

ORIGINAL RESEARCH

Ameliorative Effects of Television Watching Behavior and Motivation on the Fear of COVID-19 in Older Chinese Adults During the Pandemic

Haoyuan Yu 101, Farideh Alizadeh 102

Department of Journalism, School of Humanities, Hunan University of Science and Technology, Xiangtan City, Hunan Province, People's Republic of China; Department of Drama, Faculty of Creative Arts, University of Malaya (UM), Kuala Lumpur, Malaysia

Correspondence: Farideh Alizadeh, Department of Drama, Faculty of Creative Arts, University of Malaya (UM), Kuala Lumpur, 50603, Malaysia, Tel +60 172552146, Email farideh@um.edu.my

Purpose: The aim of this study was to investigate the television (TV) consumption patterns (viewing behavior and motivation) of older adults in Wuhan, China, during the COVID-19 pandemic and its impact on older adults' mental health, particularly in relation to COVID-19-induced fear.

Participants and Methods: A questionnaire survey was conducted with 405 older adults in Wuhan, China. The data were analyzed using a structural equation model to understand the relationship between TV viewing behavior, motivation, and fear related to COVID-19.

Results: The findings indicate that the motivation to watch TV has a positive influence on viewing behavior among older adults during the pandemic. However, this motivation negatively impacts their COVID-19-related fear. Furthermore, a negative correlation was observed between viewing behavior and fear. The primary motivations for TV viewing among older adults during the pandemic were identified as social interaction and emotion management, followed by information seeking and value expression.

Conclusion: The findings suggest that TV viewing plays a significant role in the mental well-being of older adults during the COVID-19 pandemic. By addressing the motivations of social interaction, emotion management, information seeking, and value expression, public health organizations and TV stations can contribute to the mental health of this vulnerable population.

Keywords: COVID-19, TV consumption, older adults, China, mental health

Introduction

The COVID-19 pandemic has had a significant impact on the mental health of individuals worldwide, particularly vulnerable populations, such as older adults. The world emergency triggered by the pandemic has triggered reflection on various aspects, especially security and vulnerable groups.¹ During the COVID-19 pandemic, people faced serious challenges to their mental health, including negative emotions such as anxiety, depression, loneliness, and fear due to restrictions on movement and the spread of the virus.¹⁻³ Several scholars have offered suggestions on how to improve mental health during the pandemic. This includes encouraging senior citizens and their families to connect with each other as much as possible on a daily basis to reduce loneliness in this population.⁴ Distraction in times of loneliness, such as interacting with loved ones online and watching serials and movies, may also be helpful.⁵

However, there is a lack of research on COVID-19-related fear among older adults. Fear of COVID-19 has emerged as a prevalent psychological issue that can lead to anxiety, stress, and other mental health problems.^{2,6,7} The fear of contracting COVID-19 can lead to social isolation and other behaviors that may negatively affect older adults' well-being.⁸ Older adults, who are at higher risk for severe illness and death from COVID-19, may experience higher levels of fear and anxiety.^{9,10}

Extensive media coverage during the outbreak heightened people's concern over the spread and impact of the virus, which further exacerbated their fears. Some studies have suggested that media coverage may have exaggerated the spread and impact of the virus, leading to further fears about the outbreak.^{11,12} However, some studies have also shown the potential of the media to alleviate people's sense of fear. For example, one study found that social media can alleviate the fear of COVID-19 in people with diabetes.¹³ Thus, although media usage may have further exacerbated the fear of COVID-19, it also has the potential to alleviate it.

Television (TV) watching is a common activity among older adults, and watching TV series, especially literature and action-related themes, can be effective in reducing the fear of COVID-19.¹⁴ In addition, they prefer to watch TV news, variety shows and sports events.¹⁵ TV played an important role for older adults during the pandemic, ^{16,17} serving as a source of emotional support, ^{18,19} social interaction, ^{20,21} and information. ^{22,23} Research has shown that viewing TV dramas may have been a recovery strategy for relieving stress caused by the pandemic during COVID-19 lockdowns. ²⁴ However, the effects of TV as a form of mass media on older adults' fears, as well as the relationship between older adults' TV viewing behaviors, motivations, and fears of COVID-19, remain understudied and needs further investigation.

Based on the above background and problems, the two objectives of this study are: (1) to explore the relationship between TV viewing behavior, motivation, and fear-related COVID-19 among older Chinese adults during the pandemic, and (2) to identify the main motivations for TV viewing among older Chinese adults during the pandemic. This study constructed a conceptual framework and proposed three hypothesized hypotheses. Before delving into the specific hypotheses, it is imperative to contextualize the rationale behind their formulation. First, it is widely accepted that motivation is the driving force behind any behavior, including TV viewing. For older adults, motivations such as relieving loneliness and maintaining social connectivity are often cited as key reasons for engaging in this activity. Hence, it is logical to hypothesize that their motivations positively influence their TV viewing behaviors (H1), especially during crises in which traditional social interactions are limited, such as the COVID-19 pandemic.

