Comparisons of Daily Behavior across 21 Countries

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Abstract

While a large body of research has investigated cultural differences in behavior, the typical study assesses a single behavioral outcome, in a single context, compared across two countries. The current study compared a broad array of behaviors across 21 countries (N=5,522). Participants described their behavior at 7:00 p.m. the previous evening using the 68 items of the Riverside Behavioral Q-sort (RBQ). Correlations between average patterns of behavior in each country ranged from r=.69 to r=.97 and, in general, described a positive and relaxed activity. The most similar patterns were USA/Canada and least similar were Japan/UAE. Similarities in behavior within countries were largest in Spain and smallest in the UAE. Further analyses correlated average RBQ item placements in each country with, among others, country-level value dimensions, personality traits, self-esteem levels, economic output, and population. Extraversion, openness, neuroticism, conscientiousness, self-esteem, happiness, and tolerant attitudes yielded more significant correlations than expected by chance.

Comparisons of Daily Behavior across 21 Countries

When we wonder how people around the world are similar and different, we are typically interested in what they value, how they think, and what they do. While the former two are relevant to differences in internal psychological processes, the latter speaks to the observable cultural environment in which daily life is lived. Investigation of daily life around the world by anthropologists and cross-cultural psychologists is not a new enterprise, however, researchers in these two disciplines approach this task differently. Anthropologists generally emphasize qualitative descriptions and avoid or completely eschew cross-cultural comparisons (Frake, 1980; Shweder, 1991), whereas cross-cultural psychologists typically assess a few dimensions of cultural variation (or even one) and rarely gather detailed information about any single culture. The present investigation seeks to bridge the gap between these approaches, by providing a snapshot of a wide array of individuals' behaviors in each of nearly two dozen countries on four continents.

Background

Over the last 40 years, the field of cross-cultural psychology has made impressive strides in understanding cross-national variation in a host of phenomena, including values (Bond & Smith, 1996; Earley, 1994; Hofstede, 1980; Hofstede & McCrae, 2004; Morling & Lamoreaux, 2008; Myers & Diener, 1995; Oyserman, 1993), personality (Allik & McCrae, 2004; Schmitt, Allik, McCrae, & Benet-Martínez , 2007), self-construal (Cross, 1995; Heine, 2001; Markus & Kitayama, 1991; Singelis & Sharkey, 1995), situational experience (Funder, Guillaume, Kumagai, Kawamoto & Sato, 2012; Guillaume et al., 2016), self-esteem (Bleidorn et al.; 2015), well-being (Diener, 2000), motivation (Duda & Allison, 1989; McInerney & Ali, 2006), and intelligence (Furnham & Fong, 2000). Cross-national investigations of behavior have not been

quite so comprehensive. Indeed, when cross-cultural researchers turn their attention to behavior, those interested in applied differences between countries often limit their investigation to assessing a single behavior, such as timeliness or aggression (Catalá-Miñana, Walker, Bowen, & Lila, 2014; Heine, Buchtel, & Norenzayan, 2008), in a single context, such as the workplace or the classroom (Lievens, Harris, Van Keer, & Bisqueret, 2003; Park & Huebner, 2005)[1]. Moreover, whether they focus on values, cognition, or behavior, studies in cross-cultural psychology usually compare a relatively small number of countries – often as few as two – along a limited set of constructs. In particular, many pioneering studies have focused on comparisons between the United States and Japan (Funder, Guillaume, Kumagai, Kawamoto & Sato, 2012; Markus & Kitayama, 1991; Tsujioka & Cattell, 1965; Yamaguchi, Kuhlman, & Sugimori, 1995) and have been organized around the value dichotomy of individualism-collectivism (Benet-Martínez & Karakitapoglu- Aygün, 2003; Hofstede, 1980, 2001; Hofstede, Hofstede, & Minkov, 1991; Oyserman & Lee; 2008; Schwartz, 1990).

