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We Made History: Citizens of 35 Countries Overestimate Their Nation's Role in World History

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Following a survey asking many questions about world history, 6185 students from 35 countries were asked, "What contribution do you think the country you are living in has made to world history?" They provided an estimate from 0 to 100%, where 0% indicated that the country made no contribution to world history and 100% indicated that all contributions came from the country. U.S. students provided an estimate of 30%, quite high in some regards, but modest compared to other countries (e.g., 39% by Malaysians). Country-level estimates varied widely, ranging from 11% (Switzerland) to 61% (Russia). The total estimate (summing for all countries) was 1156%. We argue that students' exaggerated estimates provide evidence for national narcissism and may be caused by several mechanisms, such as the availability heuristic—when students think about world history, they mostly think about the history of their country and thus assume their country must be important.

Keywords: Availability heuristic, Collective memory, Collective narcissism, Egocentrism, Myside bias, National narcissism

General Audience Summary

One point of identity for every person in the world is their country of residence. People are typically proud of their home country, and they tend to interpret events through the lens of people from their own nation. This study tries to capture differences among nations in egocentric biases. As part of a survey on world history we

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asked 6185 students from 35 counties, "What contribution do you think the country you are living in has made to world history?" We predicted that students in the United States would estimate high percentages, because rhetoric about "American exceptionalism" is so frequent among U.S. leaders and in public discourse. Indeed, Americans did provide a high estimate, 30%. However, students from other counties provided much higher estimates; Russians, for example, estimated that their country was responsible for 61% of world history. The total percentage for the 35 countries in our sample was a remarkable 1156% (all the more remarkable because we did not test students in about 165 other countries). Our study provides a measure of national narcissism, and reveals that national narcissism differs widely across countries. Such egocentrism may help account for difficulties in solving the world's problems due to intractable differences in perspective.

In a 2009 interview, President Barack Obama said, "I believe in American exceptionalism, just as I suspect that the Brits believe in British exceptionalism and the Greeks believe in Greek exceptionalism" (Edwards, 2012, p. 352). While on the surface this claim might seem uncontroversial—that people from around the world feel patriotic toward their home country—American conservative pundits and politicians were incensed at Obama's statement, arguing that the concept of "exceptionalism" belongs to America alone (Edwards, 2012). The idea of American exceptionalism entered U.S. political discourse in the 20th century beginning with a speech by John F. Kennedy in 1961. He invoked John Winthrop's "City on a Hill" speech and suggested that the United States has a unique mission of being a beacon to other nations. Since then, American political and religious leaders from a variety of backgrounds and political orientations have often equated American exceptionalism with the idea that the United States is the greatest country in the history of the world (e.g., Gingrich, 2011; for reviews and criticisms, see Gamble, 2012; Van Engen, 2013).

Such a perspective, however, appears egocentric or narcissistic from an international perspective. In 2013, Obama stated that a particular U.S. policy was "what makes America different. It's what makes us exceptional (Putin, 2013, para. 18)." Vladimir Putin (2013) responded saying that such statements are "extremely dangerous" for international relations. Putin's point has some empirical grounding: Social psychology research indicates that narcissistic individuals receive short-term benefits in negotiations, but at the cost of a loss of trust with their negotiating partner (Park, Ferrero, Colvin, & Carney, 2013).

The current project aims to measure national narcissism, at least indirectly, by asking how much people from around the world think that their home country has contributed to world history. Are Americans unique in claiming exceptionalism or do other countries overestimate their contributions as well? Our prediction—that people will overestimate how much their country has contributed—is partially drawn from work on "collective narcissism," the phenomenon of people showing excessive pride in one's own group. de Zavala, Cichocka, Eidelson, and Jayawickreme (2009) defined collective narcissism as "an ingroup identification tied to an emotional investment in an unrealistic belief about the unparalleled greatness of an ingroup" (p. 1074). Similarly, Bizumic and Duckitt (2008) suggested that ethnocentrism (group self-importance and group-centeredness) can be viewed as group narcissism. Extending collective narcissism to a national scale, people might overestimate the political, economic, or cultural influence that their country has had in shaping current or past events, which may lead to misunderstandings and conflicts with people from other countries who do not share similar views.

