Singapore Management University

Institutional Knowledge at Singapore Management University

Research Collection School of Social Sciences

School of Social Sciences

12-2023

The Psychological Science Accelerator's COVID-19 rapid-response dataset

Erin M. BUCHANAN Harrisburg University of Science and Technology

Andree HARTANTO Singapore Management University, andreeh@smu.edu.sg

Follow this and additional works at: https://ink.library.smu.edu.sg/soss_research



Part of the Data Science Commons, Psychology Commons, and the Public Health Commons

Citation

BUCHANAN, Erin M., & HARTANTO, Andree. (2023). The Psychological Science Accelerator's COVID-19 rapid-response dataset. Scientific Data, 10(1), 1-15.

Available at: https://ink.library.smu.edu.sg/soss_research/3726

This Journal Article is brought to you for free and open access by the School of Social Sciences at Institutional Knowledge at Singapore Management University. It has been accepted for inclusion in Research Collection School of Social Sciences by an authorized administrator of Institutional Knowledge at Singapore Management University. For more information, please email cherylds@smu.edu.sg.

PSACR

The Psychological Science Accelerator's COVID-19 Rapid Response Project

This document provides general methodological details about the Psychological Science Accelerator COVID-19 Rapid Project. The general PSA study code for this project is PSACR; PSACR contains subprojects PSACR001 Loss Gain, PSACR002 Cognitive Reappraisal, and PSACR003 Self Determination. The PSACR project also contains a survey that asked questions about health behaviors.

The **table of contents**, below, has hyperlinks that will take you directly to each section.

PSACR Personnel

Project Structure

Study Selection

Internal Review

Ethics Approval

Funding and Financing

Software Implementation

Translation

Participant Recruitment

Participant Experience and Compensation

Project Datasets

PSACR Personnel

The PSACR project has five teams: a *review team*, a set of *proposing teams*, an *administrative team*, a *translation team*, and a *data collection team*. People can be on multiple teams.

The personnel on the teams we list below consist of people who filled out a profile on the PSA's member website (https://member.psysciacc.org/login.php). Thus, it is possible for someone not to be listed here if they did not complete a profile. Moreover, people's contributions varied across projects. For the most accurate lists of contributions to PSACR001, PSACR002, and PSACR003, readers should refer to the contributorship section of the study in question.

The **review team** consisted of a Review Manager and slate of reviewers who evaluated specific aspects of the project pre-proposals that we received. The goal of our internal review process was to identify (1) critical flaws that decrease the potential impact of the project; and (2) areas of ambiguity that would obstruct the translation of the pre-proposals into full-fledged proposals in Registered Report format.

Following the drafting of full proposals in Registered Reports format, the full network was invited to submit comments on these proposals. Although the people who submitted comments were not part of the initial team of invited reviewers, some of these commenters are also listed here.

Following the review process, all reviewers were asked if they wanted to formally join projects they reviewed as co-authors. Not all reviewers agreed to join; only those who did are listed here.

We give more details on our review process here.

REVIEW TEAM					
Heather L. Urry	Review Manager				
Dana Basnight-Brown	Ethics Reviewer				
Michael Mensink	Ethics Reviewer				
Ivan Ropovik	Methods Reviewer				
Simine Vazire	Methods Reviewer				
Richard Ryan	Content Reviewer				
Jade Pickering	Full Network Reviewer				
Andrew G. Thomas	Full Network Reviewer				
Patricia Arriaga	Full Network Reviewer				

Each study that forms the full PSACR project has its own *proposing team* that drafted the initial pre-proposal to the PSA's COVID-Rapid call. The proposing teams for PSACR001, PSACR002, and PSACR003 each bear ultimate responsibility for the scientific content of their study.

Project Managers for each team play a special role, as they were the primary interfaces between the proposing teams and the PSACR administrative team.

		PROPOSIN	IG TEAMS			
PSACR001 Loss Gain		PSACR002 Cogni	tive Reappraisal	PSACR003 Self Determination		
Charles A. Dorison	Lead	Ke Wang	Lead	Nicole Legate	Lead	
Jennifer S. Lerner		Amit Goldenberg		Thuy-vy Nguyen	Lead	
Blake H. Heller		Charles A. Dorison		Arlen Moller		
Alexander J. Rothman		Andero Uusberg		Netta Weinstein		
Ichiro I. Kawachi		Jennifer S. Lerner		Charles Ebersole	Project Manager	
Ke Wang		James J. Gross				
Vaughan W. Rees		Jeremy K. Miller	Project Manager			
Brian P. Gill						
Nancy Gibbs						
Nicholas Coles	Project Manager					

The *administrative team* managed the general administration of the PSACR project, coordinating between the different teams, managing the project timeline, roll-out, and budget, consulting on methodological issues, and handling any unexpected issues that arose over the course of the project.

A	DMINISTRATIVE TEAM
Heather Urry	Director; PSACR Call Initiator; Review Manager
Christopher R. Chartier	PSACR Call Initiator
Hans IJzerman	PSACR Call Initiator
Dana Basnight-Brown	PSACR Call Initiator
Charles Ebersole	PSACR Call Initiator; Ethics Lead; PSACR003 Project Manager
Hannah Moshontz	Project Management Lead
Nicholas Coles	PSACR001 Project Manager
Jeremy K. Miller	PSACR002 Project Manager
Patrick S. Forscher	Funding Lead; Methodologist
Erin Buchanan	Implementation Lead
Maximilian Primbs	Translation Lead
MohammadHasan Sharifian	General Translation Coordinator
Jordan Suchow	General Translation Coordinator
Anna Louise Todsen	Translation Support
Katrine Krabbe Thommesen	Translation Support
Miguel Silan	Survey Development Lead
Flavio Azevedo	Survey Specialist
Peter Mallick	Ethics Liaison
Jennifer Beaudry	Implementation
Anna Szabelska	Implementation
Julia Beshears	Implementation
Amélie Gourdon-Kanhukamwe	Implementation
Bastien Paris	Implementation
Savannah Lewis	Implementation
Daniel Dunleavy	Implementation
Carmel Levitan	Implementation
Shira Meir Drexler	Implementation

The *translation team* was responsible for implementing the translation process for all study materials. The translation team was managed by three General Language Coordinators (who are listed as part of the administrative team). Each language also had a Language Wide Coordinator, who is italicized and listed first under their language.

