

Situational experience around the world: A replication and extension in 62 countries

Daniel I. Lee¹  | Gwendolyn Gardiner¹ | Erica Baranski²  |
Members of the International Situations Project | David C. Funder¹

¹Department of Psychology, University of California Riverside, Riverside, CA, USA

²Department of Psychology, University of Houston, Houston, TX, USA

Members of the International Situations Project: Maite Beramendi (Universidad de Buenos Aires), Brock Bastian (University of Melbourne), Aljoscha Neubauer (University of Graz), Diego Cortez and Eric Roth (Universidad Católica Boliviana, La Paz), Ana Torres (Federal University of Paraíba), Daniela S. Zanini (Pontifical Catholic University of Goiás), Kristina Petkova (Bulgarian Academy of Sciences), Jessica Tracy (University of British Columbia), Catherine Amiot and Mathieu Pelletier-Dumas (Université du Québec à Montréal), Roberto González (Pontificia Universidad Católica de Chile), Ana Rosenbluth (Universidad Adolfo Ibáñez), Sergio Salgado (Universidad de La Frontera), Yanjun Guan (Durham University, UK), Yu Yang (ShanghaiTech University), Diego Forero (Fundación Universitaria del Área Andina, Bogotá), Andrés Camargo (Universidad Antonio Nariño, Bogotá and Universidad de Ciencias Aplicadas y Ambientales, Bogotá), Emmanouil Papastefanakis (University of Crete), Georgios Kritsotakis (Technological Institute of Crete), Irene Spyridaki (University of Crete), and Evangelia Fragkiadaki (Hellenic American University), Željko Jernei (University of Zagreb), Martina Hřebíčková and Sylvie Graf (Czech Academy of Sciences), Pernille Strøbæk (University of Copenhagen), Anu Realo (University of Warwick and University of Tartu), Maja Becker (CLLE, Université de Toulouse, CNRS, UT2J, France), Christelle Maisonneuve (Univ Rennes, LP3C (Laboratoire de Psychologie: Cognition, Comportement, Communication) - EA 1285, F-35000 Rennes, France), Sofian El-Astal (Al Azhar University-Gaza (Palestine)), Vladimer Lado Gamsakhurdia (Ivane Javakishvili Tbilisi State University), John Rauthmann (Universität zu Lübeck), Matthias Ziegler (Humboldt University), Lars Penke (University of Goettingen & Leipzig Science Campus Primate Cognition), Emma E. Buchtel (The Education University of Hong Kong), Victoria Wai-Lan Yeung (Lingnan University), Ágota Kun and Peter Gadanez (Budapest University of Technology and Economics), Zoltán Vass and Máté Smohai (Karoli Gáspár University of the Reformed Church in Hungary), Anagha Lavalekar (Jnana Prabodhini's Institute of Psychology, Pune), Abhijit Das (AMRI Institute of Neurosciences, Kolkata), Meta Zahro Aurelia and Dian Kinayung (Univeritas Ahmad Dahlan), Vanessa Gaffar (Universitas Pendidikan Indonesia), Gavin Sullivan and Christopher Day (Coventry University, England), Eyal Rechter (Ono Academic College), Marco Perugini and Giulio Costantini (University of Milan-Bicocca), Augusto Gnisci, Ida Sergi, and Vincenzo Paolo Senese (University of Campania, "Luigi Vanvitelli"), Tatsuya Sato and Yuki Nakata (Ritsumeikan University), Shizuka Kawamoto (Yamanashi University), Asuka Komiya (Hiroshima University), Marwan Al-Zoubi (University of Jordan), Nicholas Owsley, Channing Jang, Georgina Mburu, and Irene Ngina (Busara Center for Behavioral Economics), Girts Dimdins (University of Latvia), Rasa Barkauskiene and Alfredas Laurinavicius (Vilnius University), Marijana Markovikj and Eleonara Serafimovska (Saints Cyril and Methodius University of Skopje), Khairul A. Mastor (Universiti Kebangsaan Malaysia), Elliott Kruse (EGADE Business School Monterrey), Nairán Ramírez-Esparza (Fundación Universidad de las Américas Puebla), Jaap Denissen (Tilburg University), Marcel Van Aken (University of Utrecht), Ron Fischer (Victoria University of Wellington, Wellington), Ike E. Onyishi and Kalu T. Ogba (University of Nigeria, Nsukka), Siri Leknes, Vera Waldal Holen, Ingelin Hansen, Christian Krog Tamnes, and Kaia Klæva, (University of Oslo), Rukhsana Kausar and Nashi Khan, (University of the Punjab, Lahore), Muhammad Rizwan (Government of Pakistan), Agustín Espinosa (Pontificia Universidad Católica del Perú), Maria Cecilia Gastardo-Conaco, and Diwa Malaya A. Quiñones (University of Philippines-Diliman), Paweł Izdebski (Kazimierz Wielki University), Martyna Kotyśko (University of Warmia and Mazury), Piotr Szarota (Institute of Psychology of The Polish Academy of Sciences), Joana Henriques-Calado (CICPSI, Faculdade de Psicologia, Universidade de Lisboa, Alameda da Universidade, 1649-013 Lisboa, Portugal), Florin Alin Sava (West University of Timisoara), Olga Lvova, Victoria Pogrebetskaya, Mikhail Allakhverdov, and Sergey Manichev (St. Petersburg State University), Oumar Barry (Université Cheikh Anta Diop de Dakar-Sénégal), Snežana Smederevac, Petar Čolović, Dušanka Mitrović, and Milan Oljača (University of Novi Sad), Ryan Hong (National University of Singapore), Peter Halama (Slovak Academy of Sciences), Janek Musek (University of Ljubljana), Francois De Kock (University of Cape Town), Gyuseog Han (Chonnam National University), Eunkook M. Suh and Soyeon Choi (Yonsei University), David Gallardo-Pujol (University of Barcelona), Luis Oceja and Sergio Villar (Universidad Autónoma de Madrid), Zoltan Kekecs, Nils Arlinghaus, Daniel P. Johnson, and Alice Kathryn O'Donnell (Lund University), Clara Kulich and Fabio Lorenzi-Cioldi (Université de Genève), Janina Larissa Bühler (University of Basel), Mathias Allemand (University of Zurich), Yen-Ping Chang (University of North Carolina at Chapel Hill), Wei-Fang Lin (Chung Yuan Christian University, Taiwan), Watcharaporn Boonyasiriwat (Chulalongkorn University), S. Adil Saribay (Boğaziçi University), Oya Somer (Cyprus International University), Pelin Karakus Akalin (Istinye University, Istanbul), Peter Kakubeire Baguma (Makerere University), Alexander Vinogradov (Taras Shevchenko National University of Kyiv), Larisa Zhuravlova (Zhytomyr Ivan Franko State University), Mark Conner (University of Leeds), Jason Rentfrow (University of Cambridge), Alexa Tullett (University of Alabama), Kyle Sauerberger (University of California, Riverside), Nairán Ramírez-Esparza (University of Connecticut), Douglas E. Colman (Idaho State University), Joey T. Cheng (University of Illinois at Urbana-Champaign), Eric Stocks (University of Texas, Tyler), and Huyen Thi Thu Bui (Hanoi National University of Education).

Correspondence

Daniel I. Lee, Department of Psychology,
University of California Riverside,
Riverside, CA, USA.
Email: dlee089@ucr.edu

Funding information

The authors disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: the research was supported by the US National Science Foundation under Grant BCS-1528131. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the individual researchers and do not necessarily reflect the views of the National Science Foundation. The Center for Open Science built and hosted the multi-lingual data-gathering website. Data gathering in the Czech Republic was supported by grant 20-012114S by the Czech Science Foundation and by institutional research funding RVO: 68081740 from the Institute of Psychology, Czech Academy of Sciences. Data gathering in Chile was partly supported by the Centre for Social Conflict and Cohesion Studies (FONDAP 15130009) and Center for Intercultural and Indigenous Research (CIIR) (FONDAP 15110006)

Abstract

Objective: The current study seeks to replicate and extend principal findings reported in *The World at 7:00*, a project that examined the psychological experience of situations in 20 countries.

Method: Data were collected from participants in 62 countries ($N = 15,318$), recruited from universities by local collaborators to complete the study via a custom-built website using 42 languages.

Results: Several findings of the previous study were replicated. The average reported situational experience around the world was mildly positive. The same countries tended to be most alike in reported situational experience ($r = .60$) across the two studies, among the countries included in both. As in the previous study, the homogeneity of reported situational experience was significantly greater within than between countries, although the difference was small. The previously reported exploratory finding that negative aspects of situations varied more across countries than positive aspects did not replicate. Correlations between aspects of reported situational experience and country-level average value scores, personality, and demographic variables were largely similar between the two studies.

Conclusion: The findings underscore the importance of cross-cultural situational research and the need to replicate its results, and highlight the complex interplay of culture and situational experience.