While such studies are valuable, they are limited in the information they provide about *broad* behavioral similarities and differences around the world. The present study aims to complement prior research by assessing and comparing an unusually wide array of behaviors across an unusually large number of countries. Specifically, we asked participants from 21 countries to rate the degree to which they performed each of the 68 diverse behaviors encapsulated in the Riverside Behavioral Q-sort (RBQ; Funder, Furr & Colvin, 2000) at 7:00 p.m. the previous night. We then evaluated the degree to which the enactment of different behaviors was, on average, associated with various cultural properties of the countries involved

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[1] For exceptions, see Gelfand et al (2011) and Realo, Linnamägi, & Gelfand (2015)

in the study, including average personality trait levels, economic output, population and individual differences including self-esteem, happiness and tolerant attitudes, to name a few.

Our investigation has three concrete goals: It seeks to examine (a) similarities and differences in *average* behavior across countries, (b) the degree to which the behavior of different individuals is similar within compared to across countries, and (c) how the average expression of particular behaviors is associated with other aspects of cultural variation. These goals stem from the overriding motivation to capture and compare how individuals across the world live their lives. Because life is lived through one's actions moment by moment, assessing a wide array of behaviors in a single moment in time provides a glimpse into individuals' lives and the cultural environment they create through what they do. Thus, the current investigation increases our understanding of daily life around the world both at the level of the individual and the country.

The Present Study

The Riverside-Behavioral Q-sort

The present research seeks to assess behavior comprehensively across countries through the first cross-cultural use of the Riverside Behavioral Q-sort (RBQ; Funder, Furr & Colvin, 2000). The RBQ is an assessment tool in which participants can indicate the extent to which they enacted certain behaviors (e.g., smiles frequently) on a given occasion, by sorting each of 68 descriptive items into a quasi-normal, forced distribution of 9 categories ranging from *highly characteristic* (Category 9) to *highly uncharacteristic* (Category 1). The RBQ may be particularly appropriate for cross-cultural research because it alleviates or even eliminates some of the measurement biases that have long been of concern when comparing psychological phenomena across countries (Heine, Lehman, Peng & Greenholtz, 2002; Ross & Mirowsky,

1984). Specifically, because participants are forced to sort a limited number of behaviors into each rating category, the possible influences of extreme response sets and acquiescence are eliminated. The forced choice aspect of Q-sorts may also lessen the reference group effect[2] because each participant rates each behavior in terms of how characteristic it is of his or her behavior compared to the other 67 items in the set – not whether it is more characteristic of his or her behavior compared to the behavior of other people in the local culture. The data are thus ipsatized within persons and yield an entire behavioral profile (made up of 68 behaviors) for each individual as the unit of analysis (Ozer, 1993).

Despite the potential advantages of Q-sort methodology for cross-cultural psychology, the technique can be difficult to implement, especially across many languages and cultural contexts. This difficulty may explain why it has not been employed in an international context before. Recently, however, an online version of the RBQ and other Q-sort assessments was developed, enabling their worldwide dissemination (see Guillaume et al., 2016).

Research Goals

The current project utilizes the RBQ to explore the similarities and differences in behavior across countries as well as the distinctive qualities of each country's daily behaviors. More specifically, the present research has four goals:

(1) Estimate similarities and differences in behaviors across 21 countries. Here, we aim to understand which countries are, on average and overall, most and least behaviorally similar to one another as well as what people around the world are doing in general at the same time of day.

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[2] The reference group effect is the tendency of people to make ratings in comparison to their local cultural norms, which could impede the detection of differences between cultures.

(2) Examine variation in individuals' behavior both between and within countries. We

seek to discover which countries are the most and least behaviorally homogeneous and

how this within-country variation compares to the variation in behavior between

countries.

(3) Associate country-level average behavior with other country-level variables (i.e.,

cultural values, personality, self-esteem, and population size).

(4) Interpret the behavioral manifestation of various cultural and personality dimensions

by considering the customs and social norms of particularly distinct countries.

The research project described here aimed to gather an unprecedented body of descriptive

data. It was exploratory; thus, we did not have pre-existing hypotheses that we set out to confirm.