	Т	RANSLATION TEA	AM	
Albanian	Bulgarian	Croatian	Dutch (Belgian)	French
Isabela Sula	Martin R. Vasilev	Valerija Križanić	Marlies Oosterlinck	Gwenael Kaminski
Amharic	Alina Stoyanova	Vera Cubela Adoric	Farsi	Amélie Gourdon-Kanhukamw
Redeate Habte	Evelina Marinova	Dora Popovic	Mohammadhasan Sharifian	Olivier Dujols
Arabic	Evgeniya Hristova	Barbara Žuro	Razieh Pourafshari	Alexandre Bran
Habiba Azab	Julia Kamburidis	Anita Penić Jurković	Arash Monajem	Efisio Manunta
Ahmed Khaoudi	Mina Nedelcheva-Datsova	Dajana Krupić	Zahra Etebari	Sébastien Massoni
Kanza Ait El Arabi	Veselina Kadreva	Czech	Farnaz Mosannenzadeh	Bastien Paris
Ahmed Bokkour	Nikolay Rachev	Marek Vranka	Filipino	Marina Sabristov
Ikhlas Djamai	Chinese (simplified)	Barbora Hubena	Miguel Silan	Kevin Vezirian
Chiara Picciocchi	Chuan-Peng Hu	Jáchym Vintr	John Jamir Benzon Aruta	Elizaveta Kushnir
Khaoula Nadif	Zhang Chen	Nicolas Say	Princess Lovella Maturan	Fany Muchembled
Soufian Azouaghe	Xiaoming Jiang	Ondrej Kacha	Benedict Antazo	Luis Miguel Rojas-Berscia
Armenian	Elvin Yao	Martin Čadek	Ekaterina Baklanova	Karolina Grzech
Byurakn Ishkhanyan	Wilbert Law	Danish	Finnish	Luc Vieira
Mikayel Harutyunyan	Ranran Li	Anna Louise Todsen	Jan Antfolk	French (Canadian)
Basque	Xinkai Du	Katrine Krabbe Thommesen	Minja Westerlund	Gwenaël Kaminski
Sara Morales Izquierdo	Luis Miguel Rojas-Berscia	Dutch	Lina Ahlgren	Anaïs Thibault Landry
Olalla Niño Bravo	Sau-Chin Chen	Ilse Pit		
Olatz Campos Calabor	Wilson Cyrus-Lai	Ralph Houston		
Bengali	Chunhui Wang	I.M.M. van Steenkiste		
Afroja Ahmed Rosy	Chinese (traditional)	Lara Warmelink		
Muhib Bin Kabir	Faith Chiu	Kevin van Schie		
Sumaiya Habib		Jeroen Verharen		
Tasnim Rahman		Martine Jansen		
Shahunur Akter		Jasmijn Bosch		

German	Hebrew	Japanese	Polish	Portuguese	
Leonhard Volz	Niv Reggev	Yuki Yamada	Anna Szabelska	Patricia Arriaga	
Jana B. Berkessel	Johanna Czamanski-Cohen	Yoshihiko Kunisato	Krystian Barzykowski	Rita Correia	
Ekaterina Pronizius	Aviv Mokady	Aviv Mokady Naoyuki Sunami Michal Bialek		Sara Alves	
Niklas Johannes	Noga Cohen	Tatsunori Ishii	Karolina Staniaszek	Flavio Azevedo	
Ulf-Dietrich Reips	Hungarian	Keiko Ihaya	Julita Kielińska	Anabela Santos	
Susana Ruiz-Fernández	Luca Kozma	Korean	Marta Kowal	Luis Miguel Rojas-Bers	
Isabela Sula	Balazs Aczel	Jeong Min Lee	Anna Studzinska	Leticia Micheli	
Max Korbmacher	Barnabas Szaszi	Yuna Jang	Anna Skowronek	Raquel Oliveira	
Maja Friedemann	Andras Zsido	Macedonian	Małgorzata Kossowska	Rafael Ribeiro	
Johanna Messerschmidt	Beatrix Labadi	Biljana Gjoneska	Mariola Paruzel-Czachura	Romanian	
Sandra Geiger	Italian	Sladjana Sinkolova	Natalia Pilecka	Gabriela Mariana Mar	
Julia Beitner	Nicola Cellini	Marija Stojanovska	Artur Domurat	Luis Miguel Rojas-Bers	
Nadya-Daniela Schmidt	Anna Dalla Rosa	Dragana Stojanovska	Michal Parzuchowski	Andreea Ioana Bozdo	
German (Austrian)	Marina Sabristov	Kristina Janjić	Magdalena Marszalek	Russian	
Stefan Stieger	Giovanna Mioni	Daliborka Dimova	Agata Groyecka-Bernard	Ekaterina Pronizius	
German (Swiss)	Isabela Sula	Norwegian	Olga Bialobrzeska	Batalia Bogatyreva	
Leonhard Volz	Caterina Grano	Adrian Dahl Askelund	Sylwia Adamus	Dmitrii Dubrov	
Claudia von Bastian	Claudio Singh Solorzano	Christian K. Tamnes	Karolina Grzech	Mikayel Harutyunyar	
Lilian Suter	Luis Miguel Rojas-Berscia	Vidar Schei	Marta Roczniewska	Marina Sabristov	
Clara Overkott	Mariagrazia Capizzi	Jonas Kunst	Magdalena Wielgus	Ilya Zakharov	
Greek	Chiara Picciocchi	Max Korbmacher	Anna Szala	Komil Kirgizova	
Angelos Kassianos	Giovanni A. Travaglino	Janis Zickfeld	Marta Topor	Isabela Sula	
Myrto Pantazi		Maria Louise Lund	Gabriela Czarnek	Maria Koptjevskaja-Tar	
Zoi Gialitaki		Therese Sverdrup	Katarzyna Filip	Maksim Fedotov	
Maria Antoniadi		Kristoffer Klevjer		Lisa Anton-Boicuk	