Research has shown that individuals tend to show egocentric tendencies in the context of smaller groups. Ross and Sicoly (1979) asked husbands and wives to each estimate their own and their spouse's contributions to joint activities, such as cleaning dishes and shopping for groceries, and showed that couples tended to overestimate their contributions to the joint activities. Their research showed an egocentric bias in estimating remembered contributions to performance on a group task. This bias has been demonstrated in other social contexts using similar designs (e.g., Epley & Caruso, 2004; Schroeder, Caruso, & Epley, 2016; Tanaka, 1993), and in a variety of other domains (e.g., Gilovich, Medvec, & Savitsky, 2000; Ross, Greene, & House, 1977). Egocentric bias is also one of the "seven sins of memory" (Schacter, 2002).

Does egocentric bias observed in smaller groups extend to individuals' assessments of their own country's impact on shaping the course of world history? We asked citizens from 35 countries, "What contribution do you think the country you are living in has made to world history?" by providing an estimate from 0 to 100%, whereby 0% indicates that the country made no contribution to world history, and 100% indicates that all contributions came from the country. Obviously, this question has no accurate answer for people from any country; it would be impossible to objectively calculate the contribution that a country has made to world history. However, given that there are 193 countries currently represented in the United Nations and that their combined contribution should sum to 100%, the average estimate for most countries should be very small, with some possible exceptions. Yet our question does serve as a sort of projective test, allowing us to see how people from around the world view the importance of their own nation.

Our assessment of contributions to world history was part of a larger survey about perceptions of world history (see Liu et al., 2012; Hanke et al., 2015; Páez, Liu, Bobowik, Basabe, & Hanke, 2016). In the survey, people were asked about their knowledge of important historical figures and events from around the world. The list of 40 people and events was distributed throughout the world, with no one country dominant (see Tables 1 and 2). Our central question was placed near the end of the survey. Given that we tested university student samples in each country, we may assume that their education about history is more recent (and probably more extensive) than that of the population at large.

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Table 1
List of 40 Historical Events Presented in The World History and Identity Survey (Liu et al., 2012; Hanke et al., 2015) Numbered According to their Order of Presentation in the Survey

1. Islam-Christian Wars/Crusades (11th–14th c)	21. Women's Emancipation & Suffrage
2. Abolition of Slavery (19th c)	22. Holocaust
3. Sept 11 Bombing	23. Russian Revolution (1917)
4. Iraq War (2005)	24. Fall of Berlin Wall/End of USSR
5. Discovery of Americas	25. Cultural Revolution (China)
6. Renaissance (15th c)	26. "Man on the Moon"/Space Travel
7. 30 Years War (17th c)	27. Decolonization
8. French Revolution	28. Great Depression (1930s)
9. American (War of) Independence	29. Rise of European Union
10. Industrial Revolution	30. Global Warming
11. American Civil War	31. Foundation of United Nations
12. Terrorism (terror bombings)	32. Foundation of Major Religions
13. Opium War (China, 19th c)	33. Vietnam War
14. World War I	34. Invention of Printing Press
15. World War II	35. Israeli-Palestinian Conflict
16. Creation/Evolution of Humanity	36. Age of Discovery/Colonization
17. Rise of Ancient Civilizations	37. Rise of Islamic Civilization
18. Sino-Japanese War (1930s)	38. Partition of India and Pakistan
19. Atomic Bombings	39. Asian Tsunami (2004)
20. Cold War	40. Digital Age (Computers, Internet)

Table 2
List of 40 Historical Figures from The World History and Identity Survey (Liu et al., 2012; Hanke et al., 2015) Numbered According to their Order of Presentation in the Survey

