Data Article

COVID-19 behavior determinants dataset

Jianmeng Song\textsuperscript{a,b}, Julia Kim\textsuperscript{a,b}, Ariel Graff-Guerrero\textsuperscript{a,b,c,d}, Lena Quilty\textsuperscript{c,d}, Marcos Sanches\textsuperscript{e}, Samantha Wells\textsuperscript{c,d,f,g}, Eric E. Brown\textsuperscript{c,d}, Branka Agic\textsuperscript{g,h}, Bruce G. Pollock\textsuperscript{a,c,d}, Philip Gerretsen\textsuperscript{a,b,c,d,*}

\textsuperscript{a} Institute of Medical Science, University of Toronto, Toronto, Canada
\textsuperscript{b} Multimodal Imaging Group, Centre for Addiction and Mental Health (CAMH), Toronto, Canada
\textsuperscript{c} Campbell Family Mental Health Research Institute, Centre for Addiction and Mental Health (CAMH), Toronto, Canada
\textsuperscript{d} Department of Psychiatry, University of Toronto, Toronto, Canada
\textsuperscript{e} Krembil Centre for Neuroinformatics, CAMH, Toronto, Canada
\textsuperscript{f} Institute for Mental Health Policy Research, CAMH, Toronto, Canada
\textsuperscript{g} Dalla Lana School of Public Health, University of Toronto, Toronto, Canada
\textsuperscript{h} Provincial System Support Program (PSSP), CAMH, Toronto, Canada

\section*{A R T I C L E   I N F O}

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\section*{A B S T R A C T}

The COVID-19 Behavior Determinants Database (http://covid19-database.com) is a research project that examined the sociodemographic and psychological determinants of COVID-19 related attitudes and behaviors. It is a comprehensive web-based survey that was administered to adults ages 18 or older (total n=8070) from the United States of America (n = 5326), including the four most populous states, specifically New York, California, Florida, and Texas, and Canada (n = 2744), including all provinces, except Quebec. The survey was collected at three timepoints, May 2020 (n=1019), July 2020 (n=4027), and March 2021 (n=3024). Participants provided detailed sociodemographic information and completed a battery of psychological assessments. Participants also provided information about prior testing for COVID-19 and perceived seriousness of COVID-19 and the need for current physical (social) distancing restrictions. The

\begin{itemize}
\item Centre for Addiction and Mental Health, 250 College St., Toronto, Ontario, M5T 1R8, Canada
\item University of Toronto, 27 King’s College Circle Toronto, Ontario M5S 1A1, Canada
\item Corresponding author.

\textit{E-mail addresses: philip.gerretsen@camh.ca, philgerretsen@yahoo.com (P. Gerretsen).}

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Specifications Table

| Subject                  | Infectious Diseases; Public Health and Health Policy |
|--------------------------|------------------------------------------------------|
| Specific subject area    | Behavioral determinants, social psychology           |
| Type of data             | Raw data                                             |
| How the data were acquired | The data was collected via a web-based survey platform, Dynata, a global market research company (https://www.dynata.com/). |
| Data format              | Raw                                                 |
| Description of data collection | Web-based survey data from 8070 participants 18 years of age or older were collected from the four most populous U.S. states and English-speaking Canada at three timepoints, May 2020 (n=1019), July 2020 (n=4027), and March 2021 (n=3024). Quotas for age ranges were placed to ensure that data was acquired from a representative sample, i.e., 18-24, 25-34, 35-44, 45-54, 55-64, and 65+ years of age. Survey attempts were excluded for the following reasons: over quota (n=111), partial completes (n=2544), terminated the survey (n=1093), failed open-end manual checks (n=631), and completed the survey too quickly (n=223). |
| Data source location     | Centre for Addiction and Mental Health               |
| Data accessibility       | Repository name: Harvard Dataverse                   |
|                          | Data identification number: N/A                     |
|                          | Direct URL to data: https://doi.org/10.7910/DVN/NILCAV |
| Related research article | P. Gerretsen, J. Kim, F. Caravaggio, L. Quilty, M. Sanches, S. Wells, E.E. Brown, B. Agic, B.G. Pollock, A. Graff-Guerrero, Individual determinants of COVID-19 vaccine hesitancy, PLOS ONE. 16 (2021) e0258462. https://doi.org/10.1371/journal.pone.0258462,[1,2] |

Value of the Data

- The COVID-19 Behavior Determinants Database (http://covid19-database.com) provides comprehensive sociodemographic and psychological factors associated with COVID-19 related attitudes and behaviors on 8070 respondents.
- Researchers and public health policy decision-makers can use the data to investigate the sociodemographic and psychological determinants of pandemic related attitudes and behaviours in North America.
- Researchers across the world can use the data to conduct cross-cultural investigations regarding the similarities and differences in sociodemographic and psychological factors associated with individuals’ pandemic related attitudes and behaviors.
- This dataset can be further analysed by subgroups based on sociodemographic and psychological characteristics.
- Public health officials can use this dataset to identify relevant sociodemographic and psychological factors to develop targeted and tailored interventions specific to the needs of their communities.
1. Data Description

The Harvard Dataverse repository (https://doi.org/10.7910/DVN/NILCAV) includes the raw data files in two different file types: Excel and SPSS file formats. A datamap is also included.

