in a crisis. The limitations of the study and theoretical and practical implications are discussed.

Keywords: personal goals, news media use, COVID-19 fear & worries, COVID-19 pandemic

---

[1] Correspondence address: magdalena.iwanowska@ug.edu.pl.

The importance of safety and stimulation as personal goals valued in daily life (cf. Grouzet et al., 2005) align with two primary purposes for consuming media, such as staying informed about issues and events (Hargreaves & Thomas, 2002) or seeking excitement through an entertaining story (Hoffner et al., 2009). In fact, during health crises, the media play a significant role in providing a sense of security by delivering timely information and assisting people in responding to evolving threats – for example, by promoting self-protective behaviors (Klemm et al., 2019). The COVID-19 pandemic crisis represented a setting that generated significant levels of unresolved uncertainty and violated people's sense of security, leading them to live in a persistent state of high alert (Salvi et al., 2021). This unprecedented situation might have influenced specific personal goals, especially those concerning enhancing one's health and survival (more crucial in crises) and those related to seeking excitement and pleasure (less crucial in crises). Studies on values reported significant changes in people's values during COVID-19 – an increase in the importance of the safety value and a decrease in the importance of the stimulation value (Bojanowska et al., 2021; Bonetto et al., 2021). Therefore, the aim of this study was to expand existing knowledge, examining the relationships between personal goals significance, news media use during a crisis, and perceived negative emotions related to the crisis.

Taking into account the conclusions from previous research, it may be assumed that people who prioritize goals related to physical survival (i.e., safety and health) are more likely to use news media during a health crisis than others. In contrast, since the media primarily emphasizes the informational function during times of crisis (Anwar et al., 2020), the use of news media may be less appealing to those who value entertainment and excitement. Moreover, crisis-related negative emotions can reinforce the relationship between the importance of personal goals and news media use. For example, individuals who prioritize safety are more likely to experience fear and anxiety (Nelissen et al., 2007; Roseman et al., 1994), which, in turn, might be related to higher news media use, as people turn to news media to alleviate negative emotions (Westlund & Ghersetti, 2015).

In our study, we aimed to explore two key questions 1) how the importance of personal goals (i.e., safety, health, and exciting life) is related to news media use during the COVID-19 pandemic, and 2) whether and how emotions (i.e., COVID-19 fear and worries) mediate the relationship between the importance of goals and news media use.

The Relationship Between the Importance of Personal Goals and News Media Use in a Crisis Situation

The COVID-19 pandemic disrupted many aspects of life, requiring individuals to adjust to their personal goals to adapt to the changed circumstances. A personal goal can be defined as a cognitive representation of desired outcomes (Kruglanski et al., 2002). Goals usually arise when a person perceives a discrepancy between the current state and a desired state, which motivates them to bridge this gap (e.g., Carver et al., 2000).

However, the research on the importance of personal goals during the COVID-19 pandemic is scarce. Yet, existing studies on values, which tend to be more stable and less subject to situational influences than goals (Schwartz & Bilsky, 1987), have shown changes in the perceived importance of values during the COVID-19 crisis. Studies conducted on both Polish and French samples showed that people placed greater importance on security and conformism values than usual (Bojanowska et al., 2021; Bonetto et al., 2021) and valued hedonism and stimulation less compared to pre-pandemic times (Bonetto et al., 2021).

These values (i.e., security and stimulation) are also related to the specific needs gratified by media in a crisis. Generally, news media are expected to fulfill two fundamental goals: providing information (Hargreaves & Thomas, 2002) and offering entertainment through news stories (Hoffner et al., 2009). In a crisis, according to the need for orientation (Weaver, 1980), people seek information in the news media even more to become familiar with their surroundings and reduce uncertainty. During the COVID-19 pandemic, for example, people might have used the news media to stay informed about the potential risks, preventive measures, and safety guidelines associated with the pandemic. The results of a two-wave panel survey conducted in 17 mostly European countries during the COVID-19 pandemic confirmed an overall rise in news use across these countries (Van Aelst et al., 2021).