Second, TV has been identified as a source of emotional support, social interaction, and information during crises. ^{20,21,25} Its ability to provide comfort, distraction, and updates on current affairs may alleviate fears related to COVID-19. Therefore, it is reasonable to assume that the more TV older adults watch, the less fearful they may be during this pandemic (H2). Third, the relationship between motivation and fear is complex but intuitive. If motivations for watching TV are primarily rooted in positive constructs, such as social connectivity and emotional support, it stands to reason that these motivations would negatively correlate with fear. In other words, having strong motivations to watch TV for positive reasons may mitigate the fears associated with the pandemic (H3).

Based on these considerations, the following hypotheses are proposed to examine the relationship between TV viewing behavior, motivation, and fear-related COVID-19 among older Chinese adults during the pandemic.

- H1: Older adults' motivation to watch TV positively predicts their viewing behaviors during the pandemic.
- H2: Older adults' TV viewing behavior negatively predicts their fear of COVID-19 during the pandemic.
- H3: Older adults' motivation to watch TV negatively predicts their fear of COVID-19 during the pandemic.

Materials and Methods

Participants and Procedures

A total of 405 older adults from Wuhan, China, participated in this study by completing an online survey between May 11 and May 22, 2022. Given that Chinese society was severely affected by the zero-COVID-19 policy during the survey period, all our surveys were disseminated through WeChat groups, which included groups for elderly activity centers, nursing homes, and communities in urban and rural areas.

The researcher disseminated the online questionnaire through WeChat because it has become one of the most widely used and popular messaging applications in China since Tencent released the application in 2011, ^{26,27} with over 1 billion active users per month. WeChat features include text, verbal and video chats, social photo sharing tools, interactive features, and public platform features, which have been used to provide health information during the

COVID-19 pandemic.^{14,28} In China, many researchers have collected data via WeChat during the course of the pandemic to circumvent the movement control restrictions in place, for example, to analyze the perceived risks and factors associated with COVID-19 outbreaks among residents of Chongqing, China²⁹ or to explore the behavioral and psychological responses of older Chinese adults to the COVID-19 pandemic.³⁰ Accordingly, WeChat has been essential for all Chinese people during the pandemic, and it made sense to use it to disseminate the online questionnaire.

We did not set specific inclusion criteria, apart from the age requirement, allowing for a diverse pool of participants. Voluntary participation was emphasized throughout the study, and measures were put in place to ensure the anonymity and privacy of all participants. After completing the questionnaire, older adults were rewarded with a small monetary compensation of 1–2 RMB. From May 5 to May 15, 2022, 416 eligible participants took part in this survey, and we removed 11 ineligible questionnaires based on the completeness and timing of the responses, leaving a final sample of 405 eligible participants.

Ethical Considerations

In accordance with the ethical standards outlined in the Declaration of Helsinki, this study was conducted with full consideration of the rights and well-being of the participants. Before commencing the survey, we thoroughly informed the older adult participants about the objective, scope, and specific data collection methods employed in the study. Additionally, we ensured that all participants provided their consent by signing an online consent form that explicitly outlined their agreement to participate. The University of Malaya (UM) Research Ethics Committee (TNC2/UMREC_1840) granted ethical approval for this study, attesting to its adherence to rigorous ethical standards and guidelines. Additionally, necessary permissions were obtained from administrative health agencies in Wuhan, China, to conduct research involving older adults during the COVID-19 pandemic. The study adhered to all ethical guidelines and regulations set forth by the participating institutions and governmental authorities.

In particular, we took into account several key ethical considerations. First, we ensured the privacy and confidentiality of all participant data by implementing robust data protection measures. Second, we respected the autonomy of participants by allowing them to withdraw from the study at any time without penalty. Third, we minimized the potential for participant burden by limiting the duration and complexity of the survey. Finally, we ensured that the survey did not involve any procedures that could cause harm or discomfort to the participants.

Measures

Participant Information Sheet

The information sheet contained four items intended to capture the descriptive characteristics of older adults: age, gender, educational status, and occupation.

TV Watching Behaviors

To measure the behavior of older adults watching TV during the pandemic, we designed three items. The study measured TV watching behaviors (BTV) and included questions about the frequency of use and duration of use.³¹ According to Umesh and Bose,³² binge watching has been considered an important factor in deciding to continue using information and media systems, so binge watching was also chosen as an evaluation indicator for BTV. The measurement standard was a five-point Likert scale (1 = strongly disagree, 5 = strongly agree).