1. Mao	21. Saddam Hussein
2. Stalin	22. Pope John Paul II
3. Hitler	23. Columbus
4. Napoleon	24. Jesus Christ
5. Genghis Khan	25. Buddha
6. Saladin	26. Mohammed
7. Charlemagne	27. Confucius
8. Alexander the Great	28. Isaac Newton
9. The Qin Emperor	29. Karl Marx
10. George Washington	30. Margaret Thatcher
11. Abraham Lincoln	31. Lenin
12. Franklin D. Roosevelt	32. J.F. Kennedy
13. George Bush Jr	33. Thomas Edison
14. Osama bin Laden	34. Deng Xiaoping
15. Nelson Mandela	35. Princess Diana
16. Albert Einstein	36. Che Guevara
17. Mahatma Gandhi	37. Winston Churchill
18. Martin Luther King	38. Sun Yatsen
19. Mother Theresa	39. Gorbachev
20. Martin Luther	40. Bill Gates

Our primary research questions were: How much do individuals from 35 countries believe that their country contributed to world history? How do these estimates relate to national identity (i.e., national pride and loyalty)? High estimates, and significant, positive correlations between estimated contributions and national identity would be indicative of national narcissism.

Method

Participants

The participants were 6831 university students from 35 countries (Argentina, Australia, Austria, Belgium, Brazil, Bulgaria, Canada, China, Colombia, Fiji, Germany, Hong Kong,[1] Hungary, India, Indonesia, Italy, Japan, Malaysia, Mexico, Netherlands, New Zealand, Norway, Pakistan, Peru, Philippines, Portugal, Russia, Singapore, Spain, South Korea, Switzerland, Taiwan, Tunisia, United Kingdom, and USA) participated in the study. Participants were all citizens of their respective countries and were recruited from a single university in each country. Cases with more than 33% missing values (175 cases); with a standard deviation across all relevant items of 0, indicating no variability in responses (124 cases); or with missing values for the central question of this study about percentage contributions to world history (347 cases) were excluded from the overall sample. Thus, the final sample included 6185 university students (60.2% female, 37.4% male, 2.2% did not indicate their gender). Participants' ages ranged from 16 to 80 years of age, but the mean was 21.7 years ($SD = 5.2$). A majority of participants majored in the social sciences in their respective universities (31.4% were psychology majors, and 35.5% in other social sciences), followed by science and medicine (10.1%). Only 1.0% of participants majored in history. Table 3 provides an overview of students' characteristics.

Materials and Procedure

The World History and Identity Survey (Liu et al., 2012; Hanke et al., 2015) consisted of 153 items asking questions about the importance and evaluation of 40 historical events and figures, conceptions about the overall course of world history and its main message, as well as questions about participants' demographic characteristics and attitudes on a variety of contemporary issues. For example, respondents were asked to rate numerous events (e.g., the Industrial Revolution, World War I, the Opium War (in 19th century China) and people (e.g., Genghis Khan, Charlemagne, Jesus Christ) on seven-point scales measuring intensity of affect (from *extremely negative* to *extremely positive*) and importance (*extremely important* to *not at all important*).

The list of events and people was constructed in the following way. First, any historical event or figure nominated by two or more of the 24 countries surveyed previously using open-ended measures as among the top-10 most important events or figures in world history were included (see Liu et al., 2005, 2009). We then added founders of world religions and philosophies, many of whom pre-dated the 1000-year limit for nominations of figures on the previous open-ended surveys; selected items from the distant past that were arguably the most important events or figures in their respective time periods (e.g., "30 Years War" because it was the most important European event of the 1600s,

[1] Data from Hong Kong were analyzed and reported separately from those of mainland China due to its having autonomous political and economic systems, as well as a distinct history and culture as a former British colony.