Aware of the results of studies on values during the COVID-19 pandemic and media usage, we concentrated on safety, health, and stimulation goals in our research. This choice was driven by the uncertainty introduced by the pandemic, which might have led individuals to focus more on goals related to survival and maintaining stability in their lives, and less on seeking excitement. Those who value goals related to physical survival (i.e., safety and health) are probably more likely to use news media during a crisis than others. In contrast, given that the media predominantly focuses on the informational function in times of crisis (Anwar et al., 2020), the use of news media may be less appealing to those who value entertainment and excitement. We formulated the following hypotheses:

H1a. The importance placed on the safety goal during the COVID-19 pandemic positively predicts news media use.

H1b. The importance placed on the health goal during the COVID-19 pandemic positively predicts news media use.

H1c. The importance placed on the excitement goal during the COVID-19 pandemic negatively predicts news media use.

The Mediating Role of Crisis-Related Negative Emotions in the Relationship Between Importance of Personal Goals and News Media Use

The relationship between the importance of personal goals and news media use can be reinforced by crisis-related negative emotions. Personal goals act as filters in the perception of threats and thus influence people's emotions, such as

fears and worries (Boehnke & Schwartz, 1997). Individuals who prioritize safety and health may have a heightened perception of the risks associated with the pandemic. For example, they may feel a greater fear of falling ill. Research on the fear of war and crime confirmed that people who attributed greater importance to security experienced more fear in a threat situation (Boehnke & Schwartz, 1997). Generally, research shows that individuals who prioritize safety are more likely to experience fear and anxiety (Nelissen et al., 2007; Roseman et al., 1994).

Apart from satisfying the need for information (Weaver, 1980), people seek the news media to alleviate negative emotions (Westlund & Ghersetti, 2015). During the COVID-19 pandemic, individuals experienced fear related to their physical health and worries about changes in everyday functioning in domains such as work, social contacts, or self-development (Ahorsu et al., 2022). Because the media provide helpful information about the crisis, suggesting possible ways of handling the situation, media consumption may serve as a psychological coping mechanism for fear and worries (e.g., Eden et al., 2020; Van Aelst et al., 2021). Therefore, based on the ideas that (1) fear and worries might be intensified by a focus on specific personal goals (i.e., safety and health) and that (2) people who experience fear and worries use the news media to reduce negative adverse emotional outcomes, we formulated a mediation hypothesis:

> H2. The level of COVID-19 fear & worries mediates the relationships between the importance of personal goals and news media use. The importance placed on safety (H2a) and health (H2b) goals leads to higher COVID-19 fear & worries, which in turn leads to more intensive news media use.

Method

Participants

The study included 371 participants (M_{age} = 28.88 years, SD_{age} = 10.25); 264 were women, 105 were men, and two specified their gender as "other." 194 participants described themselves as students, and 177 stated that they were employees. The respondents had higher (51%), secondary (48%), or vocational (1%) education. Most participants resided in cities with more than 100,000 inhabitants (58.5%), 19.9% lived in cities ranging in population from 20,000 to 100,000, and 21.6% came from towns with fewer than 20,000 inhabitants.

Measures

Measurement of the Importance of Personal Goals

The importance of personal goals was measured using a list of 13 goals based on the model by Grouzet et al. (2005), including financial success, high work position, popularity, image, affiliation, community feeling, self-growth, conformity,

health, safety, stabilization in life, exciting life, and religion/spirituality. Participants answered, "What do you need the most to be happy?" by rating each goal on a 9-point scale (1 = *not at all important* to 9 = *extremely important*). The relative importance of a goal was computed as the rating of that goal (i.e., safety, health, and exciting life) divided by the number of all goals (13).