Serbian	Spanish	Turkish	
Tara Bulut Allred	Danilo Zambrano Ricaurte	Ilker Dalgar	
Milica Vdovic	Sara Morales Izquierdo	Handan Akkas	
Dušana Šakan	Fany Muchembled	Halil Emre Kocalar	
Jasna Mlosevic Djordjevic	Karolina Grzech	Sami Çoksan	
Slovak	Zoi Gialitaki	Asli Sacakli	
Marcel Martončik	Spanish (Argentinian)	Cemre Karaarslan	
Andrej Findor	Danilo Zambrano Ricaurte	Murat Tümer	
Pavol Kačmár	Spanish (Colombian)	Eylül Sarıoğuz	
Ivan Ropovik	Danilo Zambrano Ricaurte	Pinar Dursun	
Gabriel Banik	Diego Vega	Arca Adiguzel	
Matúš Adamkovič	Juan Camilo Vargas-Nieto	Murathan Kurfalı	
Marek Vranka	Daniela Serrato Alvarez	Alper Karababa	
Lada Kaliska	Lina Maria Sanabria Pineda	Merve A. Kurfali	
Jozef Bavolar	Oscar Galindo-Caballero	Irem Metin-Orta	
Matej Hruška	Spanish (Peruvian)	Urdu	
Jana Schrötter	Danilo Zambrano Ricaurte	Anum Urooj	
Slovenian	Luis Miguel Rojas-Berscia	Nida Abbas	
Eva Štrukelj	Swedish	Kafeel Ashraf	
Dafne Marko	Maja Becker	Uzbek	
Miha Zrimsek	Teodor Jernsäther	Komila Kirgizova	
Lara Samojlenko	Gustav Nilsonne	Abdumalik Muminov	
	Maria Koptjevskaja-Tamm	Yoruba	
	Sara Pöntinen	Adeyemi Adetula	
	Elizaveta Kushnir	Bamikole Emmanuel Agesin	
	Lina Ahlgren	Gabriel Adetula	

The *data collection team* was responsible for participant recruitment. Each person contributing to data collection devised their own means of recruitment.

	DATA (COLLECTION TE	AM	
Erin Buchanan	John Paul Wilson	Hui Bai	Nicolas Say	Joan Urriago-Rayo
Patrick Forscher	Olivier Dujols	Marta Roczniewska	Selena Vračar	Tatsunori Ishii
Heather L. Urry	Heather Flowe	Ernest Baskin	Jasna Milosevic Djordjevic	Shimrit Daches
Jan Philipp Röer	Muhammad Butt	Jennifer Joy-Gaba	Gabriela Hofer	Jose Carlos Roxas
William Chopik	Melissa Colloff	Jennifer Perillo	Jeffrey Pavlacic	Therese Sverdrup
Carlota Batres	Teodor Jernsäther	Andree Hartanto	Shawn Geniole	Weilun Chou
Hans Ijzerman	Gulnaz Anjum	Erin Westgate	Anna Greenburgh	Agnieszka Sorokowska
Danilo Zambrano Ricaurte	Yoshihiko Kunisato	William Davis	Franki Kung	Agata Groyecka-Bernar
Anabel de la Rosa-Gomez	Ilker Dalgar	Maurice Grinberg	Meetu Khosla	James Norton
Gilad Feldman	Martin Voracek	Soufian Azouaghe	Carsten Bundt	Kortnee Evans
Argiro Vatakis	Barnaby Dixson	María Victoria Ortiz	Charlotte Eben	Hendrik Godbersen
Bastian Jaeger	Patricia Arriaga	Erica Musser	Christina Reimer	Radoslaw Walczak
Martin Vasilev	Xiaoming Jiang	Leanne Boucher	Raquel London	Dafne Marko
Steve Janssen	Natalia Bogatyreva	Pablo Correa	Roos Doekemeijer	Przemysław Zdybek
Leigh Ann Vaughn	Jan Urban	Inês Almeida	Laura Calderón Pérez	Keiko Ihaya
William Jimenez-Leal	Adeyemi Adetula	Elvin Yao	Maria Bradford	Raquel Oliveira
John Jamir Benzon Aruta	Adrian Dahl Askelund	Arca Adiguzel	Santiago Ordoñez-Riaño	Anabela Santos
Daniel Storage	Piotr Sorokowski	Tara Bulut Allred	Ahmed Khaoudi	Katherine Morris
Robert Ross	Naoyuki Sunami	Ljiljana Lazarevic	Kanza Ait El Arabi	Alexa Tullett
Gerit Pfuhl	Thomas Hostler	Faith Chiu	Ahmed Bokkour	Olga Bialobrzeska
Asil Özdoğru	Dmitry Grigoryev	Giovanni A. Travaglino	Ikhlas Djamai	Natasha Van Antwerpe
Krystian Barzykowski	Jennifer Taber	Nicola Cellini	Nihal Ouherrou	Caterina Grano
Andrej Findor	Harry Manley	Karen Yu	Neil Levy	Cassie Whitt
Rima-Maria Rahal	Gijsbert Bijlstra	Daphna Hausman Ozery	El Rim Ahn	Jacob Miranda
Luis Eudave	Behzad Behzadnia	Nikolay Rachev	Yijun Lin	Nora L. Nock
Ekaterina Pronizius	Cecilia Reyna	Marietta Papadatou-Pastou	Aviv Mokady	Claudio Singh Solorzan
Pavol Kačmár	Jim Uttley	Alexandre Bran	Jana Schrötter	Dušana Šakan
Sau-Chin Chen	Zhang Chen	Desislava Chakarova	Jozef Bavolar	Piyaorn Wajanatinapa
Amélie Gourdon-kanhukamwe	Dawn liu Holford	Johanna Czamanski-Cohen	Monika Hricova	Anais Thibault Landry
Zahir Vally	Robert Calin-Jageman	Efisio Manunta	Gabriel Lins de Holanda Coelho	Sanja Batić Očovaj
David Moreau	Qinyu Xiao	Anum Urooj	Renan Monteiro	Jacques Forest