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Table 3
Description of Sample and Mean and Median Estimates of the Contribution the Country in which Participants are Living has Made to World History (0–100%, with 0% = No Contribution, and 100% = All Contributions Come from the Participant's Country) as well the Correlations Between Percent Contributions to World History and National Identity (NI) by Country

Country	University	*N*	Gender		Age		% Contributions			NI	
			Female	Male	*M*	*SD*	*M*	*95% CI*	Median	*r*	*95% CI*
Russia	Saratov State Socio-Economic University	214	101	113	21.0	3.6	60.8	[57.4, 64.2]	64.0	.25**	[.13, .37]
UK	Brunel University	92	42	50	22.8	8.2	54.6	[49.4, 59.8]	60.0	.06	[−.14, .26]
India	Logistics	154	71	83	21.3	2.9	53.9	[49.7, 58.1]	50.0	.10	[−.05, .25]
Hong Kong	City University of Hong Kong	140	89	49	–	–	51.0	[46.5, 55.5]	50.0	.19*	[.03, .35]
Malaysia	University of Malaya-Kuala Lumpur	198	159	39	23.6	4.4	48.7	[44.7, 52.7]	50.0	.13	[−.01, .27]
Italy	University of Rome	129	72	57	24.4	8.0	44.2	[40.0, 48.4]	40.0	.28**	[.13, .43]
China	Sun-Yat-Sen University	185	103	82	19.8	1.2	41.9	[38.7, 45.1]	40.0	.00	[−.15, .15]
Philippines	University of the Phillipines-Diliman	330	218	112	19.0	1.6	41.2	[38.1, 44.3]	40.0	.20**	[.10, .30]
Brazil	Tiradentes University	190	136	54	23.6	6.7	40.7	[37.2, 44.2]	40.0	.14	[.00, .28]
Canada	University of Manitoba	189	130	58	19.5	4.7	40.2	[36.4, 44.0]	40.0	.17*	[.03, .31]
Indonesia	University of Indonesia	182	83	99	20.8	2.4	39.4	[35.6, 43.2]	40.0	.23**	[.10, .36]
Portugal	University of Minho	191	130	61	19.8	2.6	37.9	[34.7, 41.1]	38.0	.13	[−.01, .27]
Fiji	University of the South	159	84	75	22.3	3.1	35.8	[30.3, 41.3]	30.0	.15	[−.03, .33]
Colombia	Universidad Católica de Pereira (Estado de Risaralda)	159	78	81	21.3	2.9	34.4	[30.2, 38.6]	30.0	−.04	[−.21, .13]
Spain	University of the Basque Country UPV/EHU	209	154	52	23.8	7.0	33.8	[30.8, 36.8]	30.0	.30**	[.16, .44]
Japan	Osaka University	105	57	48	21.1	1.6	33.5	[27.1, 39.9]	20.0	.19	[.06, .32]
Germany	Helmut Schmidt University	147	77	70	23.9	3.4	32.7	[28.9, 36.5]	30.0	.12	[−.01, .25]
Mexico	Universidad Nacional Autónoma de Mexico	192	98	94	20.2	2.1	32.6	[29.2, 36.0]	30.0	.10	[−.07, .27]
Singapore	National University of Singapore	218	160	58	20.9	1.5	32.5	[28.8, 36.2]	27.5	−.09	[−.24, .06]
Bulgaria	Sofia University	226	193	33	19.4	1.0	29.9	[27.1, 32.7]	30.0	.13*	[−.08, .34]
Peru	Pontificia Universidad Catolica del Peru PUCP	76	56	20	20.5	3.1	29.7	[24.8, 34.6]	25.0	.27*	[.15, .39]
USA	Washington University in St. Louis	251	144	107	19.7	1.2	29.6	[26.6, 32.6]	20.0	.10	[−.12, .32]
Pakistan	University of the Punjab	98	35	57	34.5	13.5	29.1	[23.8, 34.4]	25.0	.11	[−.01, .23]
Tunisia	El-Manar University	118	97	20	22.8	5.5	28.5	[22.6, 34.4]	26.0	.20*	[.01, .39]
Australia	Southern Cross University	167	129	38	27.4	12.3	25.9	[22.0, 29.8]	20.0	.26**	[.11, .44]
Austria	Johannes Kepler University	189	107	82	25.1	4.6	23.4	[20.2, 26.6]	17.0	−.03	[−.17, .11]
Argentina	Universidad de Buenos Aires UBA	328	152	176	22.4	4.6	23.3	[21.1, 25.5]	20.0	.17**	[.07, .27]
Belgium	Université Libre de Bruxelles	130	107	21	20.5	4.5	23.0	[19.4, 26.6]	20.0	.30**	[.15, .45]
South Korea	Inha University	218	120	98	21.0	2.4	22.4	[19.5, 25.3]	20.0	.01	[−.13, .15]
Taiwan	National Tsing Hua University	291	140	151	20.7	1.8	21.1	[18.2, 24.0]	10.0	.22**	[.11, .33]
Netherlands	Tilburg University	196	159	37	19.7	2.9	20.1	[17.7, 22.5]	15.0	.10	[−.04, .24]
Hungary	Hungarian Academy of Sciences	181	117	63	21.4	2.2	19.3	[16.1, 22.5]	10.0	.28**	[.15, .41]
New Zealand	Victoria University of Wellington	137	–	–	–	–	17.7	[13.9, 21.5]	10.0	–	–
Norway	University of Bergen	165	105	59	22.6	3.5	12.3	[9.6, 15.0]	5.0	.10	[−.05, .25]
Switzerland	University of Lausanne	144	107	36	21.4	3.4	11.3	[8.7, 13.9]	5.0	.12	[−.04, .28]
Overall Mean of Samples		183	114	69	21.7	5.2	33.0	[32.3, 33.7]	30.0	.20**	[.18, .22]
Overall Sum of Samples		6185	3722	2315			1156.4		1027.5		