Measurement of News Media Use

The questionnaire administered to measure news media use consisted of a list of 15 opinion-forming Internet, press, radio, and television media that were the most popular in Poland in terms of frequency of use for news (IMM, 2020; Omyła-Rudzka & Feliksiak, 2019). The list included both private and state-owned radio stations (e.g., RMF FM, Radio Zet), television channels (e.g., TVN 24; TVP Info), web portals (e.g., wp.pl, interia.pl), daily newspapers (e.g., *Rzeczpospolita*, *Gazeta Wyborcza*). Respondents reported the frequency of using each of the listed media to obtain news in the past three weeks by indicating options on a 5-point scale (1 = *very rarely* to 5 = *very often*). The reliability of the measure was satisfactory (Cronbach's α = .78).

Measurement of COVID-19 Fear & Worries

COVID-19 fear & worries were assessed using a questionnaire inspired by the measure developed by Kroencke et al. (2020; see also Iwanowska et al., 2023; Kondratowicz et al., 2023). The questionnaire consists of 8 items constituting two subscales. The COVID-19-Related Fear subscale consists of 3 statements concerning the feeling of anxiety about health and safety (e.g., "I am anxious about my health"; "I am anxious about my safety"). The COVID-19-Related Worries subscale consists of 5 items concerning the feeling of uncertainty and anxiety about pandemic-related changes (e.g., "Due to the pandemic, I am anxious about my future and that of my loved ones"; "I think my life will change for the worse due to the pandemic"). Respondents rated each item using a 5-point scale (1 = *strongly disagree* to 5 = *strongly agree*). The total COVID-19 fear & worries score was computed as a mean of the 8 items' scores. The measure's reliability was satisfactory (Cronbach's α = .73).

Procedure

The study was conducted during the COVID-19 pandemic between April 1 and June 6, 2020. It was a time when the number of infections escalated, and there were changes in the restrictions imposed in various spheres of private and professional life, such as restrictions on shopping, the obligation to wear masks, and switching to remote forms of work and education (Cybulska & Pankowski, 2020).

All required ethical standards were maintained during the research. Participation in the study was anonymous and voluntary; each respondent consented to participate and was free to withdraw at any time. The study was conducted via an online platform. A link to the questionnaire was shared on the university website and social media. Respondents completed a set of scales: a personal goals

scale, a news media use scale, and a COVID-19 fear & worries scale. They also answered several questions not directly relevant to the purpose of this research since the study was part of a larger project on the psychological consequences of the COVID-19 pandemic (cf., Iwanowska et al., 2023; Kondratowicz et al., 2023).

Results

The Importance of Personal Goals, COVID-19 Fear & Worries, and News Media Use

To test the first hypothesis, we conducted a linear regression analysis (method: enter) with IBM SPSS 27[2]. The dependent variable was the frequency of news media use. The independent variables were the importance of personal goals (i.e., safety, health, and exciting life) and COVID-19 fear & worries. When the five independent variables were entered (along with participants' sex and age as covariates), they explained 9% of the variance in participant news media use, $R^2 = .30$, $F_{(6, 364)} = 5.828$, $p < .001$.

Table 1

Summary of the Linear Regression Model Predicting News Media Use from Personal Goals and COVID-19 Fear & Worries

Variable	B	SE	b	t	p	BCa LLCI	BCa ULCI	Bootstrap p	VIF
Sex	.058	.072	.044	.81	.421	−.116	.205	.471	1.65
Age	.011	.003	.180	3.34	<.001	.005	.017	.002	1.16
Health	.995	.382	.138	2.61	.009	.240	1.756	.005	1.12
Safety	−.104	.278	−.020	−.38	.708	−.699	.512	.747	1.09
Exciting life	−.599	.239	−.130	−2.51	.013	−1.076	−.134	.017	1.08
COVID-19 F&W	.099	.046	.111	2.14	.033	.000	.204	.056	1.08

Note. $N = 371$. Linear regression analysis was conducted on transformed variables; BCa *LLCI* = bias-corrected accelerated lower 95% confidence interval; BCa *ULCI* = bias-corrected accelerated upper 95% confidence interval; VIF = variance inflation factor; COVID-19 F&W = COVID-19 fear & worries.

---

[2] We also computed the preliminary correlations between all 13 goals and news media use. The results showed significant low negative correlations between the exciting life ($r = −.13$) and self-growth ($r = −.12$) goals and news media use as well as low positive correlations between the health ($r = .14$) and high work position ($r = .12$) goals and news media use during the COVID-19 pandemic.