TV Watching Motivations

Wang³³ developed a scale based on the use and gratification theory to measure Chinese people's motivations for and use of mainstream and social media during the COVID-19 pandemic. The motivations in the scale consist of emotion management, information seeking, social interaction, and value expression, for a total of 14 items. The motivation measure (TV watching motivations, MTV) for this study was adapted from this scale using a five-point Likert scale (1 = strongly disagree and 5 = strongly agree).

Fear of COVID-19 (FCV-19)

Ahorsu et al³⁴ developed the FCV-19S, which was later translated into Chinese.³⁵ The scale consists of seven items that measure an individual's fear of COVID-19. Examples of these items include feeling apprehensive or anxious while watching news and stories about COVID-19 on social media and being afraid of losing one's life due to the virus. Each item is rated on a five-point scale, ranging from strongly disagree (1) to strongly agree (5).

Data Analysis

We used SPSS 23[®] software to determine the reliability, validity, and usability of the scale and data. Following reliability and validity analysis, structural equation modeling (SEM) was employed using SmartPLS (Version 4.0). SEM can be used to establish, estimate, and test the relationships between variables.³⁶

Results

Sociodemographic Characteristics of the Sample

As shown in Table 1, most respondents were aged between 60 and 64 years, and there were fewer men (30.86%) than women (69.14%). The highest proportion of the participants had a junior high school education (36.05%), followed by a high school education (32.84%) or a diploma (11.36%).

Analysis of the demographic data revealed several notable trends and patterns. First, the significant majority of participants being female (69.14%) suggests a potential gender bias in the sample, possibly reflecting a higher willingness among elderly women to participate in such studies or a higher visibility of the female elderly in society. Second, the concentration of participants in the 60–64 age group (71.85%) highlights the focus of the study on the younger elderly, which may limit our understanding of the health needs and challenges faced by older age groups. Third, the education level distribution reveals that most participants completed junior high school or high school, indicating

Table I Sociodemographic Characteristics of the Sample

	Number	Percentage (%)	
Gender			
Male	125	30.86%	
Female	280	69.14%	
Age category			
60–64	291	71.85%	
65–69	61	15.06%	
70–74	32	7.9%	
75+	21	5.19%	
Level of education			
Primary school or below	40	9.88%	
Junior high school	146	36.05%	
High school	133	32.84%	
Diploma	46	11.36%	
Bachelor's degree	31	7.65%	
Master's degree or above	9	2.22%	
Occupation			
Farmer	79	19.51%	
Worker	72	17.78%	
Civil servant	32	7.9%	
Entrepreneur	49	12.1%	
Businessperson	37	9.14%	
Educational or cultural worker	21	5.19%	
Housewife	55	13.58%	
Other	60	14.81%	

Table 2 Reliability and Validity Analysis

	Cronbach's Alpha	кмо	
BTV	0.832	0.698	
MTV	0.929	0.882	
FCV	0.948	0.936	

Abbreviations: FCV, fear of COVID-19; BTV, behavior of TV watching; MTV, motivations of TV watching; KMO, Kaiser-Meyer-Olkin.

a general trend of lower educational attainment among the elderly population, which may affect their ability to access and understand health information. These trends and patterns provide valuable insights into the demographic characteristics of the study participants and offer potential directions for future research.

Reliability and Validity

Before analyzing the data, we tested the reliability and validity of the observed indicators using SPSS (Table 2). The KMO (Kaiser-Meyer-Olkin) values were all more than 0.6 (p = 0.000), and the α values were all more than 0.7. Thus, the data passed the reliability and validity tests and could be used for further analysis.

Structural Equation Modeling

A structural equation model was constructed with SmartPls (Version 4.0) for this study (Figure 1). To confirm the validity of the measurement model, we examined the model fit indices of this study (GFI = 0.956, RMSEA = 0.042, CFI = 0.985, NFI = 0.965, NNFI = 0.982), and Table 3 shows the model fit indices and criteria. To test the hypothesized structural relationship between MTV, BTV, and FCV-19, Table 4 shows the path normalization coefficients from SEM.