1 | INTRODUCTION

The idea that behavior is a function of both persons and the environments they experience (Lewin, 1951) became widely accepted only after decades of research and argument pitting the two forces against one another (Bem & Allen, 1974; Block, 1977; Bowers, 1973; Epstein, 1979; Kenrick & Funder, 1988; Mischel, 1968). Even with this recognition, researchers have only recently begun to take seriously the assessment of situations as well as persons (Funder, 2016; Parrigon, Woo, Tay, & Wang, 2017; Rauthmann & Sherman, 2018; Rauthmann, Sherman, & Funder, 2015; Sherman et al., 2015). One spur to research was the development of the Riverside Situational Q-sort (RSQ; Wagerman & Funder, 2009). The items of the RSQ describe psychologically meaningful characteristics of situations (e.g., “The situation is potentially enjoyable”; “A job needs to be done”) which can be rated by the individuals who experience them or by external observers (Rauthmann et al., 2015).

Researchers have used the RSQ to assess the relationships between ordinary situations, persons, and behavior (e.g., Funder, 2016; Morse, Neel, Todd, & Funder, 2015;

Sherman, Nave, & Funder, 2013), and how these relationships vary cross-culturally (Guillaume et al., 2016). A previous article from our research group, titled *The World at 7:00*¹ (Guillaume et al., 2016), explored the nature of situational experience across 20 countries. The goal of the current study is to replicate and extend the principal findings reported in that article. Specifically, the present study both extends the original study by reporting new data from 62 countries, gathered using similar (but not identical) methods, and seeks to replicate previous findings using analyses parallel to the original study.

1.1 | The need for replication

Although some researchers have opined that replication research reveals a lack of creativity and even allows individuals to build careers on poor methodological execution (Baumeister, 2016), recent efforts to replicate previous findings are proving to be valuable contributions to science at large. Extending to fields outside of psychology, (Button et al., 2013; Camerer et al., 2016; Cova et al.,) replication

projects have provided insights into what we know, or what we thought we knew, about human behavior (Open Science Collaboration, 2015; Simmons, Nelson, & Simonsohn, 2011).

Perhaps due to a historical focus on rigor and precision of measurement (Baumeister, Vohs, & Funder, 2007; Wiggins, 1973), personality psychology has been left relatively untargeted by large scale replication attempts. A recent exception is the Life Outcomes of Personality Replication Project (LOOPR; Soto, 2019), which addressed the relationship between the Big Five personality traits and important life outcomes (Ozer & Benet-Martínez, 2006), finding that 87% of the surveyed studies replicated the originally reported effects. Large scale replications of cross-cultural results are even more rare. The few available examples have focused on cross-cultural differences in personality measurement, finding, for example, that questionnaire factor structures originally found in English speaking samples largely replicated in Hebrew and German speaking samples (Almagor, Tellegen, & Waller, 1995; Saucier & Ostendorf, 1999). Notwithstanding these examples, if large-scale replication projects remain rare in psychology, they are even more rare in cross-cultural psychological research.

2 | CURRENT STUDY

The current study seeks to replicate and extend previous findings of a 20-country study of the relationships between situational experience, personality, and a variety of country-level variables. While exploratory in nature, the original article, *The World at 7:00* (Guillaume et al., 2016), presented broad goals paired with a number of specific questions for its study of situational experience across cultures. Listed below are the research questions and original findings that we seek to re-examine.

1. *Situational experience around the world.* On average, how do individuals around the world rate their situational experience? Original finding: the average reported situation was found to be simple, social, and mildly enjoyable.
2. *Homogeneity of situational experience.* How similar to each other, or homogeneous, are individuals' situational experiences, both within and between countries? Original finding: individuals within the same country report experiencing more similar situations than those in different countries.
3. *Variability of situational experiences.* Original finding: negative characteristics of situations vary more across countries than positive characteristics. This finding of the previous study, while theoretically sensible, was not predicted and needs to be replicated.

4. *Country-level correlates.* How are aspects of average situational experience related to other country-level variables? Original finding: among the tested variables, Individualism, Openness to Experience, and Neuroticism were found to be related to situational experience at greater than chance rates.

3 | METHOD

The data analyzed here were collected as part of a larger study regarding individual differences and cross-cultural situational experience that went beyond the previous study in many ways. The present report focuses on the measures included in the *World at 7:00*; information on other measures can be found on our Open Science Framework project (<https://osf.io/yv2nq/>). Some of the data from the larger study have been reported elsewhere (Gardiner, Sauerberger, & Funder, 2019), and further analyses are planned or in progress. The analyses reported here are unique.

3.1 | Participants

Data from 15,318 members of university and college communities (10,771 females, 4,468 males, 79 other or did not disclose) across 62 countries (see Table 1) were included. Samples from three other countries (Belgium, Finland, and Iceland) with fewer than 50 participants were not included. Participants were recruited within their universities or colleges by local collaborators who were all psychological researchers. This aspect of the recruitment is unusual as we did not recruit via MTurk or similar platforms—all participants were individually recruited by and known to local collaborators. Incentives for participation varied across locations. All participants were offered feedback on their personalities (based on BFI-2 scores; Soto & John, 2017), and in some cases they also received extra credit, course credit, or a small amount of monetary compensation.

3.2 | Procedure

A custom-built website, designed in collaboration with the Center for Open Science (ispstudy.ucr.edu²), allowed participants across the world to simultaneously access the study materials in their preferred language (42 languages in all). All materials were translated by local psychologists who are members of the International Situations Project, back translated by an independent researcher, and compared with the original to assure accuracy.

After selecting their language and entering their participant and study ID assigned by the local researcher, participants

TABLE 1 Description of samples across 62 countries

Country	Language of assessment	<i>n</i>	Females	Males	Mean Age
Argentina	Spanish	140	110	30	24.28
Australia	English	196	149	47	19.84
Austria	German	113	92	21	21.26
Bolivia	Spanish	135	78	57	21.01
Brazil	Portuguese	310	223	86	23.69
Bulgaria	Bulgarian	152	106	44	25.02
Canada	French	304	239	63	21.85
Chile	Spanish	386	255	129	21.47
China	Mandarin	432	207	219	22.63
Colombia	Spanish	181	134	47	21.68
Croatia	Croatian	218	141	77	21.46
Czech Republic	Czech	193	156	37	22.65
Denmark	Danish	246	195	49	22.92
Estonia	Estonian	293	246	47	25.88
France	French	231	195	33	22.58
Georgia	Georgian	140	112	28	22.29
Germany	German	458	341	113	24.36
Greece	Greek	225	180	43	22.57
Hong Kong	Cantonese	144	84	58	18.99
Hungary	Hungarian	178	106	70	21.76
India	English	221	110	111	22.38
Indonesia	Indonesian	131	68	61	21.83
Israel	Hebrew	173	105	66	25.42
Italy	Italian	717	463	254	21.86
Japan	Japanese	243	150	92	22.56
Jordan	Arabic	141	114	27	19.87
Kenya	English	139	91	48	21.17
Latvia	Latvian	169	140	29	24.87
Lithuania	Lithuanian	145	113	31	22.26
Macedonia	Macedonian	54	40	14	21.22
Malaysia	Malay	230	162	66	21.52
Mexico	Spanish	247	143	102	23.85
Netherlands	Dutch	301	244	56	22.14
New Zealand	English	129	111	18	19.19
Nigeria	English	135	45	89	24.72
Norway	Norwegian	159	118	41	23.89
Pakistan	English	114	57	57	22.61
Palestine	Arabic	295	246	49	22.17
Peru	Spanish	74	45	27	22.66
Philippines	English	337	229	102	19.69
Poland	Polish	234	195	39	22.35
Portugal	Portuguese	157	137	19	21.77
Romania	Romanian	177	101	76	22.84
Russia	Russian	159	124	34	21.90

(Continues)

TABLE 1 (Continued)

Country	Language of assessment	<i>n</i>	Females	Males	Mean Age
Senegal	French	635	301	333	23.31
Serbia	Serbian	185	159	25	19.72
Singapore	English	136	106	30	22.93
Slovakia	Slovakian	148	103	45	22.41
Slovenia	Slovenian	123	70	52	22.59
South Africa	English	256	170	85	22.20
South Korea	Korean	281	164	117	22.35
Spain	Spanish	419	357	62	19.73
Sweden	Swedish	130	91	35	–
Switzerland	German	755	632	119	22.35
Taiwan	Taiwanese	162	124	38	19.71
Thailand	Thai	196	151	37	19.27
Turkey	Turkish	329	224	104	21.09
Uganda	English	93	60	33	22.63
Ukraine	Ukrainian	244	188	55	22.62
United Kingdom	English	136	121	15	25.64
United States	English	1,366	921	439	19.86
Vietnam	Vietnamese	168	129	38	19.05

Note: Total $N = 15,318$ (Females: 10,771, Males: 4,468, Other: 79), with a mean age of 21.91. Age in Sweden was not recorded. The language of assessment is reported for the most frequently used language in each country.

offered their informed consent. They then completed a battery of questionnaires including demographic information, situational experience and behaviors, personality traits, and other individual difference variables. Of most relevance to the present study, participants were asked to rate an experience from the previous day that they “remember well” using the RSQ. This is a notable difference from the *World at 7:00* study, which asked participants to report on what they were doing at 7 p.m. the previous day. One of the reasons for this change is that a number of participants reported not remembering what they were doing at that time the previous day, and we doubted that meaningful data could be obtained about situations that participants did not recall well. Potential implications of this change are detailed in the discussion section. After completing all measures, participants were offered the opportunity to receive feedback on their Big Five personality traits. Measures pertaining to the current study are described below, including country-level measures previously collected by other researchers or obtained from openly accessible databases.