Halil Emre Kocalar	Nadia Corral-Frías	Alexios Arvanitis	Roosevelt Vilar	Joelle Carpentier
Kathleen Schmidt	Aaron Wichman	Dmitrii Dubrov	Débora Mola	Ana Ferreira
Biljana Gjoneska	Natalia Van Doren	Randy Mccarthy	Natalia Pilecka	Marc Jones
Tiago Lima	Claus Lamm	Andriana Theodoropoulou	Luc Vieira	Daniela Sousa
	Julita Kielińska	Johannes Vilsmeier	David Vaidis	Natalia Kiselnikova
Jeremy Miller				
Anabel Belaus	Marek Vranka	Michal Misiak	Alejandrina Hernandez	Benedict Antazo
Diego Vega	Iris Vilares	Ignazio Ziano	Nadyanna Majeed	Paulo Manuel Macapagal
Luca Kozma	Chris Noone	Nicolle Simonovic	Matej Hruška	Tonia Ballantyne
Vidar Schei	Nathan Torunsky	Eva Štrukelj	Christiana Karashiali	Chloe Depaola
Sami Çoksan	Gustav Nilsonne	Mikayel Harutyunyan	Reza Afhami	Kermeka Desai
Jonas Olofsson	Niv Reggev	Jose Soto	Vladislav Ankushev	Karley Richard
Gabriela Mariana Marcu	Murat Tümer	Andras Zsido	Maria Terskova	Chris Ceary
Janis Zickfeld	Eylül Sarıoğuz	Julia Kamburidis	Marina Romanova	Emily Jackson
Maximilian Primbs	Andrew G. Thomas	Celia Esteban-Serna	Aleksandr Ivanov	Minja Westerlund
Ivan Ropovik	Christopher Aberson	Allison Janak	Irena Sarieva	Michele Anne
Mohammad Atari	Afroja Ahmed	Anna Studzinska	Irina Prusova	Zuzanna Tajchman
Gwenael Kaminski	Megan Willis	Nihan Albayrak-Aydemir	Elena Agadullina	Francesco Foroni
Gabriel Banik	Leonhard Volz	Heather Kappes	Kaja Damnjanović	Maria Koptjevskaja-Tamm
Busra Bahar Balci	Evgeniya Hristova	Labadi Beatrix	Siu Kit Yeung	Sara Pöntinen
Asli Sacakli	Rachel Searston	Ulrich Tran	Kevin Vezirian	Saša Zorjan
Martin Seehuus	Hongfei Du	Jonas Kunst	Thea House	Kristoffer Klevjer
Matúš Adamkovič	Frederick Verbruggen	Peter Babinčák	Xin Song	Elizaveta Kushnir
Nwadiogo Chisom Arinze	David M. G. Lewis	Wilbert Law	Mathi Manavalan	Lina Ahlgren
Cynthia Fu	Chisom Esther Ogbonnaya	Marcel Martončik	Thomas Ostermann	Azuka ikechukwu Arinze
Miroslav Sirota	Clare Sutherland	Evelina Marinova	Theda Radtke	Aishwarya Iyer
Anna Dalla Rosa	Ulf-Dietrich Reips	Myrto Pantazi	Markéta Braun Kohlová	Kelly Wolfe
Monica Koehn	Marta Kowal	Sébastien Massoni	W. Matthew Collins	Adriana Olaya Torres
lan Stephen	Juan Camilo Vargas-Nieto	Jan Antfolk	Elkin Oswaldo Luis Garcia	Jaime Silva
Manyu Li	Tripat Gill	Paul Forbes	Jaroslava Valentova	Rodrigo Cárcamo
Michael Mensink	Lady Grey Javela Delgado	Małgorzata Kossowska	Paulina Szwed	Manuel Ortiz
Izuchukwu Ndukaihe	Julio Cruz Vásquez	Milica Vdovic	Artur Domurat	María del Carmen Tejada River

Mariola Paruzel-Czachura	Paul H. P. Hanel	Karis Moon	Michal Parzuchowski	Mauricio Espinoza Barría
Cemre Karaarslan	Daniela Serrato Alvarez	Marco Varella	Magdalena Marszalek	Gage Singer
Maja Becker	Sara Álvarez Solas	Matheus Ribeiro	Mina Nedelcheva-Datsova	Mónica Toro
Daniel Boller	Jana B. Berkessel	Alper Karababa	Marc Lucas	Widad Hassan
Srinivasan Tatachari	Dongning Ren	Maria Karekla	Martha Frias-Armenta	Thomas Frizzo
Anna Kuzminska	Crystal Reeck	Ilya Zakharov	Alina Stoyanova	Abdelilah Charyate
Anthony Krafnick	Angelos Kassianos	Farnaz Mosannenzadeh	Lisa Jaremka	Neha Parashar
Michal Bialek	Hilmar Brohmer	Giovanna Mioni	Susana Ruiz-Fernández	

Project Structure

The PSACR project consists of three separate studies. The survey contains: (1) a *landing page*, where participants can select their language; (2) a *consent form*; (3) a *general health behaviors survey*; (4) the *PSACR001 Loss Gain Study*; (5) the *PSACR002 Cognitive Reappraisal Study*; (6) the *PSACR003 Self Determination Study*; and (7) a *debriefing page* listing the WHO guidelines for dealing with COVID-19.

The materials for the full PSACR project are archived here.

All project elements are bundled together in a single data collection effort. However, participants are randomized to either see PSACR001 and PSACR003 **or** just PSACR002. Participants who see the PSACR001 and PSACR003 bundle will complete the studies in randomized order. The health behavior survey is always displayed before any of the three studies.

Below are the abstracts for the three projects.

- 1. PSACR001 Loss Gain (preprint; OSF). The COVID-19 pandemic presents a critical need to identify best practices for communicating health information to the global public. It also provides an opportunity to test theories about risk communication. As part of a larger Psychological Science Accelerator COVID-19 Rapid Project, a global consortium of researchers will experimentally test competing hypotheses regarding the effects of framing messages in terms of losses versus gains. We will examine effects on three primary outcomes: intentions to adhere to policies designed to prevent the spread of COVID-19, opinions about such policies, and the likelihood that participants seek additional policy information. Whereas research on negativity bias and loss aversion predicts that loss-framing will have greater impact, research on encouraging the adoption of protective health behaviour suggests the opposite (i.e., gain-framing will be more persuasive). We will also assess effects on experienced anxiety. Given the potentially low cost and the scalable nature of framing interventions, results could be valuable to health organizations, policymakers, and news sources globally.
- 2. PSACR002 Cognitive Reappraisal (preprint; OSF). The COVID-19 pandemic has increased negative emotions and decreased positive emotions globally. Left unchecked, these emotional changes might have a wide array of adverse impacts. To reduce negative emotions and increase positive emotions, we tested the effectiveness of reappraisal, an emotion regulation strategy which modifies how one thinks about a situation. Participants from 87 countries/regions (N = 21,644) were randomly assigned to one of two brief reappraisal interventions (reconstrual or repurposing) or one of two control conditions (active or passive). Results revealed that both reappraisal interventions (vs. both control conditions) had consistent effects in reducing negative emotions and increasing positive emotions across different measures. Reconstrual and repurposing had similar effects. Importantly, planned exploratory analyses indicated that reappraisal interventions did not reduce intentions to practice preventive health

behaviours. The findings demonstrate the viability of creating scalable, low-cost interventions for use around the world to build resilience during the pandemic and beyond.