MTV had a significant positive effect on BTV ($\beta = 0.58$, p = 0.000), indicating that the stronger the motivation of the elderly to watch TV, the greater their TV viewing behavior. This finding suggests that intrinsic motivations play a crucial role in shaping TV viewing habits among the elderly. Further, there was a significant negative effect of BTV on FCV-19 ($\beta = -0.23$, p = 0.002), implying that those who watched TV more actively during the pandemic exhibited less fear of COVID-19. This could be attributed to TV being a source of information and comfort during times of uncertainty. Lastly, MTV also had a negative effect on FCV-19 ($\beta = -0.22$, p = 0.002), suggesting that stronger motivation to watch TV led to less fear of COVID-19 among the elderly. This finding highlights the potential of TV as a medium for reducing anxiety

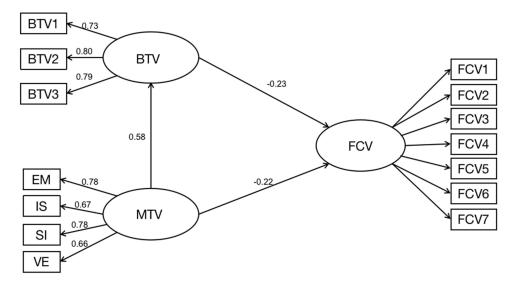


Figure I Structural equation model.

Table 3 Model Fit

Fit index	GFI	RMSEA	CFI	NFI	NNFI
Ideal value	>0.9	<0.10	>0.9	>0.9	>0.9
Test data	0.956	0.042	0.985	0.965	0.982

Abbreviations: GFI, Goodness of Fit Index; RMSEA, Root Mean Square Error of Approximation; CFI, Comparative Fit Index; NFI, Normed Fit Index; NNFI, Non-Normed Fit Index.

Table 4 Path Standardized Coefficients for the Structural Model

x	\rightarrow	Y	Unstandardized Coefficients	SE	z (CR)	р	Standardized Coefficients
BTV	\rightarrow	FCV	-0.223	0.072	-3.111	0.002***	-0.226
MTV	\rightarrow	BTV	1.030	0.118	8.766	0.000***	0.582
MTV	\rightarrow	FCV	-0.384	0.126	-3.038	0.002***	-0.220
BTV	\rightarrow	BTV3	0.855	0.063	13.548	0.000	0.792
BTV	\rightarrow	BTV2	1.014	0.074	13.605	0.000	0.799
BTV	\rightarrow	BTVI	1.000	_	_	-	0.730
MTV	\rightarrow	VE	1.024	0.084	12.181	0.000	0.657
MTV	\rightarrow	SI	0.989	0.070	14.186	0.000	0.776
MTV	\rightarrow	IS	0.863	0.070	12.399	0.000	0.669
MTV	\rightarrow	EM	1.000	_	_	-	0.781
FCV	\rightarrow	FCV7	0.980	0.043	22.781	0.000	0.851
FCV	\rightarrow	FCV6	0.969	0.043	22.520	0.000	0.846
FCV	\rightarrow	FCV5	0.956	0.042	22.784	0.000	0.851
FCV	\rightarrow	FCV4	0.962	0.044	22.096	0.000	0.837
FCV	\rightarrow	FCV3	1.026	0.044	23.521	0.000	0.865
FCV	\rightarrow	FCV2	0.925	0.040	23.134	0.000	0.858
FCV	\rightarrow	FCVI	1.000	-	-	-	0.871

Note: ***Significant at 0.01.

Abbreviations: FCV, fear of COVID-19; BTV, behavior of TV watching; MTV, motivations of TV watching; VE, value expression; SI, social interaction; IS, information seeking; EM, emotion management.

and fear during pandemic situations. The standardized coefficients for each motivation are shown in Table 4 and Figure 1 (VE = 0.66, SI = 0.78, IS = 0.67, EM = 0.78), indicating varying degrees of influence on TV viewing behavior and COVID-19 fear.

In summary, our findings suggest that the elderly's motivation to watch TV is positively correlated with their TV viewing behavior and that both are negatively correlated with their fear of COVID-19. This indicates that TV can serve as a valuable resource for the elderly, not only as a source of entertainment but also as a means of reducing anxiety and fear during times of crisis. The implications of these findings are discussed further in subsequent sections.

Discussion and Conclusion

According to the findings, older adults' motivation to watch TV during the pandemic influenced their viewing behavior. Social interaction and emotional management were the main motivations for older Chinese adults to watch TV, followed by information seeking. These findings are consistent with previous studies that have shown social interaction to be a key motivation for TV viewing.^{37,38} This study's findings regarding emotion management as a motivator for TV viewing are also consistent with previous research suggesting that TV can serve as an emotional outlet for people,³⁹ especially since watching TV series during a pandemic can provide emotional support.²⁴ Previous studies have shown that exposure to media, including TV, can influence people's perceptions of and emotional response to health threats, such as pandemics.^{40,41}

The findings of this study support the idea that TV watching behavior may have an effect on the fear of COVID-19 among older adults in China. These Results are consistent with previous research that has linked media exposure to fear and anxiety about health issues. However, the results of this study suggest that TV watching behavior may have a protective effect against the fear of COVID-19 among older adults in China.