Note. NI refers to national identification, which was measured by a composite of the 5 survey items that asked participants about their attitudes toward their nationality.
* $p < .05$. ** $p < .01$, one-tailed.

but largely forgotten now); and added recent events and people like global warming and Bill Gates. The final list of events and people used in the survey is presented in Tables 1 and 2.

Considering that World War II had been nominated in previous surveys by many respondents as one of the most important events in world history (Liu et al., 2005, 2009), the current survey also asked participants to rate on seven-point scales the extent to which they agree about some of the main effects, consequences, and meanings of World War II, such as the notion that it was a just war to stop Nazi, Fascist, and Japanese aggression. In addition, respondents were asked to list up to three events or people not listed in the survey that they considered to be among the most important in world history. The remaining sections of the survey asked participants how well various statements (e.g., "History is the story of great men and women who change the world") describe what they feel about the overall course of world history and its main message, how they would describe the story of world history, about demographic characteristics (e.g., "How many countries have you lived in?"), and about attitudes on a variety of contemporary issues (e.g., "To what extent do you think that the power to make important political decisions should rest at the level of Supranational Regional bodies [e.g.,

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European Union, ASEAN, NATO, etc.]?"). The entire questionnaire can be downloaded along with the complete dataset from the Open Science Framework (https://osf.io/z45hf/).

All questionnaires were translated from their original language into the language prevalent in the society of administration and back-translated to ensure correct translation (see Liu et al., 2012). For the basis of the current report, participants were asked to answer the following question located toward the end of the survey: "What contribution do you think the country you are living in has made to world history?" by providing an estimate from 0 to 100%, whereby 0% indicates that the country made no contribution to world history, and 100% indicates that all contributions came from the country. With the exception of universities from Spain, Argentina, Peru, and the United Kingdom, the survey was completed in university classrooms between the dates of January 15, 2007 and January 30, 2008. Data from Spain, Argentina, Peru, and the United Kingdom were collected in university classrooms between 2010 and 2013 (see Liu et al., 2012; Hanke et al., 2015, for further details).

National identity scale construction. To examine the relationship between estimated contributions to world history and perceptions of national identity, we created a composite variable of the 5 survey items that asked participants about their attitudes toward their nationality. The items were: (1) "I often regret being a [your Nationality]" (1–7, where 1 = *strongly disagree* to 7 = *strongly agree*); (2) overall, being a [your Nationality] has very little to do with how I feel about myself (1–7, where 1 = *strongly disagree* to 7 = *strongly agree*); (3) "In general, I'm glad to be a [your Nationality]' (1–7, where 1 = *strongly disagree* to 7 = *strongly agree*); (4) "How proud are you to be a citizen of the country where you are living right now?" (1–7, where 1 = *not proud at all* and 7 = *very proud*); and (5) "Of course, we all hope that there will not be another war, but if it were to come to that, would you be willing to fight for your country?" (1–7, where 1 = *definitely no* and 7 = *definitely yes*). The first two items were reverse scored and then all five items were summed to create the final composite variable, $M = 23.8$, *95% CI* [23.7, 24.0]. The internal consistency reliability (Cronbach's alpha) of the 5-item composite was .68, *95% CI* [.67, .69], and thus of moderate strength.