3.3 | Measures

3.3.1 | Riverside situational Q-sort

In order to assess situational experience, participants completed the Riverside Situational Q-sort (RSQ; Wagerman & Funder, 2009), a comprehensive measure of situational

characteristics. Using the most recent version of the measure (4.1), the 90-item Q-sort forces a quasi-normal distribution of items across a scale of 1 (Extremely Uncharacteristic) to 9 (Extremely characteristic) (see Table 2). The original study (Guillaume et al., 2016) measured situational experience using the 89-item RSQ version 3.15 (Funder & Guillaume, 2013). Analyses regarding the replicable nature of cross-cultural situational experience are restricted to 69 items that overlap between the two versions.

In addition to participants' ratings of their situations, 39 of our collaborators from 26 countries rated the extent to which each of the 90 RSQ items reflected a positive or negative experience. Items were rated on a 1 (negative experience) to 9 (positive experience) Likert-type scale. The average reliability of the 90 positivity ratings was $\alpha = .99$.

3.3.2 | Big-Five inventory

To measure each individual's personality, participants completed the Big Five Inventory-2 (BFI-2, Soto & John, 2017), a 60-item measure of the Big Five Personality traits. Using a 5-point scale, participants rated each of the items from 1 (Disagree strongly) to 5 (Agree strongly). Across the 62 countries, the average alpha reliabilities were Extraversion (.81), Agreeableness (.76), Conscientiousness (.83), Neuroticism (.86), and Openness (.80). No personality measure was administered to participants of the original study; for the

TABLE 2 Means of RSQ items across 62 countries

Item #	RSQ item	Overall	Females	Males
rsq007	Talking is permitted	6.56	6.59	6.49
rsq047	Social interaction is possible	6.42	6.45	6.36
rsq039	Emotions can be expressed	6.29	6.36	6.15
rsq067	The situation could arouse positive emotions	6.24	6.22	6.28
rsq001	The situation is potentially enjoyable	6.13	6.13	6.21
rsq062	The situation is simple and clear-cut	6.08	6.07	6.11
rsq089	It is important for people to get along	6.04	6.07	5.98
rsq008	Talking is expected or demanded	5.88	5.93	5.80
rsq042	The people who are present have close personal relationships with each other	5.87	5.93	5.70
rsq011	Minor details are important	5.79	5.80	5.76
rsq024	Self-control is necessary	5.79	5.78	5.80
rsq023	A decision needs to be made	5.75	5.73	5.78
rsq003	A job needs to be done	5.71	5.71	5.73
rsq044	The situation could be intellectually stimulating	5.70	5.68	5.79
rsq072	Success requires cooperation	5.69	5.67	5.73
rsq077	Many things are happening at once	5.66	5.67	5.62
rsq021	A reassuring person is present	5.64	5.72	5.44
rsq013	Intelligence is important	5.63	5.59	5.74
rsq069	There are opportunities to display verbal fluency	5.60	5.63	5.57
rsq090	Entertainment is present	5.58	5.55	5.66
rsq029	It is important for you to make a good impression	5.53	5.51	5.58
rsq006	Someone is counting on you to do something	5.52	5.54	5.50
rsq043	Someone present (other than you) is counted on to do something	5.46	5.48	5.42
rsq052	Clear rules define appropriate behavior	5.43	5.41	5.46
rsq048	The situation is humorous or potentially humorous	5.42	5.41	5.50
rsq045	Assertiveness is required to accomplish a goal	5.42	5.41	5.43
rsq050	Sensations are important	5.42	5.46	5.33
rsq070	People who are present occupy different social roles or levels of status	5.39	5.40	5.33
rsq040	It is possible to ruminate, daydream or fantasize	5.38	5.39	5.35
rsq038	Quick action is necessary	5.34	5.33	5.37
rsq034	Unusual ideas or points of view are being discussed freely	5.31	5.31	5.34
rsq018	The situation is playful	5.29	5.28	5.35
rsq009	Someone is asking you for something	5.29	5.29	5.31
rsq056	Ambition can be expressed or demonstrated	5.28	5.24	5.39
rsq088	New relationships could develop	5.28	5.26	5.28
rsq031	The situation includes small annoyances	5.27	5.28	5.23
rsq079	People are working hard	5.26	5.25	5.28
rsq010	Someone needs help	5.21	5.24	5.14
rsq046	Desires could be gratified	5.21	5.24	5.13
rsq068	The situation could arouse negative emotions	5.17	5.17	5.16
rsq041	The situation is noisy	5.15	5.15	5.16
rsq026	Someone needs or desires reassurance	5.14	5.20	4.96
rsq030	The situation could make people tense and upset	5.14	5.13	5.12
rsq019	The situation is rapidly changing	5.09	5.10	5.07
rsq049	You are the focus of attention	5.06	5.08	4.99

(Continues)

TABLE 2 (Continued)

Item #	RSQ item	Overall	Females	Males
rsq080	Food is important in this situation	5.04	5.09	4.93
rsq073	Someone is complimenting or praising you	5.02	5.04	4.98
rsq066	Others want advice from you	5.02	5.03	4.99
rsq055	The situation is potentially anxiety-inducing	5.00	5.03	4.90
rsq078	People are being physically active	4.99	4.96	5.05
rsq037	Moral or ethical issues are relevant	4.96	4.98	4.92
rsq063	People are comparing themselves to each other	4.94	4.90	5.03
rsq082	Family is important in this situation	4.92	5.03	4.62
rsq033	People are disagreeing about something	4.88	4.87	4.94
rsq074	Femininity can be expressed	4.86	5.03	4.49
rsq005	Someone is trying to convince you of something	4.86	4.86	4.89
rsq087	Music is an important part of this situation	4.85	4.86	4.81
rsq076	Someone needs to be taken care of	4.85	4.90	4.71
rsq002	The situation is complex	4.84	4.82	4.88
rsq057	The situation could make you feel inadequate	4.75	4.76	4.73
rsq084	Money is important	4.73	4.73	4.76
rsq027	The situation is frustrating	4.73	4.73	4.68
rsq081	The situation is physically uncomfortable	4.68	4.70	4.61
rsq065	Masculinity can be expressed	4.63	4.47	5.05
rsq004	Someone is trying to impress you	4.62	4.60	4.66
rsq025	People are competing with each other	4.61	4.52	4.85
rsq060	The presence of members of the opposite sex is an important part of this situation	4.50	4.46	4.61
rsq071	You are being pressured to conform to the actions of others	4.45	4.44	4.46
rsq054	Art is an important part of the situation	4.45	4.45	4.46
rsq020	Someone is unhappy or suffering	4.44	4.48	4.33
rsq061	Potential or actual romantic partners (for you) are present	4.38	4.37	4.40
rsq064	Power is important	4.36	4.31	4.44
rsq028	Your physical attractiveness is important	4.33	4.32	4.36
rsq032	The situation could make people feel hostile	4.31	4.31	4.35
rsq086	Someone is feeling shame	4.31	4.32	4.29
rsq053	Someone is breaking rules	4.31	4.27	4.37
rsq014	It is not clear what is going on; the situation is uncertain	4.29	4.30	4.22
rsq083	A matter of honor is at stake	4.28	4.23	4.39
rsq036	Emotional threats are present	4.26	4.26	4.25
rsq051	The situation is relevant to your health	4.20	4.19	4.23
rsq016	Someone is criticizing you	4.14	4.11	4.20
rsq017	Someone is attempting to dominate or boss you	3.98	3.98	3.99
rsq085	People are participating in athletics or sports	3.90	3.82	4.09
rsq022	Someone is blaming you for something	3.80	3.78	3.85
rsq012	Politics are relevant	3.79	3.76	3.89
rsq058	Sexuality is relevant	3.78	3.75	3.88
rsq075	Religion is relevant in this situation	3.68	3.70	3.65
rsq015	Someone is under threat	3.50	3.50	3.50
rsq035	Physical threats are present	3.46	3.41	3.58
rsq059	You are being abused or victimized	2.97	2.93	3.05

Note: The overall, female, and male RSQ item means were computed with respect to country. The vector correlation for the means of overlapping RSQ items with Guillaume et al. (2016) was $r(67) = .86, p < .001$.

present study the BFI-2 was chosen for its reliability, brevity, and ease of access.

3.3.3 | Country-level measures

A country-level measure of situational experience was computed using the individual responses to the RSQ. First, in order to have each of the sexes equally represented, an aggregated RSQ profile was computed separately for males and females for each of the respective countries (values for each of the sexes on all of the items for the sample at large can be found in Table 2; 79 individuals across our 62 countries that reported as “other” or “would rather not say” were not included). The male and female RSQ profiles for each country were then averaged in order to compute a single representative profile for each country equally weighted by sex. The same procedure for computing each country-level average measure of situational experience was followed in the original study (Guillaume et al., 2016).

Measures of country-level personality were obtained in two different ways. The original study (Guillaume et al., 2016) did not gather personality information; therefore, country-level Big Five personality scores were obtained from previous research (Schmitt, Allik, McCrae, & Benet-Martínez, 2007). For comparability, these same scores were employed in the present study, although they were not available for all countries in our samples (16 of 20 in the original study, 43 of 62 in the current study). Unlike the original study, the current study included the BFI-2, and thus provided personality scores for all 62 countries. These trait scores were first averaged by sex within each country before being combined to yield country-level averages. Across the 43 countries for which both Schmitt et al. (2007) average scores and our BFI-2 scores were available, the average correlation between these two country-level measures of personality was $r = .52$, showing statistically significant agreement for all traits except Agreeableness (Extraversion: $r(41) = .38$, $p = .01$, Agreeableness: $r(41) = .22$, $p = .16$, Conscientiousness: $r(41) = .69$, $p < .001$, Neuroticism³: $r = .54$, $p < .001$, Openness $r(41) = .50$, $p < .001$).