Although our findings clearly indicate that TV viewing reduced fear related to the COVID-19 pandemic, the mechanisms behind this relationship warrant further exploration. One potential mechanism is the role of TV in providing accurate and timely information, which can reduce uncertainty and fear. Additionally, TV programs designed to offer emotional support or distraction might help viewers manage stress and anxiety by shifting their focus away from the pandemic. Future research could explore these mechanisms in more detail, perhaps through qualitative studies that examine how specific types of content contribute to emotional well-being.

Our findings contrast with some previous research that has suggested that media exposure may increase or reduce fear and anxiety about health issues. 45,46 This discrepancy may be due to cultural differences or variations in media coverage of the pandemic. It is also possible that the older adults in this study found comfort watching TV during a time of uncertainty and isolation, which reduced their fear of the pandemic. Cultural norms and values significantly influence media consumption patterns and the psychological impact of media content. For instance, in collectivist cultures, content that emphasizes community solidarity and collective well-being may resonate more deeply and provide greater emotional comfort than in individualist cultures. Additionally, the portrayal of COVID-19 in the media might differ across cultures, influencing viewers' perceptions and emotional responses. A deeper exploration of these cultural factors could provide a more nuanced understanding of how TV serves as a coping mechanism in different cultural contexts. Future studies could compare Wuhan's findings with those from other regions or countries to identify cultural variations in TV viewing behavior and its psychological impacts.

Our findings also show that motivation to watch TV was negatively related to fear of COVID-19, suggesting that TV watching can be a coping mechanism for older adults during times of crisis. Specifically, the stronger the motivation to watch TV, the lower the fear of COVID-19 among older Chinese adults. This result is consistent with previous studies that have explored the relationship between media consumption and fear or anxiety. Addia use is a primary strategy of coping for people facing health issues or academic stress, and stressed individuals may turn to media for relaxation and recovery. For example, Thygesen et al found that motivation for social media usage and people's mental health were correlated during the pandemic, with poorer mental health associated with using social media to decrease loneliness and for entertainment purposes.

In situations of limited social distance, in which people are locked in their homes, in relative isolation, with external limitations on their ability to travel or work, and with limited personal agency in combating global pandemics, the population may not feel autonomous and socially connected in other ways. Consistent with the findings of Eden et al,⁵¹ media motivation has a mediating effect on mental health at this time, and it may motivate people to use the media to reduce stress, and anxiety.

In conclusion, this study underscores the critical role of TV viewing in supporting the mental well-being of older adults during the COVID-19 pandemic. The findings reveal that motivation to watch TV, driven primarily by the need for social interaction and emotion management, significantly influences viewing behavior and reduces the fear of COVID-19 among older adults in China. This highlights TV's potential as an effective coping mechanism during times of crisis, providing both emotional support and a means to mitigate anxiety.

The identification of social interaction as a primary motivator for TV viewing has important implications for public health interventions aimed at promoting social support and reducing social isolation among older adults. By understanding the motivations behind TV consumption and taking cultural influences into account, public health organizations and media producers can better tailor their content to address the needs of this vulnerable population.

Future research should delve deeper into the mechanisms underlying the observed relationships and explore the impact of cultural factors on TV viewing behaviors and their psychological effects. Such studies could provide a more nuanced understanding of how media can be leveraged to enhance mental health and well-being, particularly during global health crises. This would not only enrich our theoretical knowledge but also improve practical strategies for using TV and other media as tools for psychological support and stress reduction.

Limitations and Recommendations

While this study provides valuable insights into the relationship between television viewing behavior, motivation, and fear of COVID-19 among older adults in Wuhan, China, several limitations must be considered. The study relied on self-reported data, which may be subject to biases and inaccuracies, such as social desirability bias or recall bias. Participants might have misreported their TV viewing habits or the extent of their fear.

Additionally, the context-specific focus on older adults in Wuhan during the COVID-19 pandemic, coupled with potential sample bias and lack of demographic diversity, limits the generalizability of the findings. The unique cultural and policy environment in Wuhan during the pandemic may have shaped television viewing motivations and fear responses differently compared to other regions or countries. The sample predominantly included older adults from a single urban area, which may not represent the experiences of older adults in rural areas or other cities with different socio-economic backgrounds. Therefore, caution should be exercised when applying these findings to broader populations.

Based on the findings and limitations of this study, several recommendations for future research are suggested. First, to address the limitation of potential biases and inaccuracies from self-reported data, future studies should incorporate more objective Measures, such as physiological indicators or direct behavioral observations. Additionally, replicating this study with a larger and more diverse sample across multiple regions would enhance the generalizability of the findings, as the current study's focus on older adults in Wuhan during the COVID-19 pandemic may not be representative of broader populations.