3. PSACR003 Self Determination (preprint; OSF). In order to slow the transmission of COVID-19, governments around the world are asking their citizens to participate in social distancing, that is, to stay at home as much as possible. In most countries, individuals have some choice over whether or not they follow recommendations for social distancing. Thus, understanding how to best motivate social distancing has become a critical public health priority. This study tests, in a confirmatory manner, whether self-determination theory-guided message framing impacts people's motivation to participate in social distancing. Specifically, we expect autonomy-supportive messages that help people understand the value of behavior change to a) increase 'buy in', or autonomous motivation, for social distancing, b) lower feelings of defiance to follow recommendations around social distancing, and c) increase feelings of selfefficacy to participate in social distancing, relative to neutral and controlling messages. Further, we expect controlling messages that pressure people to change using shame, quilt, and threats, may backfire and a) decrease 'buy in' for social distancing and b) increase defiance, relative to the control condition. Exploratory tests will examine whether the effects of message framing on motivation and defiance extend to behavioral intentions and long-term commitment. This work has direct relevance for how public officials, health professionals, journalists, and others can communicate about solving this and future public health crises in ways that motivate people more effectively.

Study Selection

The PSACR study selection process had four stages:

- 1. **Solicitation** of pre-proposals,
- 2. Triage of pre-proposals into a short list,
- 3. Network *voting and commenting* on shortlisted pre-proposals, and
- 4. Final selection of chosen studies.

During the **solicitation** stage, the PSA issued a <u>special call</u> for rapid and impactful studies on the behavioral and psychological aspects of the COVID-19 pandemic. Pre-proposals were one page, including brief descriptions of the general question, relevant literature, and general methods. Within one week, the research community submitted 66 pre-proposals for the PSA's special call.

The PSA Director and Associate Directors reviewed and *triaged* pre-proposals into a short list of 11 pre-proposals. Triage was based on feasibility for rapid turnaround, scientific merit, and potential for helping address the COVID-19 crisis. Shortlisted pre-proposals are stored in <u>this</u> folder.

The 11 shortlisted pre-proposals were distributed to the PSA network for **voting and commenting**. PSA members could vote "yes" for any proposals they thought should be accepted for the PSACR initiative. A total of 141 PSA members voted on the shortlisted pre-proposals. They could also submit comments alongside their votes.

On the basis of these votes and comments, PSA leadership made their *final selection* of studies. Leadership accepted the three pre-proposals that received the highest number of votes.

Internal Review

The PSACR Team adopted a system of "running review" to help turn the three selected preproposals into full-fledged proposals. All three of the pre-proposals started under the assumption that they would be submitted as Registered Reports. Running reviewers focused on improving the selected pre-proposals to maximize knowledge gains rather than weeding out low-quality ideas.

The goal of "running review" was to identify (1) critical flaws that decrease the potential impact of the project; and (2) areas of ambiguity that would obstruct the translation of the pre-proposals into full-fledged proposals in Registered Report format. We adapted our <u>specific review</u> guidelines from the Registered Report guidelines at Royal Society Open Science.

Some reviewers submitted comments on the pre-proposals. The proposing teams drafted initial Registered Reports and project materials that incorporated these early comments. A new batch of reviewers commented on these initial Registered Reports, either by commenting directly on the Registered Reports in Google Docs or by submitting a separate and more formal review.

The proposing teams of the three studies were under no obligation to address issues identified during running review. Thus, the presence of a person on our list of running reviewers does not imply that they approve of the design choices of the studies they reviewed. All running reviewers were, however, invited to be co-authors on the projects at the time of data collection launch.

PSACR reviewers fell into four categories:

- 1. **Generalizability reviewer** (pre-proposal stage). This reviewer commented on any issue related to the generalizability of findings. An anonymous reviewer served as the generalizability reviewer for all three pre-proposals.
- Ethics reviewer (pre-proposal stage). This reviewer focused on ethical considerations.
 Mike Mensink and Dana Basnight-Brown served as ethics reviewers for all three pre-proposals.
- Methods reviewer (initial Registered Report stage). This reviewer focused on research design, measurement, materials, and analysis plans. Each Registered Report had at least two dedicated methods reviewers. Simine Vazire and Marcel van Assen served as methods reviewers for PSACR001, Ivan Ropovik and Lisa DeBruine served as methods reviewers for PSACR002, and Marcel van Assen, Angelika Stefan, and Felix Schönbrodt served as methods reviewers for PSACR003.
- 4. **Content reviewer** (initial Registered Report stage). This reviewer focused on theoretical justification, coverage of relevant literature, measurement, and the soundness of the relevant hypotheses. Each Registered Report had at least one dedicated content reviewer. Lukasz Walasek served as content reviewer for **PSACR001**, Heather Urry and

Steven Hayes served as content reviewers for **PSACR002**, and Richard Ryan and Dov Cohen served as content reviewers for **PSACR003**.

After reviews were completed, one member of the PSACR Team drafted a series of review summaries: one <u>general summary</u> and separate summaries for the <u>PSACR001</u>, <u>PSACR002</u>, and <u>PSACR003</u>. The review summaries, along with the specific reviews, were all sent to the proposing teams.

Once the proposing teams revised their materials based on reviewer feedback, the Registered Report drafts were sent to the full PSACR Team for a round of general comments. At this stage, one of the teams, PSACR003, opted to launch data collection immediately rather than waiting for the full Registered Report process. The remaining two teams submitted their Registered Report drafts to *Nature Human Behaviour*. The PSACR001 Registered Report was rejected, with encouragement to revise the study and resubmit it as a traditional article once data collection had concluded. PSACR002 received a revise and resubmit.