Country-level values scores were also obtained from previous research⁴ (Hofstede, 1983) that measured national culture along six dimensions: Power Distance, Individualism (versus collectivism), Masculinity (versus femininity), Uncertainty Avoidance, Long Term Orientation (versus short term orientation), and Indulgence (versus restraint).

Demographic country variables were obtained from publicly available databases. These include per-capita Gross Domestic Product (GDP; Central Intelligence Agency, 2016) and population density (World Bank, 2016).

4 | RESULTS

All analyses were computed using the “psych” package (Revelle, 2018) in “R” (R Core Team, 2019). The analyses presented below intentionally mirror the analyses presented in the original article as closely as possible to facilitate comparison. Further and more detailed analyses, including many unique to this study, can be found in the Supplemental Tables (see <https://osf.io/xzgf/d/>).

Of particular interest are relationships that are reliable across studies and measures; such relationships will be reported here in greater detail. The criteria used to assess reliability will be described in each case. In many cases, the major question is the reliability of patterns of correlations. This will be assessed using “vector correlations,” in which the pattern of correlations within one data set is correlated with the pattern of correlations in the other data set, across pairs of variables. The N for such analyses is the number of correlations being compared.⁵ Standards for assessing whether a finding has been “replicated” have become a complex and controversial topic within psychology (e.g., Simons, 2014). While many such standards have been suggested and even more are possible, for present purposes we simply considered a pattern of relationships to have replicated if the vector correlation was statistically significant. The reader is invited to inspect our findings using one's own preferred standard, if applicable.

4.1 | Situational experience around the World

Table 2 lists each of the RSQ items' average rating worldwide, ordered from highest to lowest. It is apparent that the average situational experience around the world is generally positive, socially involving, and largely unthreatening. This observation replicates our earlier findings and the conclusion that the average reported situation around the world is “a largely pleasant social interaction” (Guillaume et al., 2016, p. 499). The correlation between average RSQ item placement for the 69 items that appear in both the previous study and current study was $r = .86$,⁶ thus indicating a high degree of similarity in reported situational experience between the two studies. This high degree of similarity exists despite the fact that, unlike in the original study where participants were instructed to describe the situation they experienced the previous day at 7 p.m., our participants were able to freely choose any situation they experienced in the previous 24 hr that they remembered well.

A further question addressed in the original article concerned which countries are the most and least similar in their average situational experience. Using each country's composite RSQ profile, the average situational ratings for each country were correlated with each other, resulting in a 62×62 correlation table. Each country's average correlation with each of the other

61 countries, which reflects the overall similarity of its situational experience with the world at large, is presented in Table 3. For countries previously reported in *The World at 7:00*, the average correlation with all other countries in the respective data set are listed in the columns to the right of Table 3. The correlation between these pairs of values, across the 20 countries included in both studies, was $r = .60$ ($p = .005$). The overall average cross-cultural similarity among 62 countries in the current study was $r = .81$. This value among the 20 countries in the original study was $r = .84$. In both studies, countries highly similar to the others in the sample included Canada and the United States; countries low in similarity to the others included Japan and South Korea. Among the 20 overlapping countries, Japan was found to be the least similar to the others in both studies.

4.2 | Homogeneity of situational experience

The second research question examines the extent to which situational experience differs within and across countries. That is, are reported situational experiences more similar among individuals from the same (versus a different) country? This analysis entails correlating each individual's RSQ profile with that of each other individual within a country, and then averaging those correlations. This analysis was completed for each gender separately, then once again averaged to compute the homogeneity of situational experience within each country. These gender-balanced values can be found in Table 4. The average correlation of the reported situational experience of each participant within each country with that of each participant within in all the other countries in the sample is presented in Table 4. Replicating the finding in the original article, situational experiences within countries were more similar to each other than they were between countries (within country average $r = .166$ [.155, .176]; between country average $r = .139$ [.138, .140]), although, as in the previous study, the difference is small. These values along with those reported in the previous study can be found in the final line of Table 4.

Further analyses compared the homogeneity of specific countries as assessed in both studies. Restricted to the 20 countries that are present in both studies, there is little consistency in the countries that are the most and least homogeneous. The correlation between country-level homogeneity of situational experience across the two studies is $r = .03$, $p = .91$, which must be considered a failure to replicate the differences among countries on this variable.

4.3 | Variability of situational experience

The third research question examined a previous exploratory finding, that more negative aspects of situational

experience varied more widely across countries than did positive aspects. Similar to the original study, international collaborators ($N = 39$) rated each of the 90 RSQ items from 1 (a negative experience) to 9 (a positive experience) (see Table 5). Assessed using a simple t -test, the same analysis used in the prior study, the 15 least variable items were *not* notably different in their positivity from the 15 most variable items $t(28) = -.83$, $p = .41$. This is a failure to replicate the previous finding; in fact, the finding of the new, larger study was (non-significantly) in the opposite direction. When restricting the sample to the 20 countries that were included in the original study, we also fail to find the relationship $t(28) = -.076$, $p = .94$.

4.4 | Country-level correlates

The final research questions investigated the correlations between situational experience and country-level values, personality, and objective country-level measures. All of the relationships presented here were originally explored in the *World at 7:00*. As in the original study, given the large number and exploratory nature of the analyses, each set of correlations is first assessed with a randomization test computed using the “multicon” package (Sherman, Rauthmann, Brown, Serfass, & Jones, 2015) in the statistical software “R” (R Core Team, 2019). In this test, 10,000 random simulations of the correlations of interest compose two distributions of values expected by chance. These distributions, of the average absolute effect size and number of correlations that attain significance at $p < .05$, indicate the frequency of the empirically obtained values that occurred in a chance distribution (for further explanation, see Sherman & Funder, 2009).⁷

As mentioned previously, each set of analyses was also compared across samples with a vector correlation, which entails correlating the patterns of correlations between the RSQ and the country-level variable of interest from the two studies. The N for this analysis is the number of relationships being compared; using the RSQ items that the studies have in common, this number is 69. Relationships that were found to be particularly reliable, Versusthat is, passed the randomization test in both studies and resulted in a strong vector correlation, will be detailed here in greater depth. A full report of the country-level correlations with the RSQ is in the Supplemental Tables.

4.4.1 | Values

The first set of correlations is between country-level RSQ profiles and six value dimensions: Power Distance, Individualism, Uncertainty Avoidance, Masculinity,

TABLE 3 Intercorrelations of RSQ profiles

Country	Average <i>r</i>	95% CI	Average <i>r</i> ^w	95% CI ^w
Argentina	.83	[.80, .85]		
Australia	.85	 [.82, .87]	.83	[.81, .85]
Austria	.82	[.80, .85]	.83	[.82, .84]
Bolivia	.84	[.82, .87]		
Brazil	.83	[.80, .85]		
Bulgaria	.78	[.75, .80]		
Canada	.85	 [.83, .88]	.89	 [.88, .90]
Chile	.86	 [.84, .88]		
China	.83	[.81, .86]	.84	[.83, .85]
Colombia	.78	[.76, .81]		
Croatia	.84	[.81, .86]		
Czech Republic	.82	[.80, .85]	.84	[.82, .84]
Denmark	.77	[.75, .80]	.83	[.82, .84]
Estonia	.82	[.80, .85]	.85	[.83, .86]
France	.81	[.79, .85]		
Georgia	.74	[.72, .77]		
Germany	.82	[.90, .85]	.85	[.84, .86]
Greece	.81	[.79, .84]		
Hong Kong	.81	[.79, .84]		
Hungary	.83	[.81, .86]		
India	.77	[.74, .79]		
Indonesia	.78	[.75, .80]		
Israel	.76	[.73, .78]		
Italy	.83	[.81, .86]	.85	[.84, .86]
Japan	.80	[.78, .82]	.80	 [.79, .81]
Jordan	.69	[.67, .72]		
Kenya	.72	[.70, .75]		
Latvia	.81	[.78, .83]		
Lithuania	.78	[.76, .81]		
Macedonia	.80	[.78, .83]		
Malaysia	.66	[.63, .68]		
Mexico	.84	[.82, .88]		
Netherlands	.84	[.82, .88]	.84	[.83, .85]
New Zealand	.79	[.77, .82]		
Nigeria	.67	[.65, .70]		
Norway	.82	[.79, .84]		
Pakistan	.72	[.70, .76]		
Palestine	.71	[.68, .73]		
Peru	.84	[.82, .88]		
Philippines	.85	[.83, .88]		
Poland	.81	[.79, .84]	.85	[.84, .86]
Portugal	.80	[.78, .84]		
Romania	.82	[.80, .85]		
Russia	.82	[.80, .85]	.85	[.84, .86]

(Continues)

TABLE 3 (Continued)

Country	Average r	95% CI	Average r^w	95% CI ^w
Senegal	.71	[.69, .74]		
Serbia	.83	[.81, .87]		
Singapore	.85	[.83, .88]	.88	[.87, .89]
Slovakia	.83	[.81, .86]	.86	[.85, .87]
Slovenia	0.83	[.81, 0.86]		
South Africa	0.83	[.81, 0.86]	0.83	[.82, 0.84]
South Korea	.82	[.79, .84]	.80	[.79, .81]
Spain	.85	[.83, .88]	.86	[.85, .87]
Sweden	.84	[.82, .87]		
Switzerland	.84	[.82, .88]		
Taiwan	.83	[.81, .86]		
Thailand	.78	[.76, .81]		
Turkey	.82	[.80, .85]		
Uganda	.16	[.15, .17]		
Ukraine	.82	[.80, .84]		
United Kingdom	.84	[.82, .88]	.86	[.85, .87]
United States	.86	[.84, .89]	.88	[.86, .90]
Vietnam	.77	[.75, .79]		

Note: The most and least varying countries from their respective samples are highlighted in bold. Intercorrelations from Guillaume et al. (2016) are denoted by ^w. In the current study, the pair countries with the most similar RSQ profiles are the United States and Australia at $r = .95$, and the least similar RSQ profiles are Uganda and Bulgaria at $r = .02$. The vector correlation for the countries that appear in both samples was $r(18) = .60$.