Longitudinal studies are also recommended to explore how television viewing behavior and fear of pandemics evolve over time, providing a more dynamic understanding of these relationships. Furthermore, cross-cultural comparisons could shed light on how cultural differences influence television viewing motivations and pandemic-related fears, which could help contextualize the findings within different cultural and policy environments. Finally, expanding the scope to investigate other psychological issues such as anxiety and stress, and examining the effects of various media types on the mental health of older adults, would provide a more comprehensive understanding of media's role in supporting mental well-being during health crises. By addressing these areas, future research can offer more robust insights into the factors affecting older adults' television consumption and mental health during pandemics.

Acknowledgments

We would like to express our sincere gratitude to all the participants who contributed to this study. Their valuable insights and data provided crucial support for our research. We also extend our thanks to all individuals and institutions who supported and assisted us in completing this study. Without their help and support, this research would not have been possible.

Disclosure

The authors report no conflicts of interest in this work.

References

- 1. Parisi R, Lagomarsino F, Rania N, Coppola I. Women face to fear and safety devices during the COVID-19 pandemic in Italy: impact of physical distancing on individual responsibility, intimate, and social relationship. *Front Public Health*. 2021;9:622155. doi:10.3389/fpubh.2021.622155
- 2. Fofana NK, Latif F, Sarfraz S, Bashir MF, Komal B, Komal B. Fear and agony of the pandemic leading to stress and mental illness: an emerging crisis in the novel coronavirus (COVID-19) outbreak. *Psychiatry Res.* 2020;291:113230. doi:10.1016/j.psychres.2020.113230
- 3. Kayis AR, Satici B, Deniz ME, Satici SA, Griffiths MD. Fear of COVID-19, loneliness, smartphone addiction, and mental wellbeing among the Turkish general population: a serial mediation model. *Behav Inf Technol*. 2022;41(11):2484–2496. doi:10.1080/0144929X.2021.1933181
- 4. Sepúlveda-Loyola W, Rodríguez-Sánchez I, Pérez-Rodríguez P, et al. Impact of social isolation due to COVID-19 on health in older people: mental and physical effects and recommendations. J Nutr Health Aging. 2020;24:938–947. doi:10.1007/s12603-020-1500-7
- 5. Llorente-Barroso C, Kolotouchkina O, Mañas-Viniegra L. The enabling role of ICT to mitigate the negative effects of emotional and social loneliness of the elderly during COVID-19 pandemic. *Int J Environ Res Public Health*. 2021;18(8):3923. doi:10.3390/ijerph18083923
- 6. Ornell F, Schuch JB, Sordi AO, Kessler FHP. "Pandemic fear" and COVID-19: mental health burden and strategies. *Braz J Psychiatry*. 2020;42 (3):232–235. doi:10.1590/1516-4446-2020-0008
- 7. Sarfraz M, Ji X, Asghar M, Ivascu L, Ozturk I. Signifying the relationship between Fear of COVID-19, psychological concerns, financial concerns and healthcare employees job performance: a mediated model. *Int J Environ Res Public Health*. 2022;19(5):2657. doi:10.3390/ijerph19052657

8. Shah SS, Memon FA, Qureshi F, Soomro AB, Kemal AA, Shah AA. Mental well-being during COVID-19 pandemic: the role of fear, social isolation and psychological resilience. *Cogent Psychol.* 2022;9(1):2006993. doi:10.1080/23311908.2021.2006993