Ethics Approval

An initial ethics application was submitted to the IRB at Ashland University. Our application and approval documents are here.

We assumed that the ethics approval process for each of the sites contributing to PSACR data collection would fall into one of three categories:

- 1. The site needs local approval. For these sites, we supplied the IRB materials from the Ashland application and helped sites troubleshoot issues as they arose. If the local IRB requested a site-specific consent form or debriefing, we encouraged that site to implement those forms as a brief survey on, for example, the Qualtrics survey platform. The site-specific documents would be displayed either before or after the participant is routed into PSACR project.
- 2. **The site can join the Ashland IRB protocol**. We asked these sites to supply us with an official document from their organization's ethics board saying that they would defer to the Ashland IRB.
- 3. The site does not need ethics approval. We asked these sites to supply us with either a letter from their organization's ethics board exempting the site from an ethics approval process or a copy of the relevant policy giving this exemption.

The IRB approvals, deferral notices, and exemptions are all archived on the PSACR OSF page.

Funding and Financing

We received direct funding for the PSACR project from four sources:

- 1. A grant for \$10,000 from the Association for Psychological Science
- 2. An internal PSA contribution of \$500 from the PSA Patreon fund
- 3. **Direct donations** worth \$3,060 in response to our fundraising campaigns
- 4. Contributions worth \$3,350 to a **fund for purchasing panels** through Prolific

In addition, we obtained the following five sources of in-kind support:

- 1. A fee waiver worth \$7,642 from Prolific
- 2. **Server time** worth \$1,352 Amazon Web Services
- 3. **Panel purchases** from the company respondi on our behalf by the <u>Leibniz institute for Psychology</u>. Assuming each panel is worth \$1,500, the value of these purchases is \$13,500
- 4. Compute time on the Open Science Grid via the <u>UW-Madison Center for High Throughput Computing</u>. The value of this compute time is difficult to quantify
- 5. **Compute time on Harvard Business School's <u>HBSGrid</u>**. The value of this compute time is difficult to quantify

We used this direct funding and in-kind support to for the following items:

- 1. Semi-representative panels in four African countries from the company, nudge
- 2. Semi-representative panels in nine countries from the company, respondi
- 3. **Semi-representative panels** from two countries from the company, Prolific
- 4. **A lab grants program**, which paid out 18 grants to collaborating labs to help fund data collection
- 5. Two servers and a load balancer to maintain our data collection site
- 6. A power analysis to guide data collection for the full project
- 7. Bayesian analyses for project PSACR002

Software Implementation

We implemented all PSACR projects in the <u>formr software framework</u>. formr surveys are controlled by an *item table*, which we created using Google Sheets. Item tables specify survey flow, display items, and response categories.

The implementation process of each element of the PSACR project proceeded in four stages:

- 1. **Initial translation** of the project element from a Word document to an item table,
- 2. Quality control of the survey project element,
- 3. **Initial user testing** with the proposing teams and a small subset of the PSACR Team, and
- 4. **Broad user testing** with the full PSACR Team.

Initial translation. This stage started with a Word document containing a specific element of the PSACR project, such as the project consent form, the PSACR001 study, or the general health behavior survey. PSACR implementers copy-pasted each part of the target project element into an item table, added initial styling to the using markdown, and programmed the item table's logic and flow. The emphasis at this stage was accuracy to the Word document.

Quality control. This stage involved the correction of typos and the harmonization of items and response options across the PSACR project. PSACR project implementers ensured that (1) all survey items had anchor points for all response options (e.g., "Not at all"; "Slightly"; "Moderately"; "Very"; "Extremely" instead of "1 (Not at all)"; "2"; "3"; "4"; "5 (Extremely)"); (2) response options were displayed in a similar order across survey elements; and (3) response options matched the wording of survey questions. The implementers also checked that the live version of the survey for ease of responding.

Initial user testing. During this stage, a small, selective group of people completed a live version of the full PSACR project (all elements included) and <u>left comments</u> about bugs, usability, and any other issues that came to mind during the study completion process. Project implementers went through all open issues and, upon closing each issue, moved the issue to the relevant section of the issue document. This stage continued until the issues added to the document became repetitive rather than referring to specific bugs and usability concerns.

Broad user testing. During this stage, the PSACR Project Managers emailed a live version of the survey to the full PSACR Team with instructions to complete the full survey. We created a brief form to solicit structured feedback about the survey. The implementers then downloaded a version of the dataset and ensured that (1) all data were collected as expected; (2) all survey elements were displayed as expected; (3) completion times were mostly within half an hour of survey start; and (4) data from each project could be analyzed easily and quickly.

The PSACR project was hosted on two servers donated by Amazon Web Services, with a load balancer to direct traffic between servers.

Translation

The PSACR project was conducted in 44 languages and dialects, a feature that required us to translate our materials into 43 languages and dialects. In our initial solicitations of translators, 405 people volunteered. At least 268 people actually conducted translations.

This large team was managed by a **translation lead** (Maximilian Primbs) and two **general translation coordinators** (MohammadHassan Sharifian and Jordan Suchow). The translation lead interfaced with the administrative team and ensured the whole translation process moved smoothly. Together with the two general translation coordinators, the translation lead also oversaw the **language-wide coordinators**. There was one language-wide coordinator per language. The language-wide coordinators oversaw the teams of translators dedicated to one specific language.

Translations went through <u>forward translation</u>, <u>backward translation</u>, and <u>cultural</u> <u>adjustment</u> processes.

During *forward translation*, we aimed to have two translators jointly translated materials from English to the target language. Joint translations occured in the same general time period, with translators spot-checking each other's work. The language-wide translator will then import the finished translation into a spreadsheet.

During **backward translation**, we aimed to have two translators jointly translated the materials from the spreadsheet back into English. Once again, joint translations occurred during the same general time period. If necessary, the language-wide coordinator will make adjustments to the translations based on the notes from the proposers.

During *cultural adjustment*, the translations were sent to external readers. We attempted to solicit non-academics for this step to ensure they are accessible to non-academic and non-student audiences.

