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Supplementary Materials for

Moving chairs in Starbucks: Observational studies find rice-wheat cultural differences in daily life in China

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- Reference (*41*)

fig. S1. Sample chair trap in a Starbucks in Shanghai.

table S1. Are people in international chains more likely to be sitting alone?

	B/ γ	SE	z	*P*
Time of Day	-0.08	0.01	-5.35	< 0.001
Day of the Week	-0.06	0.01	-4.52	< 0.001
Time of Day	-0.08	0.01	-5.44	< 0.001
Day of the Week	-0.06	0.01	-4.47	< 0.001
Starbucks	0.17	0.09	1.94	0.053
Time of Day	-0.08	0.01	-5.47	< 0.001
Day of the Week	-0.06	0.01	-4.46	< 0.001
International Chain	0.21	0.09	2.19	0.028

Note: Day of the week is coded numerically: Monday = 1 to Sunday = 7. Time of day is rounded to the nearest hour. Model is an HLM using the binomial GLMER function. Data is grouped at the store level.

table S2. Rice-wheat differences controlling for international chain.

	B/ γ	SE	z	*P*
International Chain	0.18	0.06	3.13	0.002
Time of Day	-0.07	0.01	-6.97	< 0.001
Day of the Week	-0.07	0.01	-6.25	< 0.001
International Chain	0.17	0.06	3.05	0.002
Time of Day	-0.07	0.01	-6.77	< 0.001
Day of the Week	-0.07	0.01	-6.38	< 0.001
Percent Rice	-0.45	0.17	-2.70	0.007

Note: Day of the week is coded numerically: Monday = 1 to Sunday = 7. Time of day is rounded to the nearest hour. Model is an HLM using the binomial GLMER function. Data is grouped at the store level.

table S3. Sitting alone and GDP.

	B/ γ	SE	z	*P*
Day of the Week	-0.07	0.01	-6.31	< 0.001
Time of Day	-0.07	0.01	-6.79	< 0.001
Day of the Week	-0.07	0.01	-6.28	< 0.001
Time of Day	-0.07	0.01	-6.81	< 0.001
GDP per Capita	0.006	0.01	0.42	0.672
Day of the Week	-0.07	0.01	-6.62	< 0.001
Time of Day	-0.06	0.01	-6.60	< 0.001
GDP per Capita	0.018	0.005	3.38	0.001
Percent Rice	-0.56	0.09	-6.37	< 0.001

Note: Day of the week is coded numerically: Monday = 1 to Sunday = 7. Time of day is rounded to the nearest hour. Model is an HLM using the binomial GLMER function. Data is grouped at the city level. GDP is 2013 data.

table S4. Sitting alone and district-level data.

	B/ γ	SE	z	*P*	B/ γ	SE	z	*P*
District GDP per Capita	0.002	0.007	0.22	0.824	0.010	0.006	1.74	0.082
Day of the Week	-0.06	0.01	-5.67	< 0.001	-0.07	0.01	-5.87	< 0.001
Time of Day	-0.07	0.01	-5.55	< 0.001	-0.07	0.01	-5.65	< 0.001
Percent Rice					-0.53	0.16	-3.39	0.001
Population Density	-0.03	0.03	-1.35	0.177	0.02	0.03	0.59	0.559
Day of the Week	-0.07	0.01	-5.82	< 0.001	-0.07	0.01	-5.82	< 0.001
Time of Day	-0.07	0.01	-5.40	< 0.001	-0.07	0.01	-5.50	< 0.001
Percent Rice					-0.51	0.22	-2.33	0.020
% Population ≥ 65	-0.02	0.02	-0.88	0.378	0.01	0.02	0.45	0.651
Day of the Week	-0.08	0.02	-4.97	< 0.001	-0.08	0.02	-5.07	< 0.001
Time of Day	-0.08	0.02	-4.71	< 0.001	-0.08	0.02	-4.74	< 0.001
Percent Rice					-0.63	0.28	-2.29	0.022

Note: Day of the week is coded numerically: Monday = 1 to Sunday = 7. Time of day is rounded to the nearest hour. Model is an HLM using the binomial GLMER function. Data is grouped at the district level. GDP and population density data is from 2013.

table S5. Basic predictors of chair moving.

	B/ γ	SE	z	*P*
Percent Rice	-1.86	0.44	-4.19	< 0.001
Employee	1.93	0.30	6.52	< 0.001
Below 40 Years Old	0.03	0.38	0.09	0.928
Female (civilians only)	-1.06	0.44	-2.41	0.016
Percent Rice	-2.06	0.47	-4.34	< 0.001
Employee	2.02	0.31	6.58	< 0.001
Percent Rice	-1.85	0.46	-4.16	< 0.001
Female	-0.44	0.29	-1.53	0.125
Percent Rice	-2.02	0.48	-4.24	< 0.001
Employee	2.03	0.31	6.57	< 0.001
Female	-0.46	0.30	-1.51	0.131

Note: Models are HLMs using the binomial GLMER function. Data is grouped at the city level.

table S6. City and district census predictors of chair moving.