As can be seen in Table 1, the importance placed on the health goal, the level of COVID-19 fear & worries, and age were significantly positively related to news media use, whereas the importance of the exciting life goal was significantly negatively related to the use of news media. The importance of the safety goal and sex were not statistically significant predictors of news media use. Thus, the results supported H1b (for health goal) and H1c (for excitement goal) but did not support H1a (for safety goal).

COVID-19 Fear & Worries as a Mediator of the Relationship Between the Importance of Personal Goals and News Media Use

To verify the second hypothesis, we tested two mediation models with PROCESS Macro for SPSS (Model 4), with COVID-19 fear & worries as a mediator between two personal goals (i.e., safety and health) and news media use. Mediation effects were tested with regression analysis using the PROCESS macro bootstrapping procedure (Hayes, 2013).

Figure 1

Mediation Model: Safety Goal as a Predictor, COVID 19 Fear & Worries as a Mediator, and Frequency of News Media Use as a Dependent Variable
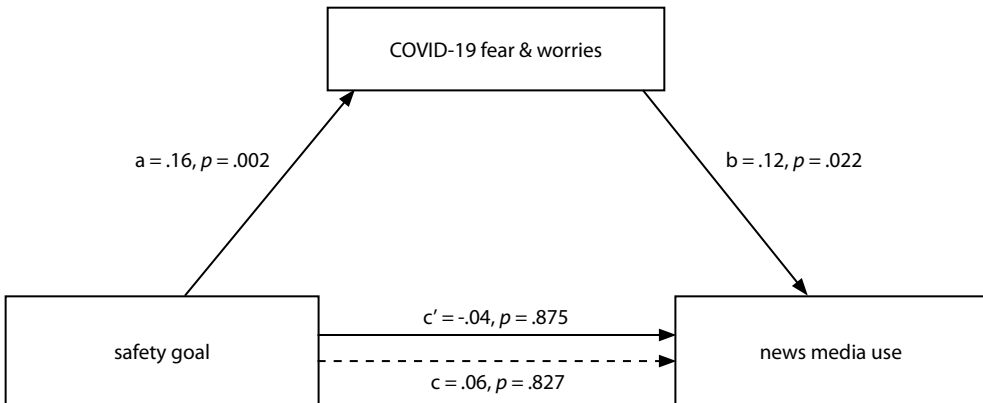
The analysis revealed that there was an indirect effect of the safety goal on news media use via COVID-19 fear & worries; however, the effect was small (indirect effect = 0.11, BootsLLCI = .012, BootsULCI = .253), and the total effect was non-significant (p = .827). As shown in Figure 1, the importance placed on the safety goal was not directly related to news media use. Still, it was positively associated with COVID-19 fear & worries, which in turn was positively related to news media use. This result shows a partial mediation effect (cf. Agler & De Boeck, 2017), supporting hypothesis H2a.

The mediation effect for the health goal was not statistically significant (indirect effect = .08, BootsLLCI = −.008, BootsULCI = .217). The hypothesis H2b was not supported.

Discussion

In alignment with the predictions based on the "need for orientation" concept (Weaver, 1980), we found that, during the pandemic, the health goal is positively associated with the use of news media (H1b supported). The study also confirmed that the importance of the exciting life goal is negatively related to news media use in pandemic times (H1c supported). However, we did not find a direct relationship between the safety goal and news media usage (H1a not supported). These results suggest that, particularly in the initial stage of a health crisis, mass media serve as a significant source of health information, providing guidelines, recommendations from health authorities, and updates on the latest developments. However, at this point, they present no solutions to the forthcoming economic or social concerns, which are also related to the sense of safety. Regarding the nature of goals, our study suggests that during the pandemic, health-related goals become more concrete and evident because they are closely associated with the issues of illness and mortality. In contrast, safety-related goals may appear more abstract and generalized. What is more, our findings show that individuals who value an exciting and pleasant life may find news media consumption less appealing during a crisis. This is likely due to the media's primary focus on the informational function in times of crisis (Anwar et al., 2020). This finding also aligns with the notion that during a health crisis, individuals are less oriented toward seeking excitement (Bonetto et al., 2021).