Raw data: The database includes the raw data of 8070 participants sociodemographic information, COVID-19 related attitudes and behaviours, and a battery of psychological assessments collected at three different timepoints, May 2020 (n=1019), July 2020 (n=4027), and March 2021 (n=3024). Among them, 392 participants had completed the questionnaires more than once. This dataset contains 401 variables and a total of 8071 rows (with the first row as the variable names).

Datamap: The datamap provides a detailed list of the scale items used in the survey and their corresponding variable codes as shown in the raw database. Scale scoring guides are also included.

2. Experimental Design, Materials and Methods

Our group designed the study and survey, which is comprised of previously published and original scales that were developed specifically for COVID-19 (http://covid19-database.com). The survey was digitized by Dynata for administration through their online survey platform. Several logic branches were coded to display subsequent items based on the specific response options selected (see Supplemental material 1).

The survey was tested by our group to ensure usability and technical functionality. The soft launch data were inspected by Dynata and our group prior to the hard launch.

Participation in this study was voluntary and open to all participants in the U.S. and in Canada in the specified geographical regions. Dynata uses a routing technology that is designed to ensure high-quality sampling. The invitation process involved multiple channels, including email invitations, banners, and messaging on panel community sites. Survey invitations provided basic links to the system, and upon entry, participants were asked additional screening questions to ensure they met the criteria for the study. The survey automatically terminated if participants indicated they did not live in English speaking Canada or the four specified states in the US, or entered year of birth outside of the range from 1918 to 2001.

All participants provided written informed consent prior to completing the survey. The study was approved by the Research Ethics Board (REB) of the Centre for Addiction and Mental Health. The EQUATOR Reporting Guidelines were followed.

Participants provided detailed sociodemographic information and completed a battery of assessments, including questionnaires that assess the degree of complacency and confidence in relation to COVID-19 and COVID-19 specific vaccines. The following were used: Bogardus Social Distance Scale – Asian/European [3], Perceived Vulnerability to Disease Questionnaire (PVD), the infectability subscale [4], the Vaccine Attitude Examination (VAX) scale [5], the Holistic Complementary and Alternative Medicine Questionnaire (HCAM) [6], the Citizen Trust in Government Organization Scale (CTGO) [7], and items assessing social support and political affiliation. Further, participants completed original scales specific to COVID-19, including COVID-19 Education, COVID-19 Awareness Scale, perceived seriousness of COVID-19 and restrictiveness of the current physical (social) distancing restrictions, prior testing for COVID-19 (self and close others) (single-item), and health risk factors for COVID-19.

Additionally, participants completed a battery of other psychological assessments: the Ten-Item Personality Inventory (TIPI) [8], Big Five Inventory-10 (BFI-10) [9], Risk Propensity Scale (RPS) [10], Multidimensional Iowa Suggestibility Scale (MISS) [11], Authority Behavior Index (ABI) [12], General Trust Scale (GTS) [13], Brief Locus-of-Control Scale (LOC) [14], Positive and Negative Affect Schedule (PANAS) [15], Padua Inventory – Washington State University Revision (PI – WSUR) [16], Duke Religion Index [17], Cognitive Reflection test [18], Whiteley-7 Scale [19], and
Experiences in Close Relationships (ECR) [20], and a single-item to assess the impact of COVID-19 on the participant's mental health.

Upon completion of the data collection, survey attempts were filtered for the following reasons: Over quota (n=111), partial completes (n=2544), terminated the survey (n=1093), failed open-end manual checks (n=631), and completed the survey too quickly (n=223). The filtering was done by Dynata, and the study team only had access to the filtered database. The data was scored in SPSS following the scoring guidelines for each scale.

Ethics Statements

All participants provided written informed consent prior to completing the survey. The study was approved by the Research Ethics Board (REB) of the Centre for Addiction and Mental Health (053/2020). The EQUATOR Reporting Guidelines was followed.

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.

Data Availability

COVID-19 Behavior Determinants Database (Original data) (Dataverse)

CRediT Author Statement

Jianmeng Song: Software, Validation, Data curation, Formal analysis, Writing – original draft, Visualization; Julia Kim: Conceptualization, Project administration, Methodology, Software, Validation, Formal analysis, Data curation, Visualization, Writing – review & editing; Ariel Graff-Guerrero: Conceptualization, Investigation, Supervision, Writing – review & editing; Lena Quilty: Conceptualization, Investigation, Writing – review & editing; Marcos Sanches: Methodology, Software, Validation, Formal analysis, Data curation, Writing – review & editing; Samantha Wells: Conceptualization, Investigation, Writing – review & editing; Eric E. Brown: Conceptualization, Investigation, Project administration, Methodology, Formal analysis, Writing – review & editing; Branka Agic: Conceptualization, Investigation, Writing – review & editing; Philip Gerretsen: Conceptualization, Investigation, Supervision, Project administration, Funding acquisition, Writing – review & editing.

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Supplementary Materials

Supplementary material associated with this article can be found in the online version, at doi:10.1016/j.dib.2022.108732.
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