In some cases, we had to scale down the translation process due to a lack of available translators. This resulted in, occasionally, one translator completing a step instead of two and the elimination of the cultural adjustment step. In nine cases we needed to hire an outside translator to complete one of the translation steps.

A study translation could be fielded the moment it is finished and added to our study software, which means that different languages can start data collection at different times. We hoped this feature would speed our study timeline.

All translated materials are stored <u>here</u> on the PSACR OSF project.

Participant Recruitment

Planned Recruitment

As of Monday, April 6, 2020 when we closed our call for collaborators, the PSA's COVID-Rapid project had recruited 221 collaborating labs from 54 countries, spanning 41 languages and dialects. In a survey we conducted of their planned recruitment, the labs estimated they could recruit 51,347 participants.

In this survey, we asked the method the labs would use to recruit their participants. In this survey, 62% of labs reported they would rely on the local subject pools they use for in-lab studies. The remainder will rely on social media, email lists, and/or financial contributions to the project's panel recruitment efforts.

In addition to recruiting participants through these labs, we plan to recruit through survey companies with their own panels. These panels will target 15 countries for semi-representative sampling, yielding 8,100 participants. "nudge" and "Prolific" refer to the companies who provided these panels; the "ZPID" panels were purchased by the Leibniz Institute for Psychology (ZPID) from the company, respondi.

PLANNED PANEL RECRUITMENT

Country	Language	Provider	Sampling strategy	Participants
Egypt	Arabic	nudge	Sex, age stratification	540
Kenya	English	nudge	Sex, age stratification	540
Nigeria	English	nudge	Sex, age stratification	540
South Africa	English	nudge	Sex, age stratification	540
United States of America	English	Prolific	Sex, age, ethnicity stratification	540
United Kingdom	English (British)	Prolific	Sex, age, ethnicity stratification	540
Mexico	Spanish (Mexican)	ZPID / respondi	Sex, age stratification	540
China	Chinese	ZPID / respondi	Sex, age stratification	540
Japan	Japanese	ZPID / respondi	Sex, age stratification	540
Korea (South)	Korean	ZPID / respondi	Sex, age stratification	540
Austria	German	ZPID / respondi	Sex, age stratification	540
Romania	Romanian	ZPID / respondi	Sex, age stratification	540
Russia	Russian	ZPID / respondi	Sex, age stratification	540
Sweden	Swedish	ZPID / respondi	Sex, age stratification	540
Switzerland	German (Swiss); French	ZPID / respondi	Sex, age stratification	540

PLANNED LAB-BASED RECRUITMENT

Country / Region	Labs	Participants	Language	Labs	Participants
Albania	1	5	Albanian	1	5
Argentina	2	200	Arabic	1	100
Australia	9	1930	Arabic; Hebrew	2	1040
Austria	4	600	Bengali	1	200
Bangladesh	1	200	Brazilian Portuguese	3	400
Belgium	1	300	British English	2	325
Brazil	1	100	British English; Bulgarian	1	150
Bulgaria	2	450	British English; Urdu	1	1000
Canada	3	1400	Bulgarian	2	450
China	6	1,100	Chinese	4	1150
Colombia	4	2490	Chinese; English	1	200
Costa Rica	1	500	Chinese; English; Hindi; Turkish	1	500
Cyprus	2	200	Croatian	2	650
Czech Republic	3	1250	Czech	3	1250
Ecuador	1	50	Dutch; English	1	300
Finland	1	300	Dutch; English; German	1	100
France	7	1750	English	76	14,005
Germany	5	900	English, German, Norwegian	1	200
Greece	3	350	English; Filipino	2	500
Hungary	3	750	English; German	1	100
India	2	300	English; Italian	1	100
Iran	2	250	English; Spanish; Haitian Creole	1	100
Ireland	2	700	English; Turkish	1	100
Israel	4	1255	English; Urdu	1	100
Italy	5	1902	Farsi	4	650
Japan	3	1800	Finnish; Swedish	1	300
Kenya	1	300	French	6	1350
Macedonia	1	100	French; English	1	500
Malaysia	2	350	French; Italian	1	250
Mexico	2	135	German	9	1500
Morocco	1	100	Greek	6	1250
Netherlands	3	600	Hebrew	3	245

New Zealand	1	150	Hindi; Swahili	1	300
Norway	4	1900	Hungarian	3	750
Pakistan	1	200	Italian	5	2,150
Peru	1	100	Japanese	3	1,800
Philippines	2	500	Macedonian	2	230
Poland	9	1850	Mexican Spanish	1	60
Portugal	4	350	Montenegrian; Serbian	1	200
Republic of North Macedonia	1	130	Norwegian	3	1,700
Romania	1	100	Polish	10	2,350
Russian Federation	5	2,600	Portuguese	4	350
Serbia	4	1000	Romanian	1	100
Singapore	1	150	Russian	5	2,600
Slovakia	6	920	Serbian	6	1,600
Spain	1	100	Slovak	6	920
Sweden	2	700	Spanish	10	3,415
Switzerland	2	200	Swedish	1	200
Taiwan	2	800	Traditional Chinese	1	600
Thailand	1	40	Turkish	12	2,450
Turkey	10	1,650	Urdu	1	100
United Arab Emirates	1	80	Uzbek	1	2
United Kingdom	16	4,025	Unknown / Unspecified	2	400
United States of America	47	9,135	Total	221	51,347
Unknown / Unspecified	11	2,050			
Total	221	51,347			

Achieved Recruitment

Participant recruitment lasted from April 23, 2020 to October 23, 2020. During this period, our data collection team of 349 collaborators had recruited 47,397 people from 110 countries and 44 languages (excluding people we recruited for whom we could not identify the country where they were located). A table of participant information is deposited here alongside the rest of the project data.

Contrary to how we planned data collection, we did not track the number of research labs during the data collection process because of the project contributors who are unaffiliated with a research lab. We also did not track which participants were recruited by which research labs to reduce the identifiability of participants and make the ethics approval process easier.

We also obtained three more panels (MIDGAM, Qualtrics, and a Greek sample through Prolific) than planned. This occurred because Niv Reggev, Crystal Reeck, and Myrto Pantazi purchased these panels on the project's behalf.