Interestingly, although in our study the safety goal was found not to be directly related to news media consumption, the results of mediation analysis indicate a mediation mechanism, showing that the importance placed on the safety goal leads to higher levels of COVID-19 fear & worries, which in turn leads to higher news media consumption (H2a partially supported). We did not confirm this effect for the health goal (H2b not supported). It aligns with previous studies, indicating that there are no connections between health values and the feeling of fear, in contrast to safety values, where such a relationship exists (cf. Nelissen et al., 2007; Roseman et al., 1994). These results add to the literature on the links between COVID-19 fear and news media use (Bendau et al., 2020), confirming that both emotional and motivational factors play a role in predicting news media consumption, which seems to serve as a psychological coping mechanism.

Limitations and Directions for Future Studies

This study is not without limitations. First, it was correlational, meaning causal relationships between variables could not be determined. It is possible that news media use leads to changes in personal goals, especially those related

to health issues. Second, we found an indirect effect of the safety goal on news media consumption, but the total effect was insignificant. The reason for this might be the sample size. Therefore, future studies on health-related crises should include a larger group to test if the total effect becomes significant or if the mediated effect becomes non-significant (cf. Agler & de Boeck, 2017; Kenny & Judd, 2014). Third, participants in the present study were recruited via an Internet platform, potentially limiting the sample to Internet users. To enhance future research, it is advisable to include a more diverse range of participants.

Also, the group was specific regarding sociodemographic variables such as gender and age, which could have influenced their preference for personal goals. For instance, 71% of the group were women, and as indicated by the results of previous studies, women experienced COVID-19 fear for the health and life of their loved ones to a greater extent than men (Van der Vegt & Kleinberg, 2020). This effect might have led to a stronger emphasis on safety and health-related goals among women. Moreover, we observed that age positively predicts the use of news media during a crisis. It might suggest that age might moderate the relationship between personal values and news media use. We asked mainly about the use of traditional news media, so this result may be partly because young people today access news through diverse channels such as social media, documentaries, and television programs, which they find more aligned with their preferences in terms of agenda, content, format, and tone (Galan et al., 2019). In subsequent studies, it is worth exploring the relationship between age and news media consumption, as younger individuals face challenges regarding the reliability and credibility of news on social media platforms, which is of significant importance in health crises (Dhiman, 2023).

Implications

The presented study has several implications. Firstly, the obtained results provide insights into the significance of personal goals and the role of fears and worries in the use of news media during a health crisis. Secondly, the findings indicate possible patterns of news media use in a health crisis. This knowledge can assist media organizations in creating more balanced and informative content that considers the needs and emotional well-being of the users. The study results also offer guidelines for journalists and publishers during times of crisis, suggesting that they should particularly focus on delivering accurate and reliable information about health-related behaviors, especially in the early stages of a health crisis.

References

Agler, R., & De Boeck, P. (2017). On the interpretation and use of mediation: Multiple perspectives on mediation analysis. *Frontiers in Psychology*, *8*, Article 1984. https://doi.org/10.3389/fpsyg.2017.01984

Ahorsu, D. K., Lin, C. Y., Imani, V., Saffari, M., Griffiths, M. D., & Pakpour, A. H. (2022). The fear of COVID-19 scale: Development and initial validation. *International Journal of Mental Health and Addiction, 20*(3), 1537–1545. https://doi.org/10.1007/s11469-020-00270-8

Anwar, A., Malik, M., Raees, V., & Anwar, A. (2020). Role of mass media and public health communications in the COVID-19 pandemic. *Cureus*, *12*, Article e10453. https://doi.org/10.7759/cureus.10453