Long-term Orientation, and Indulgence (Hofstede, 1983). All but one of the value dimensions (Masculinity) yielded a greater number of RSQ correlates than expected by chance in the current study. The vector correlations for the relationships between reported situational experience and these value dimensions across studies can be found in Table 6. For each of the values dimensions, not including Masculinity, these analyses show that the pattern of correlations is very similar across studies. Also (displayed on the right side of the table), when analyses are restricted to countries that are only present in both studies, the similarity of the relationships between values and situational experience (not including Power Distance) sees a considerable increase.

While the vector correlations do suggest that the relationship between a country's values and average situational experience are similar in the two samples, only the dimension of Individualism was found to be correlated with the RSQ to a degree greater than chance both in the original *World at 7:00* study and in the current analyses. In the current study, Individualism was related to 29 of the 90 RSQ items. The strongest positive relationships were with the items: "people are comparing themselves to each other" (item #63), and "the situation is potentially enjoyable" (#1). Two of the strongest negative correlations were with the items: "self-control is necessary" (#24), and "someone is attempting to dominate or boss you" (#17). For a full list of correlates, see Supplemental

Table 6. The vector correlation of the situational correlates of Individualism across the two studies was $r(67) = .47$, $p < .001$. For a complete list of the items correlated with the values dimensions, along with the results of the randomization tests, see Supplemental Tables 1–6.

4.4.2 | Big Five personality traits

The second set of country-level correlates is between the Big Five personality traits and reported situational experience. This relationship was examined using two different measures of country-level personality. The first set of country level personality scores was gathered in prior research published by other investigators (Schmitt et al., 2007). As such, the analyses using this measure of country-level personality pertained to 43 of the 62 countries in our sample for which average trait scores were available. The second measure of traits was computed from our own data, using our participants' responses to the BFI-2 (Soto & John, 2017) in all 62 countries. As described previously, male and female participants' scores were first averaged separately, then averaged together for each country such that country-level personality profiles represented each gender equally.

Table 7 displays a series of vector correlations summarizing the similarity of relationships between situational

TABLE 4 Average inter-individual RSQ correlations within and between countries

Country	Within country	Between country	Within COUNtry ^w	Between country ^w
Argentina	.22	.15		
Australia	.22	.16	.17	.17
Austria	.11	.11	.18	.18
Bolivia	.21	.16		
Brazil	.16	.13		
Bulgaria	.16	.13		
Canada	.14	.13	.18	.18
Chile	.16	.12		
China	.15	.13	.18	.17
Colombia	.17	.15		
Croatia	.16	.14		
Czech Republic	.22	.16	.23	.19
Denmark	.19	.16	.18	.17
Estonia	.15	.14	.19	.17
France	.21	.16		
Georgia	.20	.15		
Germany	.19	.15	.21	.19
Greece	.19	.15		
Hong Kong	.20	.16		
Hungary	.14	.13		
India	.18	.15		
Indonesia	.16	.15		
Israel	.18	.15		
Italy	.14	.13	.17	.17
Japan	.12	.11	.28	.20
Jordan	.16	.14		
Kenya	.14	.13		
Latvia	.18	.15		
Lithuania	.13	.12		
Macedonia	.17	.15		
Malaysia	.07	.09		
Mexico	.12	.11		
Netherlands	.26	.18	.21	.18
New Zealand	.14	.13		
Nigeria	.17	.15		
Norway	.15	.13		
Pakistan	.16	.14		
Palestine	.16	.13		
Peru	.15	.13		
Philippines	.17	.15		
Poland	.24	.17	.24	.20

(Continues)

TABLE 4 (Continued)

Country	Within country	Between country	Within COUNtry ^w	Between country ^w
Portugal	.16	.14		
Romania	.07	.12		
Russia	.12	.12	.23	.20
Senegal	.12	.12		
Serbia	.21	.16		
Singapore	.06	.07	.20	.19
Slovakia	.20	.16	.22	.20
Slovenia	.22	.16		
South Africa	.12	.12	.17	.17
South Korea	.19	.14	.12	.14
Spain	.16	.14	.25	.20
Sweden	.09	.08		
Switzerland	.16	.15		
Taiwan	.18	.15		
Thailand	.24	.17		
Turkey	.17	.13		
Uganda	.23	.17		
Ukraine	.17	.15		
United Kingdom	.11	.09	.21	.19
United States	.16	.15	.17	.17
Vietnam	.23	.16		
Average	.166 [.155, .176]	.139 [.138, .140]	.200 [.183, .216]	.180 [.177, .182]

Note: The most and least homogeneous countries for their respective samples are highlighted in bold. Values from Guillaume et al. (2016) are denoted by ^w. In the current study, the most homogeneous pair of countries are the Netherlands and Poland at $r = .23$, and the least homogeneous are the United Kingdom and Sweden at $r = 0.01$. For countries that appear in both samples, the vector correlation of within country homogeneity was $r(18) = .03$, and between country homogeneity was $r(18) = -.11$.

experience and personality across studies, samples, and measures. The first line of the table reports that the vector correlation for the relationships between Extraversion and situational experience, as found in Guillaume et al. (2016) using the Schmitt et al. (2007) values, and our current study using the BFI-2, was $r = .23$. When this relationship was examined restricting countries in our current sample to those that were present in the original study ($n = 16$) the vector correlation increased to $r = .54$, $p < .001$. The vector correlation of the relationships between situational experience and the same measure of Extraversion (Schmitt et al., 2007) across studies was $r = .41$. Once again, when restricted to the countries present in both studies ($n = 16$) this correlation

TABLE 5 Most and least varying RSQ items across countries

Most varying RSQ items				Least varying RSQ items			
RSQ item	Mean	Positivity	Eta	RSQ item	Mean	Positivity	Eta
Talking is permitted	6.56	6.39	.29	The situation could be intellectually stimulating	5.70	7.26	.14
Social Interaction is possible	6.42	7.03	.27	The situation is physically uncomfortable	4.68	2.63	.14
Religion is relevant in this situation	3.68	4.71	.27	Potential or actual romantic partners are present	4.38	7.05	.14
The situation is potentially anxiety inducing	5.00	2.89	.27	A decision needs to be made	5.75	5.05	.13
You are being abused or victimized	2.97	1.37	.26	Music is an important part of this situation	4.85	7.34	.13
Physical threats are present	3.46	1.63	.25	Others want advice from you	5.02	6.29	.13
Moral or ethical issues are relevant	4.96	5.26	.24	Someone is feeling shame	4.31	2.61	.13
The situation could arouse positive emotions	6.24	7.97	.23	People who are present occupy different social roles or levels of status	5.39	5.29	.12
It is possible to ruminate daydream or fantasize	5.38	6.71	.22	Success requires cooperation	5.69	6.53	.12
Power is important	4.36	4.17	.22	The situation is frustrating	4.73	2.26	.12
Ambition can be expressed or demonstrated	5.28	6.29	.22	The presence of members of the opposite sex is an important part of this situation	4.50	6.06	.12
Emotional threats are present	4.26	1.68	.22	Someone needs help	5.21	5.11	.12
The situation is potentially enjoyable	6.13	7.68	.22	Someone is trying to convince you of something	4.86	4.32	.12
The situation is playful	5.29	7.61	.22	People are competing with each other	4.61	4.37	.12
The situation is humorous or potentially humorous	5.42	8.11	.22	The situation is rapidly changing	5.09	4.66	.10
Average positivity:	5.30			Average positivity:	5.12		

Note: Positivity of situational experience items were rated by 39 of our collaborators ($r(28) = -0.83, p = .41$).

was $r = .57$. The correlations between studies increased systematically when using the same measure of personality and increased further when compared across the same countries. Note that there was a good deal of similarity between the findings of the two studies even when different measures of the Big Five, from different sources, were used. This result will be considered further in the Discussion.