	B/ γ	SE	z	*P*
% Population 65 and Older	-0.18	0.09	-2.05	0.041
Percent Rice	-2.02	1.30	-1.55	0.121
% Population 65 and Older	-0.05	0.11	-0.43	0.667
City GDP Per Capita (10k RMB)	-0.27	0.36	-0.74	0.457
City Log GDP Per Capita	-0.35	0.48	-0.73	0.467
Percent Rice	-1.84	0.48	-3.81	< 0.001
City Log GDP Per Capita	-0.02	0.25	-0.08	0.936
District GDP Per Capita	-0.02	0.03	-0.65	0.517
Percent Rice	-2.44	0.70	-3.51	< 0.001
District GDP Per Capita	0.03	0.02	1.29	0.199
District Population Density	-0.19	0.10	-1.95	0.052
Percent Rice	-2.12	0.85	-2.51	0.012
District Population Density	0.01	0.11	0.08	0.937

Note: Models are HLMs using the binomial GLMER function. Data is grouped at the district or city level.
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table S7. International comparison of chair moving.

	B	SE	z	*P*	B	SE	z	*P*
US (compared to China)	1.70	0.33	5.18	< 0.001	1.66	0.33	5.04	< 0.001
Employee	1.93	0.30	6.52	< 0.001	1.94	0.30	6.55	< 0.001
Female					-0.35	0.26	-1.36	0.173
Japan (compared to China)	-0.15	0.57	-0.27	0.788	-0.09	0.57	-0.16	0.873
Employee	2.04	0.29	7.10	< 0.001	2.07	0.29	7.15	< 0.001
Female					-0.41	0.29	-1.42	0.156

Note: Models use the binomial GLM function in the program R.

table S8. How well do other major theories of culture predict sitting alone?

	B/ γ	SE	z	*P*	B/ γ	SE	z	*P*	B/ γ	SE	z	*P*
Average Temperature	-0.006	0.005	-1.23	0.219	0.009	0.003	2.58	0.010	0.011	0.004	3.10	0.002
Percent Rice					-0.69	0.15	-4.55	< 0.001	-0.79	0.15	-5.13	< 0.001
Day of the Week									-0.07	0.01	-6.68	< 0.001
Time of Day									-0.07	0.01	-6.79	< 0.001
Internet Penetration 2007	0.39	0.50	0.79	0.429	0.67	0.21	3.23	0.001	0.66	0.17	3.83	< 0.001
Percent Rice					-0.53	0.10	-5.35	< 0.001	-0.54	0.08	-6.64	< 0.001
Day of the Week									-0.07	0.01	-6.20	< 0.001
Time of Day									-0.07	0.01	-6.92	< 0.001
% Nonlocal Residents	-0.007	0.007	-1.05	0.293	0.002	0.005	0.39	0.700	0.004	0.005	0.94	0.350
Percent Rice					-0.41	0.15	-2.69	0.007	-0.46	0.13	-3.58	< 0.001
Day of the Week									-0.07	0.01	-6.49	< 0.001
Time of Day									-0.07	0.01	-6.56	< 0.001
% Employed Service Sector	0.007	0.004	1.63	0.103	0.007	0.002	4.39	< 0.001	0.007	0.002	3.94	< 0.001
Percent Rice					-0.46	0.08	-6.15	< 0.001	-0.48	0.08	-6.31	< 0.001
Day of the Week									-0.07	0.01	-6.15	< 0.001
Time of Day									-0.07	0.01	-6.86	< 0.001
% in Private Industry	-2.83	2.55	-1.11	0.268	2.46	6.35	0.39	0.699	0.14	4.53	0.03	0.975
Percent Rice					-0.52	0.30	-1.74	0.082	-0.43	0.23	-1.87	0.061
Day of the Week									-0.07	0.01	-6.43	< 0.001
Time of Day									-0.07	0.01	-6.55	< 0.001
% Self-Employed	4.77	2.73	1.75	0.080	1.24	4.49	0.28	0.782	1.75	3.62	0.48	0.629
Percent Rice					-0.39	0.20	-1.91	0.056	-0.38	0.17	-2.43	0.015
Day of the Week									-0.07	0.01	-6.47	< 0.001
Time of Day									-0.07	0.01	-6.52	< 0.001
Pathogen Prevalence	-0.26	0.59	-0.44	0.661	-0.54	0.23	-2.40	0.016	-0.61	0.24	-2.57	0.010
Percent Rice					-0.63	0.11	-6.00	< 0.001	-0.71	0.11	-6.55	< 0.001
Day of the Week									-0.07	0.01	-5.47	< 0.001
Time of Day									-0.07	0.01	-5.76	< 0.001

Note: Day of the week is coded numerically: Monday = 1 to Sunday = 7. Time of day is rounded to the nearest hour. Model is an HLM using the binomial GLMER function. Data is grouped at the city level. Employment data is from the 1996 statistical yearbook. Average temperature is the average for the city (taking the average of January and July temperatures). Shaded rows correlate opposite from theory prediction.

table S9. How well do other major theories of culture predict chair moving?

