Data Article

Dataset on social media use during COVID-19: Associations with self-efficacy, perceived threat, and preventive behavior

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ABSTRACT

The ongoing COVID-19 pandemic is the most significant public health crisis of this century, and the world has been facing multiple challenges for the last two years, including a high death toll, the imposition of various forms of lockdown and the unavailability of vaccines. Globally, people have faced fearful situations and sought information from social media in order to understand the severity of the situation as well as to protect themselves and others. In comparison to traditional media (electronic and print), social media provides quick and easy access to information, making its impact timely and powerful. The cross-sectional data reflects social media use and its associations with self-efficacy, perceived threat, and preventive behavior in the time of COVID-19 among the people of Pakistan. An online-based cross-sectional survey has been conducted to obtain data from the respondents. These respondents were reached out by sharing a hyperlink through various social media platforms. A total number of 310 respondents furnished their responses. The

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survey was completed in April 2020. This data may be of great interest to researchers, policymakers, research organizations, and social and mental health practitioners who wish to explore other dimensions of mental health issues caused by the ongoing COVID-19 pandemic.

Specifications Table

Subject	Social Sciences
Specific subject area	Social media use, self-efficacy, perceived threat, and preventive behavior among people in Pakistan during COVID-19
Type of data	Table
	SPSS File
How the data were acquired	Because of social distancing and lockdown, we developed an online-based questionnaire using Google Survey. We measured social media use and adopted a self-efficacy scale, perceived threat scale as well as preventive behavior scale. The questionnaire is available as a Supplementary file in the related manuscript presenting the results of the study.
Data format	Raw
	Analyzed
	Filtered
Description of data collection	Participants were recruited using social media websites (Facebook, LinkedIn, and WhatsApp). A link to the questionnaire was also posted on the social media pages of many Pakistani universities. Data was gathered from April 10 to 30, 2020. Each question in the questionnaire was mandatory. Because English is the official working and study language in Pakistan, the questionnaire was administered in English.
Data source location	• Institution: International Islamic University
	• City: Islamabad
	• Country: Pakistan
Data accessibility	Repository name: Mendeley Data
	Data identification number: 10.17632/mtd59df24s.2
	Direct URL to data: https://data.mendeley.com/datasets/mtd59df24s/2
Related research article	Q.K. Mahmood, S. R. Jafree, S. Mukhtar, F. Fischer, Social Media Use, Self-Efficacy, Perceived Threat, and Preventive Behavior in Times of COVID-19: Results of a Cross-Sectional Study in Pakistan, Frontiers in Psychology. 12 (2021) 2354. https://doi.org/10.3389/fpsyg.2021.562042

Value of the Data

- At the time of data collection, Pakistan was facing lockdown and social media usage was expected to be high. This data may help researchers and public/mental health practitioners in gaining a better understanding of the impact of social media in fostering self-efficacy and preventative behavior among Pakistan's population.
- Academics and public/mental health practitioners can benefit from this research, because it looks at how COVID-19's perceived threat varies among different socio-demographic groups. These data might also be useful to policymakers and government agencies in developing better plans for COVID-19 and future pandemics.
- These data might be used to assess the effect of social media in promoting preventative behavior among individuals during infectious disease outbreaks. Furthermore, it may be used to assess the relationship between respondents' self-efficacy and preventative behavior. Researchers and policymakers can get more insight from this quickly changing situation in order to build better understanding and strategies.

1. Data Description

Data presented in this article was collected during the COVID-19 pandemic in Pakistan. The goal of data collection was to investigate the link between social media use and people's self-efficacy, perceived threat, and preventative behavior during the peak of the COVID-19 crisis in Pakistan. Data was gathered in April 2020 with respondents from all around the country taking part. The data shows extremely interesting features of respondents based on gender, age, marital status, employment status, place of residence, and education. Table 1 of our published study article [1] contains the demographics of the participants.

The dataset depicts the respondents' social media use, perceived threat, self-efficacy, and preventative behavior. A total of 310 respondents completed the survey and the responses were analyzed using SPSS. The data is accessible online in .sav format at Mendeley Data (https://data.mendeley.com/datasets/mtd59df24s/2).

Table 1
Scale items of perceived threat.

Items	Mean	SD	Skewness	Kurtosis
COVID-19 could happen to me	3.03	1.050	−.345	−.605
COVID-19 could happen to my family	3.14	1.029	−.389	−.322
COVID-19 could happen to my neighbors and friends	3.34	.972	−.560	.075

Table 2
Scale items of self-efficacy.

Items	Mean	SD	Skewness	Kurtosis
I can figure out how to avoid COVID-19 infection	3.69	.959	−.862	.663
I can avoid COVID-19 infection	3.84	.871	−.767	.784
I can recover even if I contract COVID-19	3.54	.909	−.145	−.071
I am fully informed about COVID-19	3.78	.929	−.533	−.065

Table 3
Preventive behavior during the COVID-19.

Items	Mean	SD	Skewness	Kurtosis
I use hand sanitizer before and after contact with high touch surfaces and objects	4.00	1.203	−1.129	.337
I wash my hands with soap and water for twenty seconds before having food	4.42	.937	−1.798	2.969
I wash my hands with soap and water for twenty seconds before making food	4.41	.960	−1.870	3.250
I wash my hands with soap and water for twenty seconds whenever I feel my hands are dirty	4.64	.727	−2.218	5.074
I wash my hands with soap and water for twenty seconds after using the washroom	4.72	.659	−2.844	9.106
I cover my mouth and nose every time I cough or sneeze	4.45	.876	−1.870	3.501
If no tissue is available, I cough or sneeze in my arm	4.23	1.038	−1.310	.952
I put my used tissue in a covered waste basket	4.41	.980	−1.781	2.658
I avoid hand shaking with people	4.22	.957	−1.365	1.775
I keep social distancing while moving out	4.40	.966	−1.842	3.122
I avoid meeting with sick people these days	4.44	.935	−1.839	2.976
I avoid going out unnecessarily these days	4.52	.913	−2.243	4.986
I avoid touching eyes, nose and mouth these days	3.97	1.039	−.911	.308

Table 4
Social media use.