In the current study, using the measures reported by Schmitt et al. (2007), Conscientiousness, Neuroticism, and Openness all yielded correlations with RSQ items that were greater than expected by chance in both number and effect size. Using the same source (Schmitt et al., 2007) for country-level measures of personality, the original study only found Neuroticism and Openness to be related to situational experience at a rate greater than chance. In the current study, some of the strongest positive relationships between country-level Neuroticism and reported situational experience were with the items: “the situation could arouse negative emotions” (#68), “someone needs to be taken care of”

(#76), and “emotional threats are present” (#36). Conversely, some of the situational experience items negatively related to Neuroticism are: “ambition can be expressed or demonstrated” (#56), and “someone is complimenting or praising you” (#73). For Openness, some of the strongest positive relationships were with items: “music is an important part of this situations” (#87), and “sexuality is relevant” (#58). Negative correlates include items: “someone is blaming you for something” (#22), and “someone is attempting to dominate or boss you” (#17). The full list of situational correlates of both Neuroticism and Openness across both studies are presented in Tables S11 and S12 of the Supplemental Tables.

Along with passing the randomization test across both studies, Neuroticism and Openness show similarity in their patterns of results. For Neuroticism, a vector correlation of the overall pattern of results between studies showed substantial similarity ($r(67) = .31, p = .01$). This similarity of results increased when the sample was restricted to countries present in both studies ($r(67) = .66, p < .001$). Openness also resulted

in a similar pattern of relationships between situational experience and the country-level personality trait across studies ($r(67) = .34, p = .004$). Once again, this similarity was further bolstered when restricting the samples to only countries (16) present in both studies ($r(67) = .70, p < .001$).

Using our participants' responses to the BFI-2, all country-level personality traits, except for Extraversion, passed our randomization and produced more correlations than would be expected by chance. The individual relationships between situational experience and the respective country-level BFI-2 trait can be found in the Supplemental Tables.

4.4.3 | Demographic country-level variables

The final set of country-level correlations are with demographic measures. These included a measure of economic activity (Gross Domestic Product per-capita) and population density. Although neither of these country-level variables were found to be related to situational experience at a rate greater than chance in the previous study, the current set of analyses allowed for an exploration with a larger number of countries. Both GDP per-capita and population were found to have greater than chance correlations with situational experience. However, the pattern of correlates for both samples were still very similar. The vector correlations for these relationships across studies are reported in Table 8. Because this article focuses on findings that are consistent across studies, these findings will not be considered further here.

5 | DISCUSSION

The current study aimed to follow up on previous findings regarding cross-cultural patterns of situational experience.

TABLE 6 Vector Correlations between Situational Characteristics and Values Across Studies

	56 Countries	20 Countries
Power distance	.30*	.30*
Individualism	.47***	.63***
Uncertainty avoidance	.36**	.42***
Masculinity	.08	.17
Long-term orientation	.30*	.54***
Indulgence	.36**	.48***

Note: Country level value variables are from Hofstede (1983). The vector correlations were completed using $N = 69$ RSQ items that were present in both versions 4.1 and 3.15. For Guillaume et al. (2016) $N = 20$ countries. In the current study $N = 56$ countries (value scores were not available for the remaining 8). 20 countries were present in both samples.

*** $p < .001$; ** $p < .01$; * $p < .05$.

As implied by its title, the original article *The World at 7:00* (Guillaume et al., 2016), examined situations experienced by participants across 20 countries the previous day at 7 p.m. Both replicating and expanding upon this ambitious original endeavor, the current project collected new data from 62 countries, including the 20 included in the previous study. While still investigating cross-cultural relationships using ordinary, everyday situations, the current study asked participants to report on any situation from the previous day that they "remember well." This change in procedure was made in response to the types of situations participants reported in the original study, which included a relatively small range of activities such as eating dinner, studying, or moving from one place to the next.⁸ The change also encouraged participants to describe situations which they report they remember well—the previous restriction of reporting what they were doing at 7 p.m. resulted in a number of participants stating that they did not remember. Despite this procedural difference, the results reported here provide further evidence for (and in a few cases against) the reliability of previously reported findings (Simons, 2014). For an overall summary of the methodological differences across studies, along with a comparison of results, see Table 8.

5.1 | Situational experience across countries

In both the current study and *The World at 7:00*, we observed that average reported situational experience was generally similar when comparing all pairs of countries around the world (average $r = .81$ and $.84$, respectively). The average reported situation in both studies was social and enjoyable. Given what university students are likely doing at 7 p.m., for example, commuting, socializing, or having dinner, this seems a likely scenario. However, participants in the present study were prompted to report any situation the previous day that they remembered well, and some research suggests that individuals are particularly likely to recall negative events (Vaish, Grossmann, & Woodward, 2008). Nonetheless, similar to the original study, the average reported situation around the world was social and positive in nature, giving us added confidence in the reliability of this conclusion.

Additionally, the similarity of each country's situational experience to the world at large was assessed by averaging the profile correlations between it and every other country within its respective sample. Among the 20 countries included in both studies, their degree of similarity to the world at large was highly similar. Indeed, Canada was the most similar in the original study, and one of the four countries tied for similarity in the current project.

While Uganda was not included in the original study, it is worth noting that its average situational experience was an extreme outlier in this sample, with an average correlation with

TABLE 7 Vector correlations of situational correlates from Guillaume et al. (2016)

	BFI-2		Schmitt et al. (2007)	
	62 Countries	16 Countries	43 Countries	16 Countries
Extraversion	.23*	.54***	.41***	.57***
Agreeableness	.09	.27*	.15	.32**
Conscientiousness	.21	.46***	.37**	.51***
Neuroticism	.07	.42***	.31**	.66***
Openness	.34**	.70***	.57***	.63***

Note: The vector correlations were completed using $N = 69$ RSQ items that were present in both versions 4.1 and 3.15. For all analyses from Guillaume et al. (2016) measures of country level personality were found in Schmitt et al. (2007) where $N = 16$ countries. In the current study country level personality traits were computed using BFI-2, where $N = 62$ and 16, respectively, for all and overlapping samples.

*** $p < .001$; ** $p < .01$; * $p < .05$.

other countries of just $r = .18$. It is unclear if this peculiarity was due to a lack of applicability of the scale, misconceptions of item meanings, or other potential issues. For our Ugandan sample these issues are particularly perplexing due to the measure being administered in English, which would seem to avoid potential problems with translations. The issue appears to be unique to the RSQ; other measures did not show any distinctive patterns for the Ugandan sample. Further research is necessary to examine potential issues of administering the RSQ to particular samples.

Similar difficulties arise in interpreting the extent to which the homogeneity of situational experiences replicated across studies. Although the main finding did, indeed, replicate—individuals within countries report experiencing more similar situations than those in different countries—further analyses show that the relative homogeneity of specific countries did not replicate across studies. The countries with the greatest homogeneity of situational experience were the Netherlands in the current study, and Japan in the original study. In the current study, Japan came in 56th out of 62 countries. It is unclear if these differences arose due to different countries being included in the two studies, or are due to extreme cases regressing to the mean (Barnett, Van Der Pols, & Dobson, 2004).

Both studies did find that individuals within countries reported situations more similar to each other than to those of individuals in different countries. As displayed in Table 8, although these differences were small, the average within and between country correlations also lie outside of their respective confidence intervals. This gives further support to the idea that each country has unique characteristics and demands which influence the situations that individuals experience. Future research including objective measures of situations (Blake, Lee, De La Rosa, & Sherman) is necessary to understand if these differences are related to observable differences in environments across countries or to subjective interpretations. Future research may also benefit from having

independent observers rate the situations described or recorded by participants (Rauthmann et al., 2015).

The current study failed to replicate the finding that aspects of situational experience that varied the most across countries were more negative than those that varied less across countries; in fact, the mean difference was in the opposite direction. One potential explanation is the difference in methodology across studies. By being prompted to report any situation that they remember well, participants may have disproportionately reported emotionally valenced situations compared to the original study. However, the authors believe that this result better illustrates the hazards of post-hoc interpretations of surprising findings, even when seemingly plausible grounds can be found for them (see the Discussion in *The World at 7:00*). Replication of intriguing but unanticipated results is critical and, as found in the present study, may lead to disappointing yet informative results.

5.2 | Country-level correlates

Finally, the current study found many more links between situational experience and country-level variables than did the original study. Perhaps due to differences in the number of countries included in the respective samples ($N = 20$ for the original study, $N = 62$ for the current study), the current study identified a greater number of values, personality traits, and demographic country-level variables to be related to situational experience (see Table 8). Particularly for the values dimensions (Hofstede, 1983), while the original article only found greater than chance relationships with Individualism, the current study found relationships with nearly all of the variables (excluding Masculinity). Interestingly, even though fewer values variables passed the significance “bar” in our original study, the patterns of relationships between the two studies still are remarkably similar—a finding which highlights the limitations of evaluating findings solely in terms of