ACHIEVED PANEL RECRUITMENT

Country	Language	Provider	Sampling strategy	Participants
Egypt	Arabic	nudge	Sex, age stratification	1383
Kenya	English	nudge	Sex, age stratification	1626
Nigeria	English	nudge	Sex, age stratification	1316
South Africa	English	nudge	Sex, age stratification	1211
United States of America	English	Prolific	Sex, age, ethnicity stratification	544
United Kingdom	English	Prolific	Sex, age, ethnicity stratification	552
Greece	Greek	Prolific	Convenience	61
Mexico	Spanish (Mexican)	ZPID / respondi	Sex, age stratification	646
China	Chinese	ZPID / respondi	Sex, age stratification	660
Japan	Japanese	ZPID / respondi	Sex, age stratification	623
Korea (South)	Korean	ZPID / respondi	Sex, age stratification	588
Austria	German	ZPID / respondi	Sex, age stratification	613
Romania	Romanian	ZPID / respondi	Sex, age stratification	623
Russia	Russian	ZPID / respondi	Sex, age stratification	601
Sweden	Swedish	ZPID / respondi	Sex, age stratification	601
Switzerland	German (Swiss); French	ZPID / respondi	Sex, age stratification	635
Israel	Hebrew	MIDGAM	Convenience	178
Chile	Spanish (all dialects)	Qualtrics	Convenience	578

ACHIEVED COLLABORATOR RECRUITMENT

Country / Region	Participants	Language	Participants
Albania	3	Arabic	158
Algeria	2	Armenian	1,029
Andorra	1	Bengali	58
Argentina	285	Bulgarian	247
Armenia	1,020	Chinese (simplified)	404
Australia	1,293	Chinese (traditional)	253
Austria	435	Croatian	2,009
Azerbaijan	1	Czech	624
Bahrain	1	Dutch	502
Bangladesh	56	Dutch (Belgian)	88
Belarus	6	English	9,507
Belgium	332	English (British)	161
Bosnia and Herzegovina	54	Farsi	139
Brazil	475	Filipino	656
Brunei Darussalam	1	Finnish	189
Bulgaria	242	French	1,497
Cabo Verde	1	French (Canadian)	18
Cambodia	1	German	1,221
Canada	535	German (Swiss)	4
Cayman Islands	1	Greek	194
Chile	271	Hebrew	115
China	399	Hungarian	733
Colombia	262	Italian	685
Costa Rica	723	Japanese	3,398
Croatia	1,900	Korean	9
Cyprus	15	Macedonian	398
Czechia	653	Norwegian	651
Denmark	8	Polish	3,463
Ecuador	36	Portuguese	616

Egypt	3	Portuguese (Brazilian)	485
Estonia	1	Romanian	156
Finland	329	Russian	213
France	1,449	Serbian	243
Georgia	1	Slovak	552
Germany	901	Slovenian	440
Greece	187	Spanish	344
	107		
Guadeloupe		Spanish (Argentinian)	288
Guam	2	Spanish (Colombian)	993
Hong Kong	120	Spanish (Mexican)	165
Hungary	722	Swedish	335
Iceland	1	Turkish	697
India	112	Urdu	374
Indonesia	7	Uzbek	1
Iran	138	Yoruba	40
Ireland	370	Total	34,352
Israel	132		
Italy	702		
Jamaica	1		
Japan	3,396		
Kazakhstan	6		
Kenya	3		
Korea (South)	16		
Kosovo	2		
Kuwait	1		
Latvia	1		
Lebanon	2		
Lithuania	2		
Luxembourg	6		
Macao	1		
Malawi	2		

Malaysia	94	
Malta	2	
Mauritius	1	
Mexico	195	
Moldova	7	
Montenegro	7	
Morocco	171	
Mozambique	1	
Myanmar	1	
Netherlands	463	
New Caledonia	1	
New Zealand	303	
Nicaragua	2	
Nigeria	187	
Norway	689	
Oman	1	
Pakistan	635	
Panama	2	
Peru	6	
Philippines	744	
Poland	3,365	
Portugal	584	
Qatar	3	
Republic of North Macedonia	383	
Romania	156	
Russian Federation	186	
Saudi Arabia	15	
Serbia	247	
Singapore	157	
Slovakia	537	
Slovenia	443	

South Africa	4	
Spain	18	
Sri Lanka	2	
Sweden	255	
Switzerland	22	
Taiwan	187	
Thailand	24	
Trinidad and Tobago	2	
Turkey	694	
Ukraine	6	
United Arab Emirates	20	
United Kingdom	855	
United States of America	5,038	
Venezuela	1	
Viet Nam	5	
Virgin Islands	1	
Yemen	1	
Total	34,352	

Participant Experience and Compensation

We aimed to limit the length of the project to 30 minutes or less of participant time. The exact study flow for participants differs depending on whether the data collection source is a panel provider or a collaborator on the data collection team. Each panel provider will receive a unique link and will handle participant compensation themselves. We will also give separate links to labs that plan to recruit on the open internet or in a local participation pool.

For members of the data collection team recruiting on the open internet or in participation pools, the compensation process begins after the debriefing. On this page, the participants are asked to enter information that is meaningful to them. This information is put through a hashing algorithm, which generates a random string of numbers and letters that will not be meaningful to anyone who receives it. This string is the participant's *compensation code*.

The participant is asked to give the compensation code to the data collection coordinator for the lab that recruited them. The coordinator can enter this code into a web portal that checks whether the compensation code is in our internal database of compensation codes. The compensation code database will not be linked in any way to the main study data; this database is simply a single column of compensation codes. If the compensation code is in the single column of codes, the data collection coordinator knows that the participant did indeed complete the PSACR study. They can then issue the compensation of their study compensation. Some sites issued course credit and some money; however many participants were uncompensated.

We provide more details on how we issued compensation to participants here.

Project Datasets

Our project datasets are all housed at <u>this component</u> on the Open Science Framework. The data are documented in detail on that component; we are also preparing a data paper that fully describes the PSACR project datasets.

The project datasets are fully inclusive, containing all data with no filtering. However, the datasets contain many different variables to allow users to choose many different types of quality checks prior to their analyses.

Each of our three main projects (<u>PSACR001</u>, <u>PSACR002</u>, and PSACR003) chose different a priori rules for excluding responses. Readers should consult each individual paper to find their a priori exclusion criteria.