- 9. Chen LK. Older adults and COVID-19 pandemic: resilience matters. Arch Gerontol Geriatr. 2020;89:104124. doi:10.1016/j.archger.2020.104124
- 10. Girdhar R, Srivastava V, Sethi S. Managing mental health issues among elderly during COVID-19 pandemic. J Geriatr Care Res. 2020;7(1):32–35.
- 11. Anwar A, Malik M, Raees V, Anwar A. Role of mass media and public health communications in the COVID-19 pandemic. Cureus. 2020;12(9):1.
- 12. Xu T, Sattar U. Conceptualizing COVID-19 and public panic with the moderating role of media use and uncertainty in China: an empirical framework. In: *Healthcare*. Vol. 8. MDPI; 2020:249.
- 13. Iacobucci G. Covid-19: diabetes clinicians set up social media account to help alleviate patients' fears. *BMJ*. 2020;368:m1262. doi:10.1136/bmj. m1262
- 14. Yu H, Alizadeh F. Associations between the TV program preferences of older adults and their COVID-19-related fear during the pandemic: a quantitative study in China. *Cogent Arts Humanit*. 2023;10(2):2268917. doi:10.1080/23311983.2023.2268917
- 15. Yu H, Alizadeh F. Chinese older adults' motivations and preferences for television watching during the pandemic. *Malays J Soc Sci Humanit MJSSH*. 2023;8(4):e002296–e002296. doi:10.47405/mjssh.v8i4.2296
- Goodman-Casanova JM, Dura-Perez E, Guzman-Parra J, Cuesta-Vargas A, Mayoral-Cleries F. Telehealth home support during COVID-19 confinement for community-dwelling older adults with mild cognitive impairment or mild dementia: survey study. J Med Internet Res. 2020;22 (5):e19434. doi:10.2196/19434
- 17. Greenwood-Hickman MA, Dahlquist J, Cooper J, et al. "They're going to zoom it": a qualitative investigation of impacts and coping strategies during the COVID-19 pandemic among older adults. Front Public Health. 2021;9:679976. doi:10.3389/fpubh.2021.679976
- Túñez-López M, Vaz-álvarez M, Fieiras-Ceide C. Covid-19 and public service media: impact of the pandemic on public television in Europe. Prof Inf. 2020;29(5):2.
- 19. Sigre-Leirós V, Billieux J, Mohr C, et al. Binge-Watching in Times of COVID-19: A Longitudinal Examination of Changes in Affect and TV Series Consumption Patterns During Lockdown. Psychol Pop Media; 2022.
- 20. Lund B, Ma J. Exploring information seeking of rural older adults during the COVID-19 pandemic. Aslib J Inf Manag. 2021;74(1):54–77. doi:10.1108/AJIM-04-2021-0118
- 21. Kim J, Merrill JK, Collins C, Yang H. Social TV viewing during the COVID-19 lockdown: the mediating role of social presence. *Technol Soc.* 2021;67:101733. doi:10.1016/j.techsoc.2021.101733
- 22. Arif W, Mahmood F, Mughal MA. Information seeking through TV and Facebook and health belief model: a case of province of Punjab (Pakistan) during Covid-19 pandemic. *J Res Soc Pak.* 2020;57(2):9.
- 23. Sun Y, Hu Q, Grossman S, Basnyat I, Wang P. Comparison of COVID-19 information seeking, trust of information sources, and protective behaviors in China and the US. *J Health Commun*. 2021;26(9):657–666. doi:10.1080/10810730.2021.1987590
- 24. Boursier V, Musetti A, Gioia F, Flayelle M, Billieux J, Schimmenti A. Is watching TV series an adaptive coping strategy during the COVID-19 pandemic? Insights from an Italian community sample. *Front Psychiatry*. 2021;2:554.
- Tang L, Zou W. Health information consumption under COVID-19 lockdown: an interview study of residents of Hubei Province, China. Health Commun. 2021;36(1):74–80. doi:10.1080/10410236.2020.1847447
- Chen ZT, Cheung M. Privacy perception and protection on Chinese social media: a case study of WeChat. Ethics Inf Technol. 2018;20(4):279–289. doi:10.1007/s10676-018-9480-6
- 27. Tu F. WeChat and civil society in China. Commun Public. 2016;1(3):343-350. doi:10.1177/2057047316667518
- 28. Liu S, Yang L, Zhang C, et al. Online mental health services in China during the COVID-19 outbreak. *Lancet Psychiatry*. 2020;7(4):e17–e18. doi:10.1016/S2215-0366(20)30077-8
- 29. He S, Chen S, Kong L, Liu W. Analysis of risk perceptions and related factors concerning COVID-19 epidemic in Chongqing, China. *J Community Health*. 2021;46:278–285. doi:10.1007/s10900-020-00870-4
- 30. Liang W, Duan Y, Yang M, et al. Behavioral and mental responses towards the COVID-19 pandemic among Chinese older adults: a cross-sectional study. *J Risk Financ Manag.* 2021;14(12):568. doi:10.3390/jrfm14120568
- 31. Bryant MJ, Lucove JC, Evenson KR, Marshall S. Measurement of television viewing in children and adolescents: a systematic review. *Obes Rev.* 2007;8(3):197–209. doi:10.1111/j.1467-789X.2006.00295.x
- 32. Umesh S, Bose S. Binge-watching: a matter of concern? Indian J Psychol Med. 2019;41(2):182-184. doi:10.4103/IJPSYM.IJPSYM 279 18
- 33. Wang X. The motivations and uses of mainstream and social media during the COVID-19 pandemic in China: a structural equation modeling approach. Comput Hum Behav Rep. 2021;4:100098. doi:10.1016/j.chbr.2021.100098
- 34. Ahorsu DK, Lin CY, Imani V, Saffari M, Griffiths MD, Pakpour AH. The fear of COVID-19 scale: development and initial validation. *Int J Ment Health Addict*. 2020;2:1–9.
- 35. Chi X, Chen S, Chen Y, et al. Psychometric evaluation of the fear of COVID-19 scale among Chinese population. *Int J Ment Health Addict*. 2021;2:1–16.
- 36. Hsu IY, Su TS, Kao CS, Shu YL, Lin PR, Tseng JM. Analysis of business safety performance by structural equation models. *Saf Sci.* 2012;50 (1):1–11. doi:10.1016/j.ssci.2011.04.012
- 37. Starosta J, Izydorczyk B, Lizińczyk S. Characteristics of people's binge-watching behavior in the "entering into early adulthood" period of life. Health Psychol Rep. 2019;7(2):149–164. doi:10.5114/hpr.2019.83025
- 38. Tefertiller A, Sheehan K. TV in the streaming age: motivations, behaviors, and satisfaction of post-network television. *J Broadcast Electron Media*. 2019;63(4):595–616. doi:10.1080/08838151.2019.1698233
- 39. Kim S. Audience involvement and film tourism experiences: emotional places, emotional experiences. Tour Manag. 2012;33(2):387-396.
- 40. Melki J, Tamim H, Hadid D, et al. Media exposure and health behavior during pandemics: the mediating effect of perceived knowledge and fear on compliance with COVID-19 prevention measures. *Health Commun*. 2022;37(5):586–596. doi:10.1080/10410236.2020.1858564
- 41. Tsoy D, Tirasawasdichai T, Kurpayanidi KI. Role of social media in shaping public risk perception during COVID-19 pandemic: a theoretical review. *Int J Manag Sci Bus Adm.* 2021;7(2):35–41.
- 42. Gao J, Zheng P, Jia Y, et al. Mental health problems and social media exposure during COVID-19 outbreak. *PLoS One*. 2020;15(4). doi:10.1371/journal.pone.0231924