TABLE 8 Comparison of studies

	The world at 7:00	The international situations project
<i>Sample</i>		
Countries	20	62 (20 overlapping)
Languages	14	42
<i>N</i>	5,447 (64% female)	15,318 (70% female)
<i>Measures</i>		
Situations	RSQ 3.15 (89 items)	RSQ 4.1 (90 items, 69 overlapping)
Personality	BFI Country Scores (Source: Schmitt et al., 2007)	BFI Country Scores (Source: Schmitt et al, 2007) BFI-2 Individual Scores
<i>Findings</i>		
Highest/lowest average RSQ	“Situation is basically simple and clear cut.” (7.01)	“Talking is permitted.” (6.56)
Item placement	“P is being abused or victimized.” (2.17)	“You are being abused or victimized.” (2.97)
Correlation of 69 overlapping means across studies: $r(67) = .86, p < .001$		
Similarity of situational	Average $r = .84$	Average $r = .81$
Experience across countries	Relative country similarity across studies $r(18) = .60, p = .005$ (20 overlapping countries)	
	Most Similar: Canada	Most Similar: Canada
	Least Similar: Japan	Least Similar: Japan
Homogeneity of situational	Within Country: $r = .200$ [.183, .216]	Within Country: $r = .166$ [.155, .176]
Experience	Between Country: $r = 0.180$ [.177, 0.182]	Between Country: $r = .139$ [.138, .140]
Negativity of 15 most/least	15 Most Positive Average: 4.00	15 Most Positive Average: 5.30
Variable RSQ items	15 Least Positive Average: 5.70 $t(28) = 2.71, p = .01$	15 Least Positive Average: 5.12 $t(28) = -0.83, p = .41$
Country-level correlates of situational experience:	Values: Individualism	Values: Individualism, Also: Power Distance, Uncertainty, Long-term Orientation, and Indulgence
Variables that passed randomization test $p < .05$	Personality (Schmitt et al., 2007): Neuroticism and Openness Personality (BFI-2): Not Measured Demographic variables: None	Personality (Schmitt et al., 2007): Neuroticism and Openness Also: Conscientiousness Personality (BFI-2): Agreeableness, Conscientiousness, Neuroticism ^a , and Openness Demographic variables: GDP per-capita and Population Density
Vector correlations across studies: (Country-level correlates of situational experience)	All available countries^b:	Overlapping countries only:
Values:	56 with 20 Countries	20 Overlapping Countries Only
Individualism	.47***	.63***
Power Distance	.30*	.30*
Uncertainty Avoidance	.36**	.42***
Long-Term Orientation	.30*	.54***
Indulgence	.36**	.48***
Masculinity	.08	.17
Personality (Schmitt Means):	43 with 16 Countries	16 Overlapping Countries Only
Neuroticism	.31**	.66***

(Continues)

TABLE 8 (Continued)

	The world at 7:00	The international situations project
Openness	.57***	.63***
Conscientiousness	.37**	.51***
Agreeableness	.15	.32**
Extraversion	.41***	.57***
Personality (Schmitt Means and BFI-2):	62 with 16 Countries	16 Overlapping Countries Only
Neuroticism	.07	.42***
Openness	.34**	.70***
Conscientiousness	.21	.46***
Agreeableness	.09	.27*
Extraversion	.23*	.54***
Demographic Variables:	62 with 20 Countries	20 Overlapping Countries Only
GDP per-capita	.11	.27*
Population Density	.38***	.37***

Bold indicate summarizing of analyses or subtitles of the table.

^aThe term Neuroticism is used for the *N* factor (Neuroticism and Negative Emotionality) across Big Five measures for the sake of consistency.

^bNumber of countries vary according to available data for ISP countries.

*** $p < .001$; ** $p < .01$; * $p < .05$.

customary (and arbitrary) significance thresholds. We shall return to this point below.

To examine the relationships between the Big Five personality traits and situational experience at the country level, we measured traits using two different methods. Specifically, when the Big Five personality traits scores were obtained from previous research (Schmitt et al., 2007), the current study found greater than chance relationships between situational experience and Conscientiousness, Neuroticism, and Openness. The original study only found reliable relationships for Neuroticism and Openness. Alternatively, when country-level traits were computed using our own participants' scores on the BFI-2 (Soto & John, 2017), we found more significant relationships than would be expected by chance (Sherman & Funder, 2009), between the RSQ and all traits, except Extraversion.

Overall, when comparing across measures of the Big Five, it is clear that the relationships between personality and situational experience are more similar when the traits are measured with the same instrument (NEO-PI-R versus BFI-2). The similarity of results across studies, regardless of which personality measure was used, also increased noticeably when restricted to countries that are present in both studies. Potential explanations for the differences that arose include the inseparable nature of personality and culture (Markus & Kitayama, 1998) and the variability of social norms (Gelfand et al., 2011; Reno, Cialdini, & Kallgren, 1993). However, it is also important to note that despite the lower correlations when comparing results across different measures and

countries, the correlations were still largely positive and significant, suggesting that meaningful relationships exist beyond these specific concerns.

The final set of analyses explored relationships between situational experience and GDP per-capita and population density. In the current study, both of these variables were correlated with more characteristics of situational experience than would be expected by chance. The previous study found far fewer significant correlations. Despite this difference, further analyses show strong similarity in the pattern of results across studies (see Table 8).

Overall, the results reported in this article should encourage future research to explore the relationships between situational experience and demographic variables, values, and other markers of culture. Of potentially greater importance, given the large number of comparisons conducted in cross-cultural studies, researchers should carefully consider the criteria they use to identify effects as “real.” Using the randomization test in *The World at 7:00* did, indeed, help us identify patterns of effects that arose beyond chance, but it also could have led us to ignore what we now consider to be reliable relationships. That is, with a sample of 20 countries, using the metric of the number of correlations that fall under $p < .05$ or the average effect size of said relationships, the results of our simulations suggested that the relationships were negligible. Yet in many cases the overall pattern of results was consistent with the findings of the second, much larger study. A conclusion to be drawn from this experience is that a sample of “only” 20 countries is far from sufficient to draw

robust conclusions about cross-cultural differences. Larger and more wide-ranging studies are needed.

6 | CONCLUSION: ON “REPLICATION”

In discussions of the “replication crisis” in psychology, various definitions have been offered for terms such as replication, conceptual replication, exact replication, and so on (e.g., Stroebe & Strack, 2014). The present study does not adhere to any of these exact definitions, nor do we believe that any one-size-fits-all definition of “replication” is reasonable. For our analyses, we assessed the reliability of the principal findings in a large, cross-cultural study of situational experience by comparing them as closely as possible to the findings of a separate, even larger cross-cultural study. We repeated the key analyses of the first study as closely as we could with the data from the second study and drew conclusions about the similarity of the two sets of findings that are summarized in Table 8. We believe this is the most informative way to assess the reliability of multiple findings from large, complex data sets.

Our efforts provide further evidence for the importance of investigating situations in cross-cultural research and conducting difficult replications. The consistent increase in similarity of results across studies when cross-cultural comparisons were limited to the same countries highlight the complex interplay of culture and situational experience. While specific relationships between countries may be difficult to capture, the current study garnered further support for general trends in the similarity of situational experience and country-level relationships across the world.

CONFLICT OF INTEREST

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

ORCID

Daniel I. Lee  <https://orcid.org/0000-0003-0789-058X>

Erica Baranski  <https://orcid.org/0000-0002-2853-7841>

ENDNOTES

- ¹ The title referred to the instruction for participants to describe their situational experience at 7:00 p.m. the previous day.
- ² The url used for the study was ispstudy.net (no longer active). Screenshots of the entire survey in English are available at <https://osf.io/yv2nq/>
- ³ For the sake of consistency, the dimensions Neuroticism and Negative Emotionality will both be referred to as Neuroticism. Also, Openness and Open-Mindedness will be referred to as Openness.

- ⁴ The country-level values data are publicly available at <https://www.hofstede-insights.com/product/compare-countries/>.
- ⁵ However, the *df* for these analyses is a complex matter because the correlations are not independent of each other (Sherman & Funder, 2009).
- ⁶ As mentioned in the previous footnote, although for this correlation one could calculate $df = 67$, $p < .001$, the degrees of freedom and therefore *p* level are highly imprecise because the ipsatively-rated *q*-items are intercorrelated in complex ways.
- ⁷ The “number of significant correlations” is a cruder and more arbitrary measure of association than is the average absolute value of the correlations, but the former number is more familiar and perhaps easier to understand (Sherman & Funder, 2009).
- ⁸ Even with our efforts, many of our current participants still reported similar mundane activities as memorable events from the previous day.

REFERENCES

- Almagor, M., Tellegen, A., & Waller, N. G. (1995). The Big Seven model: A cross-cultural replication and further exploration of the basic dimensions of natural language trait descriptors. *Journal of Personality and Social Psychology*, *69*, 300–307. <https://doi.org/10.1037/0022-3514.69.2.300>
- Barnett, A. G., Van Der Pols, J. C., & Dobson, A. J. (2004). Regression to the mean: What it is and how to deal with it. *International Journal of Epidemiology*, *34*, 215–220. <https://doi.org/10.1093/ije/dyh299>
- Baumeister, R. F. (2016). Charting the future of social psychology on stormy seas: Winners, losers, and recommendations. *Journal of Experimental Social Psychology*, *66*, 153–158. <https://doi.org/10.1016/j.jesp.2016.02.003>
- Baumeister, R. F., Vohs, K. D., & Funder, D. C. (2007). Psychology as the science of self-reports and finger movements: Whatever happened to actual behavior? *Perspectives on Psychological Science*, *2*, 396–403. <https://doi.org/10.1111/j.1745-6916.2007.00051.x>
- Bem, D. J., & Allen, A. (1974). On predicting some of the people some of the time: The search for cross-situational consistencies in behavior. *Psychological Review*, *81*, 506–552. <https://doi.org/10.1037/h0037130>
- Blake, A. B., Lee, D. I., De La Rosa, R., & Sherman, R. A. Wearable cameras, machine vision, and big data analytics: Insight into people and the places they go. In S. E. Woo (Eds.), *Big data methods for psychological research: New horizons and challenges*.
- Block, J. (1977). Advancing the psychology of personality: Paradigmatic shift or improving the quality of research? In D. Magnusson & N. S. Endler (Eds.), *Personality at the crossroads: Current issues in interactional psychology* (pp. 37–63). Hillsdale, NJ: Earlbaum.
- Bowers, K. S. (1973). Situationism in psychology: An analysis and a critique. *Psychological Review*, *80*, 307–336. <https://doi.org/10.1037/h0035592>
- Button, K. S., Ioannidis, J. P., Mokrysz, C., Nosek, B. A., Flint, J., Robinson, E. S., & Munafò, M. R. (2013). Power failure: Why small sample size undermines the reliability of neuroscience. *Nature Reviews Neuroscience*, *14*, 365–376. <https://doi.org/10.1038/nrn3475>
- Camerer, C. F., Dreber, A., Forsell, E., Ho, T.-H., Huber, J., Johannesson, M., ... Wu, H. (2016). Evaluating replicability of laboratory