Items	Mean	SD	Skewness	Kurtosis
I receive the names of tablets or injections related to the treatment of COVID-19 on my social media accounts	2.93	1.269	−.006	−1.191
I receive the names of herbal medicines to cure myself from Coronavirus	3.19	1.160	−.352	−.958
People share some home-based remedies on social media that can be useful for COVID-19	3.59	1.150	−.755	−.223
People send me religious texts on social media for the protection from this virus	4.08	.958	−1.257	1.539
I use social media to keep myself updated on current situation of the outbreak of COVID-19	3.75	1.040	−.748	.153
I seek and share information on social media about the availability of face mask in my locality	2.88	1.109	.203	−.757
I seek and share information on social media about appropriate technique to use face mask	3.15	1.074	−.202	−.799
I seek and share information on social media about the availability of hand sanitizers in my locality	3.03	1.082	.010	−.892
I use social media pages to take advice from the doctors in case of not feeling good	2.88	1.143	.085	−.971

1.1. Perceived threat of COVID-19

We reviewed existing measures that had previously been established to assess the perceived threat during infectious disease outbreaks in order to design the scale to measure the perceived threat of COVID-19. Yang [2], for example, created a measure to quantify the perceived threat of H1N1. Similarly, a scale was developed from it to assess the perceived risk of MERS [3]. We adapted this scale for evaluating the perceived threat of COVID-19 in our study. Three items were used to assess perceived susceptibility ("COVID-19 could happen to me", "COVID-19 could happen to my family", and "COVID-19 could happen to my neighbors and friends"). These items were measured on a five-item Likert scale with endpoints labelled 'strongly agree' (5) and 'strongly disagree' (1).

1.2. Self-efficacy

We adapted four items for the self-efficacy scale and modified it accordingly [3]. The items are "I can figure out how to avoid COVID-19 infection", "I can avoid COVID-19 infection", "I can recover even if I contract COVID-19", and "I am fully informed about COVID-19"). A five-point Likert scale ('strongly disagree' [5] to 'strongly agree' [1]) was used for this scale.

1.3. Preventive behavior during COVID-19

We created a scale of preventative behavior based on three components (handwashing, cough etiquette, and social distancing behavior) [1]. This scale was developed in accordance with the WHO's COVID-19 preventive recommendations. Five items were used to assess handwashing behavior (using hand sanitizer, washing hands before making and eating food, and washing hands whenever they feel dirty and after using the bathroom). Three items were utilized to measure

cough etiquette behavior (covering the mouth and nose while sneezing, coughing or sneezing into the arm if having no tissue, putting the used tissue into a covered dustbin). Five questions were used to assess social distancing behavior (avoiding shaking hands with people, maintaining social distance when going outside, avoiding going out unnecessarily or visiting sick people, and not touching body parts). A five-point Likert scale (ranging from 'not at all' [1] to 'always' [5]) was used.

1.4. Social media use

Social media use was assessed using two constructs: medical information (related to COVID-19) and general information. Retrieving and distributing general information on social media includes home-based treatments and the names of herbal medications beneficial for strengthening immunity in response to COVID-19, the names of pills or injections used to treat COVID-19, and religious texts for illness and ailment protection. Five elements were utilized to assess medical information obtained or shared via social media (proper procedures for wearing a face mask, the availability of hand sanitizer and face masks, visiting doctors if feeling ill, and keeping track of medical information).

2. Experimental Design, Materials and Methods

At the time of this study, the government of Pakistan had imposed a nationwide lockdown. Keeping this situation in mind, the researchers decided to conduct an online-based survey using social media platforms such as Facebook, WhatsApp, and LinkedIn. Furthermore, his link was also posted on social media pages of various Pakistani universities and distributed via e-mail. Despite the fact that social media users do not represent the overall population, more than 45 million Pakistanis were active social media users at the time of this study. Therefore, it was expected that Pakistani social media users would participate in this study. A questionnaire was implemented at Google Survey. The questionnaire was administered in English language, because English is the official working and study language in Pakistan. It included five sections: socio-demographic characteristics, social media usage, perceived threat, self-efficacy, and preventive behavior among Pakistanis. This questionnaire was published and can be accessed in the supplementary appendix of the related publication [1].

Data was collected between April 10 and April 30, 2020. Respondents were told about the study's objectives through a cover letter, and informed consent was obtained online. Participation was completely voluntary and no financial incentives were provided. Each item in the questionnaire was compulsory, and the respondent could not submit the form until they had answered all of them. If a respondent chose not to answer all of the questions, he or she was allowed to exit the survey. We did not collect any contact information in order to ensure that the responses of the respondents remained anonymous. A total of 310 respondents completed the survey successfully. Data was transformed and imported into SPSS for statistical analysis.

Ethics Statements

All procedures carried out in this study were in line with the concerned research committee. The study was reviewed and approved by the ethical review board of the Department of Sociology, International Islamic University Islamabad (No: R03-2020). The respondents participated in this study on voluntary basis and their informed consent was obtained before online submission of the survey form.

CRediT Author Statement

Qaisar Khalid Mahmood: Conceptualization, Methodology, Data curation, Writing – original draft. **Sara Rizvi Jafree:** Supervision, Writing – review & editing. **Sahifa Mukhtar:** Data curation, Writing – review & editing. **Florian Fischer:** Supervision, Writing – review & editing.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Acknowledgments

References

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