Bendau, A., Petzold, M. B., Pyrkosch, L., Mascarell Maricic, L., Betzler, F., Rogoll, J., & Plag, J. (2021). Associations between COVID-19 related media consumption and symptoms of anxiety, depression and COVID-19 related fear in the general population in Germany. *European Archives of Psychiatry and Clinical Neuroscience*, *271*, 283–291. https://doi.org/10.1007/s00406-020-01171-6

Boehnke, K., & Schwartz, S. H. (1997). Fear of war: Relations to values, gender, and mental health in Germany and Israel. *Peace and Conflict: Journal of Peace Psychology*, *3*(2), 149–165. https://doi.org/10.1207/s15327949pac0302_3

Bojanowska, A., Kaczmarek, Ł. D., Koscielniak, M., & Urbańska, B. (2021). Changes in values and well-being amidst the COVID-19 pandemic in Poland. *PLOS ONE*, *16*(9), Article e0255491. https://doi.org/10.1371/journal.pone.0255491

Bonetto, E., Dezecache, G., Nugier, A., Inigo, M., Mathias, J.-D., Huet, S., Pellerin, N., Corman, M., Bertrand, P., Raufaste, E., Streith, M., Guimond, S., de la Sablonnière, R., & Dambrun, M. (2021). Basic human values during the COVID-19 outbreak, perceived threat and their relationships with compliance with movement restrictions and social distancing. *PLOS ONE*, *16*(6), Article e0253430. https://doi.org/10.1371/journal.pone.0253430

Carver, C. S., Sutton, S. K., & Scheier, M. F. (2000). Action, emotion, and personality: Emerging conceptual integration. *Personality and Social Psychology Bulletin*, *26*(6), 741–751. https://doi.org/10.1177/0146167200268008

Cybulska A., & Pankowski, K. (2020). *Życie codzienne w czasach zarazy* [*Everyday life in pandemic times*]. Fundacja Centrum Badania Opinii Społecznej. https://www.cbos.pl/SPISKOM.POL/2020/K_060_20.PDF

Dhiman, D. B. (2023). The rise and impact of misinformation and fake news on digital youth: A critical review. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.4438362

Eden, A. L., Johnson, B. K., Reinecke, L., & Grady, S. M. (2020). Media for coping during COVID-19 social distancing: Stress, anxiety, and psychological well-being. *Frontiers in Psychology*, *11*, Article 577639. https://doi.org/10.3389/fpsyg.2020.577639

Galan, L., Osserman, J., Parker, T., & Taylor, M. (2019). *How young people consume news and the implications for mainstream media*. A report by Flamingo commissioned by the Reuters Institute for the Study of Journalism, Oxford University. https://reutersinstitute.politics.ox.ac.uk/our-research/how-young-people-consume-news-and-implications-mainstream-media

Grouzet, F. M. E., Kasser, T., Ahuvia, A., Dols, J. M. F., Kim, Y., Lau, S., Ryan, R. M., Saunders, S., Schmuck, P., & Sheldon, K. M. (2005). The structure of goal contents across 15 cultures. *Journal of Personality and Social Psychology*, *89*(5), 800–816. https://doi.org/10.1037/0022-3514.89.5.800

Hargreaves, I., & Thomas, J. (2002). *New news, old news: An ITC and BSC research publication*. Broadcasting Standards Commission/Independent Television Commission.

Hayes, A. F. (2013). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. Guilford Press.

Hoffner, C. A., Fujioka, Y., Ye, J., & Ibrahim, A. G. S. (2009). Why we watch: Factors affecting exposure to tragic television news. *Mass Communication and Society*, *12*(2), 193–216. https://doi.org/10.1080/15205430802095042

IMM. (2020). Najbardziej opiniotwórcze media w Polsce. Marzec 2020 [*The most opinion-forming media in Poland. March 2020*]. Instytut Monitorowania Mediów. https://www.imm.com.pl/raport-imm-najbardziej-opiniotworcze-media-w-polsce-marzec-2020/

Iwanowska, M., Zawadzka, A. M., Kondratowicz, B. (2023). News media exposure and life satisfaction in the COVID-19 pandemic: A moderated mediation model of COVID-19 fear and worries and gender. *Current Issues in Personality Psychology*, *11*(3), 205–215. https://doi.org/10.5114/cipp/156172