- experiments in economics. *Science*, 351, 1433–1436. <https://doi.org/10.1126/science.aaf0918>
- Central Intelligence Agency. (2016). *The world factbook*. Retrieved from <https://www.cia.gov/library/publications/the-world-factbook/rankorder/2004rank.html>
- Cova, F., Strickland, B., Abatista, A., Allard, A., Andow, J., & Attie, M. ... Zhou, X. Estimating the reproducibility of experimental philosophy. *Review of Philosophy and Psychology*.
- Epstein, S. (1979). The stability of behavior: I. On predicting most of the people much of the time. *Journal of Personality and Social Psychology*, 37, 1097–1126.
- Funder, D. C.. (2016). Taking situations seriously: The situation construal model and the Riverside Situational Q-Sort. *Current Directions in Psychological Science*, 25, 203–208. <https://doi.org/10.1177/0963721416635552>
- Funder, D. C., & Guillaume, E.. (2013). *Revised RSQ for international research (version 3.15)* (unpublished manuscript). Riverside, NJ: University of California.
- Gardiner, G., Sauerberger, K., Members of the International Situations Project, & Funder, D. C.. (2019). Towards meaningful comparisons of personality in large-scale cross-cultural studies. In A. Realo (Ed.), *In praise of an inquisitive mind: A Festschrift in honor of Jüri Allik on the occasion of his 70th birthday* (pp. 123–139). Tartu, Estonia: University of Estonia Press.
- Gelfand, M. J., Raver, J. L., Nishii, L., Leslie, L. M., Lun, J., Lim, B. C., ... Aycan, Z. (2011). Differences between tight and loose countries: A 33-nation study. *Science*, 332, 1100–1104. [1.1126/science.1197754](https://doi.org/10.1126/science.1197754)
- Guillaume, E., Baranski, E., Todd, E., Bastian, B., Bronin, I., Ivanova, C., ... Funder, D. C.. (2016). The World at 7:00: Comparing the experience of situations across 20 countries. *Journal of Personality*, 84, 493–509. <https://doi.org/10.1111/jopy.12176>
- Hofstede, G. (1983). National cultures in four dimensions: A research-based theory of cultural differences among nations. *International Studies of Management and Organizations*, 13, 46–74. <https://doi.org/10.1080/00208825.1983.11656358>
- Kenrick, D. T., & Funder, D. C.. (1988). Profiting from controversy: Lessons from the person-situation debate. *American Psychologist*, 43, 23–34. <https://doi.org/10.1037/0003-066X.43.1.23>
- Lewin, K. (1951). *Field theory in social science*. New York, NY: Harper.
- Markus, H. R., & Kitayama, S. (1998). The cultural psychology of personality. *Journal of Cross-Cultural Psychology*, 29, 63–87. <https://doi.org/10.1177/0022022198291004>
- Mischel, W. (1968). Consistency and specificity in behavior. In W. Mischel (Ed.), *Personality and assessment* (pp. 13–39). New York, NY: Wiley.
- Morse, P. J., Neel, R., Todd, E., & Funder, D. C.. (2015). Renovating situational taxonomies: Exploring the construction and content of fundamental motive situation types. *Journal of Personality*, 83, 389–403.
- Open Science Collaboration. (2015). Estimating the reproducibility of psychological science. *Science*, 349, aac4716.
- Ozer, D. J., & Benet-Martinez, V. (2006). Personality and the prediction of consequential outcomes. *Annual Review of Psychology*, 57, 401–421. <https://doi.org/10.1146/annurev.psych.57.102904.190127>
- Parrigon, S., Woo, S. E., Tay, L., & Wang, T. (2017). CAPTION-ing the situation: A lexically-derived taxonomy of psychological situation characteristics. *Journal of Personality and Social Psychology*, 112, 642–681. <https://doi.org/10.1037/pspp0000111>
- R Core Team. (2019). *R: A language and environment for statistical computing*. Vienna, Austria: R Foundation for Statistical Computing. Retrieved from <https://www.R-project.org/>
- Rauthmann, J. F., & Sherman, R. A. (2018). The descripton of situations: Towards replicable domains of psychological situation characteristics. *Journal of Personality and Social Psychology*, 114, 482–488.
- Rauthmann, J. F., Sherman, R. A., & Funder, D. C.. (2015). Principles of situation research: Towards a better understanding of psychological situations. *European Journal of Personality*, 29, 363–381.
- Reno, R. R., Cialdini, R. B., & Kallgren, C. A. (1993). The transsituational influence of social norms. *Journal of Personality and Social Psychology*, 64, 104–112. <https://doi.org/10.1037/0022-3514.64.1.104>
- Revelle, W. (2018). *psych: Procedures for personality and psychological research*. Evanston, IL: Northwestern University. Retrieved from <https://CRAN.R-project.org/package=psychVersion=1.8.4>
- Saucier, G., & Ostendorf, F. (1999). Hierarchical subcomponents of the Big Five personality factors: A cross-language replication. *Journal of Personality and Social Psychology*, 76, 613. <https://doi.org/10.1037/0022-3514.76.4.613>
- Schmitt, D. P., Allik, J., McCrae, R. R., & Benet-Martínez, V. (2007). The geographic distribution of big five personality traits: Patterns and profiles of human self-description across 56 nations. *Journal of Cross-Cultural Psychology*, 38(2), 173–212.
- Sherman, R. A., & Funder, D. C.. (2009). Evaluating correlations in studies of personality and behavior: Beyond the number of significant findings to be expected by chance. *Journal of Research in Personality*, 99, 330–343. <https://doi.org/10.1016/j.jrp.2009.05.010>
- Sherman, R. A., Nave, C. S., & Funder, D. C.. (2013). Situational construal is related to personality and gender. *Journal of Research in Personality*, 47, 1–14. <https://doi.org/10.1016/j.jrp.2012.10.008>
- Sherman, R. A., Rauthmann, J. F., Brown, N. A., Serfass, D. G., & Jones, A. B. (2015). The independent effects of personality and situations on real-time expressions of behavior and emotion. *Journal of Personality and Social Psychology*, 109, 872–888. <https://doi.org/10.1037/pspp0000036>
- Simons, D. J. (2014). The value of direct replication. *Perspectives on Psychological Science*, 9, 76–78. <https://doi.org/10.1177/1745691613514755>
- Simmons, J. P., Nelson, L. D., & Simonsohn, U. (2011). False-positive psychology: Undisclosed flexibility in data collection and analysis allows presenting anything as significant. *Psychological Science*, 22(11), 1359–1366.
- Soto, C. J. (2019). How Replicable Are Links Between Personality Traits and Consequential Life Outcomes? The Life Outcomes of Personality Replication Project. *Psychological Science*, 30, (5), 711–727. <http://dx.doi.org/10.1177/0956797619831612>
- Soto, C. J., & John, O. P. (2017). The next Big Five Inventory (BFI-2): Developing and assessing a hierarchical model with 15 facets to enhance bandwidth, fidelity, and predictive power. *Journal of Personality and Social Psychology*, 113, 117–143. <https://doi.org/10.1037/pspp0000096>
- Stroebe, W., & Strack, F. (2014). The alleged crisis and the illusion of exact replication. *Perspectives on Psychological Science*, 9, 59–71. <https://doi.org/10.1177/1745691613514450>
- Vaish, A., Grossmann, T., & Woodward, A. (2008). Not all emotions are created equal: The negativity bias in social-emotional development. *Psychological Bulletin*, 134, 383–403. <https://doi.org/10.1037/0033-2909.134.3.383>

- Wagerman, S. A., & Funder, D. C.. (2009). Situations. In P. J. Corr & G. Matthews (Eds.), *Cambridge handbook of personality psychology* (pp. 27–42). Cambridge, England: Cambridge University Press.
- Wiggins, J. S. (1973). *Personality and prediction: Principles of personality assessment*, Reading, MA: . Addison-Wesley Pub. Co.
- World Bank, World Development Indicators. (2016). Population density (people per sq. km of land area) [Data file]. Retrieved from <https://data.worldbank.org/indicator/EN.POP.DNST>

How to cite this article: Lee DI, Gardiner G, Baranski E, Members of the International Situations Project, Funder DC. Situational experience around the world: A replication and extension in 62 countries. *J Pers.* 2020;88:1091–1110. <https://doi.org/10.1111/jopy.12558>