While there is a general theoretical basis for expecting geographic variation in behavior (e.g.,

biological and social differences across individuals and physical differences across

environments; see Rentfrow et al., 2008), we did not have any a priori hypotheses on what these

would be. Likewise, we did not include or omit particular countries on the basis of hypothesized

geographic variation. Venturing into a research territory not widely explored by previous studies,

we simply aimed to explore similarities and differences in a variety of behaviors across many

countries as a foundation for further, empirically-based theory building (see Haig, 2005).

Method

Participants

We sought to collect as many participants as possible in as many countries as possible.

This effort led to data collected in 21 countries with a total $N = 5,522$ (female = 3,523, male =

1,999; mean age = 22 years, $SD = 4.25$, range: 16-30 years). All participants were members of

college communities recruited by research collaborators in each country. Table 1 provides

Table 1

Samples from 21 countries.

Country	University	Compensation	*N*	Female	Male	Mean Age (*SD*)
Australia	University of Queensland	Course credit	141	109	32	20 (3.85)
Austria	University of Innsbruck	Volunteer	87	71	16	25 (5.12)
Canada	University of British Columbia	Course credit	191	126	65	21 (4.40)
China	Several universities	$0.67 USD per person	1565	854	711	22 (2.22)
Czech Republic	7 Universities	Volunteer	220	159	61	28 (5.48)
Denmark	University of Copenhagen	Volunteer	118	96	22	23 (4.76)
Estonia	17 colleges and universities	Volunteer	314	251	63	26 (7.42)
Germany	Humboldt University of Berlin	Course Credit	70	55	15	27 (7.66)
Italy	University of Milano-Bicocca	Course credit	144	75	69	23 (4.58)
Japan	Ritsumeikan University	Volunteer	227	107	120	21 (1.05)
Netherlands	Tilburg University; Utrecht University	Course credit	258	220	38	20 (2.30)
Poland	Kazimierz Wielki University	Volunteer	97	73	24	24 (5.07)
Russia	Ural Federal University	Course credit	101	80	21	22 (5.59)
Singapore	National University of Singapore	Course credit	158	109	49	21 (2.05)
Slovakia	Comenius University; University of Trnava; Catholic University	Volunteer	98	86	12	22 (3.00)
South Africa	University of Cape Town	Volunteer/lottery	114	62	52	23 (4.62)
South Korea	Chonnam National University	Course credit	103	69	34	22 (3.82)
Spain	University of Barcelona	Volunteer	108	78	30	22 (6.82)
UAE	American University of Sharjah	Course credit	83	41	42	20 (1.67)
UK	University of Edinburgh	Course credit	107	75	32	21 (4.72)
US	UC Riverside	Course credit	1218	727	491	20 (2.27)

Note. Countries including samples from multiple universities or colleges: China, Estonia, Slovakia, Czech Republic. *Total N = 5522; Females: 3523; Males: 1999*

demographic information and recruitment procedures for each of the data collection sites.

Procedure

Collaborators in each country directed their participants to our custom-made website

(www.internationalsituationsproject.com), where participants were prompted to select their

language of assessment by clicking on their respective country's flag and then to enter their

assigned study and participant ID numbers. Participants then provided demographic information

and described what they were doing at 7:00 p.m. the evening before. Specifically, they were

asked to write a brief description of: (1) Who they were with, (2) where they were, and (3) what

they were doing. We chose 7:00 p.m. as the time of assessment under the assumption that people

are typically not at work or in school and are therefore more unconstrained to do what they wish

relative to other hours of the day. We expected this tendency to enhance situational and

behavioral variation. After providing their open-ended descriptions, participants quantified their

situational experience using the RSQ and, subsequently, their behaviors in this situation using

the RBQ. Analyses of the RSQ data, from 20 of the 21 countries in the present study, were

previously reported by Guillaume et al. (2016)[3]. All the analyses in the present study are new.

Measure

The RBQ was translated and independently back-translated in collaboration with our

international collaborators, who are all psychologists with university faculty appointments. We

worked with these collaborators to resolve any discrepancies between the original and back-

translated English versions. After our collaborators translated the RBQ items into their respective

languages, independent native speakers back-translated the items into English. We then reviewed

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[3] Data from the United Arab Emirates were not available at the time the study by Guillaume et al. (2016) was
completed.