Results

The primary data of interest are reported in columns toward the right side of Table 3 labeled mean and median percentage. These provide two estimates of central tendency for each country about the estimated contribution that students assigned to their country's role in world history; the countries are listed from those whose students provide the highest percentages (Russia, the United Kingdom) to those giving the lowest estimates (Norway, Switzerland). Our small sample of 35 nations alone claimed to have determined 1156% of the course of world history. Average estimates ranged from 11% for Switzerland (a historically neutral actor in world affairs with only 8 million residents) to 61% for Russia (a major power in modern history, and one of many countries of historical note in earlier periods). Citizens from the United States, which has arguably been the leading world power since World War II but is a relatively recent country in world history, reported a mean contribution of 30%, which places the US in the middle of the pack. Canada (40%), Malaysia (49%) and Portugal (38%), among others, all reported higher percentages than the United States. As shown in the rightmost column of Table 3, median estimates were similar to the mean estimates, although for most countries they were somewhat lower due to positive skew in the distribution of estimates. The total of the median estimates of all 35 countries was 1028%.

To establish the reliability of individuals' estimated contributions to world history, we divided the estimates in our sample into two roughly equal groups by assigning randomly generated numeric identification codes to all subjects and then using the odd-numbered identification codes to form one group of estimates, $N = 3111$; $M = 33.12$; *95% CI* [29.1, 33.1], and even-numbered codes to form the second group of estimates, $N = 3074$; $M = 33.53$; *95% CI* [29.5, 33.5]. The Pearson correlation of the mean estimated contributions to world history for each country for the two samples was high, $r(33) = .95$, $p < .01$, *95% CI* [.90, .98], indicating that the results are stable.

Contributions to World History and National Identification

As shown in the far right column of Table 3, estimated contributions to world history for the entire data set were significantly correlated with national identity composite scores, $r(5936) = .20$, $p < .01$, *95% CI* [.18, .22], showing that individuals who indicated greater pride in and loyalty toward their countries tended to give higher estimates of their country's contributions to world history. The degree of association between estimated contributions to history and national identity varied by country, with correlations ranging from Pearson's *r* values near 0 for Austria, China, Columbia, South Korea, and Singapore to *r* values of .20 or higher ($p < .05$) for the following 9 countries: Australia, Belgium, Hungary, Indonesia, Italy, Philippines, Russia, Taiwan, and Tunisia. There were smaller, albeit significant, correlations for Bulgaria, Canada, and Hong Kong.

Other Associations

We considered other associations in the data, too, such as individuals' perceptions of religion and conceptions about the meanings and lessons of world history (see Tables S1 and S2 in the Supplemental Online Material). However, these analyses generally led to even weaker correlations than those already reported. When all our correlations were entered into a linear regression model, they only accounted for about 10% of the total variance in estimated contributions to history. Despite some significant correlations, most of the variance remains unaccounted for by the other variables we measured. Great variability exists across countries, and we find no single underlying factor (or even small set of factors) that we assessed accounts for our findings of national narcissism and its vicissitudes.

Nevertheless, comparing nations using Inglehart and Welzel's (2010) region cultural map (see Table S3 in the Supplemental Online Material) we found that Protestant Europe showed the lowest mean estimated contributions to world history (19%); Catholic Europe, Latin America, Confucian Asia, and

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English-speaking nations reported higher mean contributions of 31–32%; and Orthodox or Ex-Communist Europe, South Asia, and Islamic nations reported the highest mean contributions of around 40%. This profile suggests that nations sharing survival and traditional values related to collectivism and high power distance (Basabe & Ros, 2005) showed strong national narcissism, while nations sharing expressive individualism showed the opposite profile. However, cultural differences explain only 5% of the variance. Next, we turn to hypotheses about why this state of affairs exists.