Kenny, D. A., & Judd, C. M. (2014). Power anomalies in testing mediation. *Psychological Science*, *25*(2), 334–339. https://doi.org/10.1177/0956797613502676

Klemm, C., Das, E., & Hartmann, T. (2019). Changed priorities ahead: Journalists' shifting role perceptions when covering public health crises. *Journalism*, *20*(9), 1223–1241. https://doi.org/10.1177/1464884917692820

Kroencke, L., Geukes, K., Utesch, T., Kuper, N., & Back, M. D. (2020). Neuroticism and emotional risk during the COVID-19 pandemic. *Journal of Research in Personality*, *89*, Article 104038. https://doi.org/10.1016/j.jrp.2020.104038

Kruglanski, A. W., Shah, J. Y., Fishbach, A., Friedman, R., Chun, W. Y., & Sleeth-Keppler, D. (2002). A theory of goal systems. In M. P. Zanna (Ed.), *Advances in experimental social psychology*, *34*, pp. 331–378. Academic Press. https://doi.org/10.1016/S0065-2601(02)80008-9

Kondratowicz, B. B., Zawadzka, A. M., & Iwanowska, M. (2023). Employee life satisfaction: The role of COVID-19-related fear and worries and employee resources. *Roczniki Psychologiczne* [*Annals of Psychology*], *26*(2), 177–194. https://doi.org/10.18290/rpsych2023.0011

Nelissen, R. M. A., Dijker, A. J. M., & de Vries, N. K. (2007). Emotions and goals: Assessing relations between values and emotions. *Cognition & Emotion*, *21*(4), 902–911. https://doi.org/10.1080/02699930600861330

Omyła-Rudzka, M., & Feliksiak, M. (2019). Wiarygodność mediów [*Credibility of media*]. Fundacja Centrum Badania Opinii Społecznej. https://cbos.pl/SPISKOM.POL/2019/K_070_19.PDF

Roseman, I. J., Wiest, C., & Swartz, T. S. (1994). Phenomenology, behaviors, and goals differentiate discrete emotions. *Journal of Personality and Social Psychology*, *67*(2), 206–221. https://doi.org/10.1037/0022-3514.67.2.206

Salvi, C., Iannello, P., Cancer, A., McClay, M., Rago, S., Dunsmoor, J. E., & Antonietti, A. (2020). Going viral: How fear, socio-cognitive polarization and problem-solving influence fake news detection and proliferation during COVID-19 pandemic. *Frontiers in Communication*, *5*, Article 562588. https://doi.org/10.3389/fcomm.2020.562588

Schwartz, S. H., & Bilsky, W. (1987). Toward a universal psychological structure of human values. *Journal of Personality and Social Psychology*, *53*(3), 550–562. https://doi.org/10.1037/0022-3514.53.3.550

Van Aelst, P., Toth, F., Castro, L., Štětka, V., Vreese, C. d., Aalberg, T., Cardenal, A. S., Corbu, N., Esser, F., Hopmann, D. N., Koc-Michalska, K., Matthes, J., Schemer, C., Sheafer, T., Splendore, S., Stanyer, J., Stępińska, A., Strömbäck, J., & Theocharis, Y. (2021). Does a crisis change news habits? A comparative study of the effects of COVID-19 on news media use in 17 European countries. *Digital Journalism*, *9*, 1208–1238. https://doi.org/10.1080/21670811.2021.1943481

Van der Vegt, I., & Kleinberg, B. (2020). Women worry about family, men about the economy: Gender differences in emotional responses to COVID-19. *ArXiv*, Article abs/2004.08202. https://doi.org/10.48550/arXiv.2004.08202

Weaver, D. H. (1980). Audience need for orientation and media effects. *Communication Research*, *7*(3), 361–373. https://doi.org/10.1177/009365028000700305

Westlund, O., & Ghersetti, M. (2015). Modelling news media use. *Journalism Studies*, *16*(2), 133–151. https://doi.org/10.1080/1461670x.2013.868139