43. Zhao N, Zhou G. Social media use and mental health during the COVID-19 pandemic: moderator role of disaster stressor and mediator role of negative affect. Appl Psychol Health Well-Being. 2020;12(4):1019-1038. doi:10.1111/aphw.12226

- 44. Farber BA, Ort D, Mayopoulos G. Psychotherapists' preferences for television and movies during the early stages of the COVID-19 pandemic. J Clin Psychol. 2020;76(8):1532-1536. doi:10.1002/jclp.23005
- 45. Garfin DR, Silver RC, Holman EA. The novel coronavirus (COVID-2019) outbreak: amplification of public health consequences by media exposure. Health Psychol. 2020;39(5):355. doi:10.1037/hea0000875
- 46. Mertens G, Gerritsen L, Duijndam S, Salemink E, Engelhard IM. Fear of the coronavirus (COVID-19): predictors in an online study conducted in March 2020. J Anxiety Disord. 2020;74:102258. doi:10.1016/j.janxdis.2020.102258
- 47. Harrell SP. Being human together": positive relationships in the context of diversity, culture, and collective well-being. Posit Psychol Relatsh New Dir Theory Res. 2018;3:247-284.
- 48. Ittefaq M, Abwao M, Baines A, Belmas G, Kamboh SA, Figueroa EJ. A pandemic of hate: social representations of COVID-19 in the media. Anal Soc Issues Public Policy. 2022;22(1):225–252. doi:10.1111/asap.12300
- 49. Reinecke L, Oliver MB. The Routledge Handbook of Media Use and Well-Being: International Perspectives on Theory and Research on Positive Media Effects. Routledge; 2016.
- 50. Thygesen H, Bonsaksen T, Schoultz M, et al. Social media use and its associations with mental health 9 months after the COVID-19 outbreak: a cross-national study. Front Public Health. 2022;9:2316. doi:10.3389/fpubh.2021.752004
- 51. Eden AL, Johnson BK, Reinecke L, Grady SM. Media for coping during COVID-19 social distancing: stress, anxiety, and psychological well-being. Front Psychol. 2020;11:577639. doi:10.3389/fpsyg.2020.577639

Psychology Research and Behavior Management

Dovepress

Publish your work in this journal

Psychology Research and Behavior Management is an international, peer-reviewed, open access journal focusing on the science of psychology and its application in behavior management to develop improved outcomes in the clinical, educational, sports and business arenas. Specific topics covered in the journal include: Neuroscience, memory and decision making; Behavior modification and management; Clinical applications; Business and sports performance management; Social and developmental studies; Animal studies. The manuscript management system is completely online and includes a very quick and fair peer-review system, which is all easy to use. Visit http://www.dovepress.com/testimonials.php to read real quotes from published authors.

Submit your manuscript here: https://www.dovepress.com/psychology-research-and-behavior-management-journal