General Discussion

When asked to estimate how much their country contributed to world history, students from 35 countries gave estimates that greatly exceed what might be considered a realistic account of history, with estimates totaling over a thousand percent. Of course, it is impossible to objectively estimate contributions to world history; so many factors are at play: wars, geographic exploration, scientific discoveries, and development of various religions, belief systems, political ideologies and codes of law. Our question thus functions more as a projective than an objective test question; the answers tell us about what people believe about history. We are measuring collective memory (a group's memory of how history happened) rather than history itself (Wertsch & Roediger, 2008).

These inflated estimates are surprising for several reasons. First, the sample consisted of university students who presumably have greater, or at least more recently acquired, knowledge of world history than the general populations of their country. Measuring a cross-section of each country's population might have yielded even greater narcissism. A surprise (to the authors) was the relatively modest showing of students in the United States. Yes, their mean estimate of the United States as having been responsible for 30% of world history is highly inflated, but students in most other countries provided higher estimates. Russians provided estimates twice as high as Americans, which is interesting given President Putin's (2013) concerns about expressions of American exceptionalism by President Obama.

Theoretical Accounts

What might explain the inflated estimates of one's own nation's influence on world history, which we have termed national narcissism? None of our measures accounted for much of the variance, nor were estimates especially inflated in individualistic societies compared to collectivistic societies (see Heine & Hamamura, 2007, versus Sedikides, Gaertner, & Vevea, 2005). National narcissism was higher in materialistic, more collectivistic and hierarchical cultures, but explained variance was small.

What, then, is driving the narcissism effect? We cannot answer definitively. The purpose of our paper is to report a new phenomenon, and more analytic research will be needed to better understand it. We suspect that one major factor is the availability heuristic (Kahneman & Tversky, 1973): Material that is more easily retrieved (called to mind) is judged as more probable and important than information that is retrieved with more difficulty (or not at all). When answering the critical question of our study, students may implicitly consider it a probability problem in which the denominator is "all of world history" and the numerator is "my country's history and its effect on the world." Students know the numerator—their own country's history—but are unaware of the vast scope of the denominator, the huge number of countries, events, and peoples that represent world history. In addition, students may attribute their fluent retrieval as reflecting their country's contributions rather than their limited knowledge base (Jacoby, Kelley, & Dywan, 1989). Thus, because the historical information that students can retrieve is their own history, their estimates of its influence are greatly inflated.

Availability is only one possible hypothesis, of course, and it awaits future development. Another hypothesis is that our findings may reflect a tendency to overestimate small proportions when making estimates (Landy, Guay, & Marghetis, 2018; Thomas, Dougherty, & Buttaccio, 2014). This tendency is doubtless at play in our data, but the great differences among nations in their estimates are likely due to other factors.

Alternatively, because participants answered questions about prominent events and individuals from all over the world before making their estimate, they might have been influenced by the events mentioned in the survey. The relatively large number of events related to the United States may have inflated ratings from U.S. students, whereas non-U.S. students may have felt motivated to assert their national pride by giving high estimates of their own country's contributions.

To investigate these possibilities, we examined correlations between participants' ratings for historical events and figures and their country's estimated contributions to world history. If participants were "positively primed" by events and figures associated with their countries then we would expect to see significant, positive correlations with items about a country and estimated contributions to world history. If participants had negative reactions from items about the United States, we would expect to see negative correlations between those items and estimates of contributions to world history. The general finding was that the correlations were small, inconsistent, and largely uninterpretable, both for data aggregated across all countries, as well as for individual countries. Moreover, in a recent study involving U.S. state-level narcissism by Putnam, Ross, Soter, and Roediger (2018), placement of a question asking about Americans' home state's contributions to American history occurred either before or after a survey of their knowledge of American history. Placement did not affect Americans' estimates. Thus, positive or negative social priming probably had no effect on our outcome.

Finally, other potential factors causing the overestimates may include the tendency to believe that one's own groups are superior to outgroups (Brewer, 1999) and the illusory superiority effect—the tendency for people to see themselves as above average on most dimensions (Hoorens, 1993). Individuals may also attribute greater significance to nationally relevant events that occurred in their lifetime and for which have meaningful personal memories (Taylor, Burton-Wood, & Garry, 2017). The egocentric tendency to favor one's own group over others, sometimes called my-side bias, may also play a role (Stanovich, West,

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& Toplak, 2013). We have operationalized national narcissism as an answer to the one question about one's nation's contributions to world history, but other measures are possible, and it will be interesting to see how they correlate. Our measure might alternatively be conceived as assessing national importance or national ethnocentrism. Future research could examine whether national narcissism is related to measures of biased self-perception and individual narcissism (e.g., John & Robins, 1994), as well as to measures of collective narcissism (de Zavala et al., 2009).

Applications

One practical take-away from our study is that people will undoubtedly inflate the importance of their country or group. This inflation may not be malicious, but simply the result of several psychological processes coming together: the availability heuristic, over-estimating small numbers, and in-group favoritism, among others. An important point for negotiators is to understand the history, perceptions, and beliefs of members of the other side of any negotiation, which may differ radically from their own, even about the same situation. Moreover, it is important for negotiators to recognize how their own national ethnocentrism can shape the assumptions and rules that underlie their approach to diplomacy and conflict resolution, even when they see themselves as neutral observers to a conflict (e.g., Leahy, 2015; O'Dwyer, Lyons, & Cohrs, 2016).

Our study powerfully demonstrates how strong some of these egocentric biases can be. In a world of competing interests, a person must recognize that other's claims of importance are not delusions, but are simply how they see the world. For example, Wertsch and Karumidze (2009) provided an interpretation of how Russians and Georgians perceived and then remembered the 2008 Russian-Georgian war completely differently.

Limitations

Our study has limitations. First, we included only 35 countries, and we omitted most countries in Africa (where humanity arose) and those in the Mesopotamian Valley (the "bread basket of civilization"), as well as France, Greece, and many other countries that have had great influence over the centuries. If we had included all 193 countries comprising the United Nations, we would of course have a much higher total estimate. For example, Hong Kong and Taiwan, which are both politically and economically autonomous but not independent members of the United Nations, together reported a total mean estimate of having been responsible for 72% of world history (of course, they may have identified as Chinese).

A second limitation is that we used students from only one university as our sample in each country. For example, students at Washington University in St. Louis represented all the United States, and the same principle is true for all other countries (see Table 3 for a list of the universities included). Washington University draws students from all states, but in other universities our sample students may reside in a more concentrated area of the country.

Another issue is that the wording of our question is ambiguous; we asked students, "What contribution do you think the country you are living in has made to world history?" The question was deliberately vague, so subjects may have interpreted it as referring to "since my country became an independent entity with this name" or "peoples of the land that is now my country throughout all time." It is also unclear how students understood what counts as a contribution to world history. In future studies, we plan to alter the wording of the question in various ways to determine how various changes in framing the issue change the estimates provided. A critic might argue that the question about how much a country has contributed to world history is fundamentally unanswerable, but psychologists have often been able to glean interesting insights into human behavior by asking people questions that are difficult to answer. Virtually all research on attribution of responsibility has provided subjects with questions that have no correct answer; even if there is no objectively correct answer, the answers people provide are interesting and informative. We believe the same to be true of our study.

Conflict of Interest Statement

The authors declare no conflict of interest.

Author Contributions

H. R. and F. Z. conceived of the current study design. J. L. and D. P. conceived of and organized the primary World History and National Identity study. F. Z., K. H., and D. P. conducted statistical analyses with the assistance of H. R. and J. L. All authors contributed to the writing and revising of the article.

Appendix A. Supplementary data

Supplementary data associated with this article can be found, in the online version, at https://doi.org/10.1016/j.jarmac.2018.05.006.

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