	B/ γ	SE	z	*P*	B/ γ	SE	z	*P*	B/ γ	SE	z	*P*
Average Temperature	-0.03	0.01	-3.39	< 0.001	-0.04	0.01	-3.66	< 0.001	0.01	0.03	0.48	0.634
Employee					2.02	0.30	6.63	< 0.001	2.01	0.31	6.54	< 0.001
Percent Rice									-2.60	1.25	-2.09	0.037
Internet Penetration 2007	-1.92	1.65	-1.16	0.245	-2.69	1.71	-1.58	0.115	-0.79	1.06	-0.74	0.453
Employee					2.05	0.31	6.69	< 0.001	2.05	0.31	6.61	< 0.001
Percent Rice									-1.86	0.54	-3.46	< 0.001
% Nonlocal Residents	-0.05	0.03	-1.51	0.130	-0.06	0.03	-1.96	0.050	-0.02	0.02	-0.89	0.375
Employee					2.12	0.37	5.69	< 0.001	2.10	0.38	5.58	< 0.001
Percent Rice									-1.74	0.64	-2.70	0.007
% Service Sector	-0.008	0.019	-0.43	0.671	-0.014	0.021	-0.67	0.505	-0.006	0.009	-0.64	0.524
Employee					2.04	0.31	6.66	< 0.001	2.04	0.31	6.60	< 0.001
Percent Rice									-1.97	0.49	-4.00	< 0.001
% in Private Industry	-51.00	17.10	-2.07	0.003	-49.79	21.77	-1.20	0.230	-24.77	22.52	-1.10	0.271
Employee					2.03	0.37	5.54	0.002	2.05	0.37	5.53	< 0.001
Percent Rice									-1.19	0.88	-1.35	0.176
% Self-Employed	32.03	19.11	1.68	0.093	38.68	19.43	1.99	0.047	20.69	13.78	1.50	0.133
Employee					2.13	0.37	5.70	< 0.001	2.13	0.38	5.66	< 0.001
Percent Rice									-1.74	0.59	-2.94	0.003
Pathogen Prevalence	5.05	2.95	1.71	0.087	6.42	2.80	2.29	0.022	2.63	2.57	1.02	0.307
Employee					2.63	0.51	5.17	< 0.001	2.57	0.50	5.13	< 0.001
Percent Rice									-2.80	1.44	-1.94	0.053

Note: Data is grouped at the city level. Employment data is from the 1996 statistical yearbook. Average temperature is the average of January and July temperatures. Shaded rows correlate opposite from theory prediction.

table S10. Sitting alone models with stores nested in districts nested in cities.

	B/ γ	SE	*z*	*P*
Percent Rice	-0.31	0.16	-1.96	0.050
Day of the Week	-0.06	0.01	-4.24	< 0.001
Time of Day	-0.08	0.01	-5.44	< 0.001
Percent Rice	-0.34	0.17	-2.00	0.046
International Chain	0.24	0.09	2.60	0.009
Day of the Week	-0.06	0.01	-4.13	< 0.001
Time of Day	-0.08	0.02	-5.58	< 0.001
Percent Rice	-0.47	0.16	-2.94	0.003
International Chain	0.24	0.09	2.64	0.008
Day of the Week	-0.05	0.01	-4.03	< 0.001
Time of Day	-0.09	0.01	-5.84	< 0.001
GDP per Capita	0.02	0.01	1.56	0.120
Percent Rice	-0.57	0.15	-3.86	< 0.001
International Chain	0.23	0.09	2.57	0.010
Day of the Week	-0.05	0.01	-3.88	< 0.001
Time of Day	-0.09	0.01	-5.96	< 0.001
District GDP per Capita	0.02	0.01	3.23	0.001
Percent Rice	-0.60	0.20	-2.96	0.003
International Chain	0.25	0.09	2.69	0.007
Day of the Week	-0.05	0.01	-3.88	< 0.001
Time of Day	-0.09	0.01	-5.85	< 0.001
Population Density	0.06	0.03	1.78	0.075

Note: Models are HLMs using the binomial GLMER function.

table S11. Chair moving models with stores nested in districts nested in cities.

	B/ γ	SE	z	*P*
Employee	2.21	0.36	6.18	< 0.001
Percent Rice	-2.20	0.86	-2.57	0.010
District GDP per Capita	0.03	0.03	0.88	0.382
Employee	2.23	0.36	6.25	< 0.001
Percent Rice	-2.12	0.90	-2.36	0.018
City Log GDP Per Capita	0.45	0.72	0.62	0.538
Employee	2.22	0.35	6.26	< 0.001
Percent Rice	-1.77	0.86	-2.05	0.040
Population Density	-0.01	0.12	-0.05	0.960

Note: Models are HLMs using the binomial GLMER function.

table S12. Chair moving models with stores nested in districts nested in cities.

	B/ γ	SE	z	*P*
Day of the Week	-0.08	0.01	-8.15	< 0.001
Time of Day	-0.07	0.01	-7.73	< 0.001
Time of Day	-0.07	0.01	-6.79	< 0.001
Day of the Week	-0.07	0.01	-6.31	< 0.001

Note: Models are HLMs using the binomial GLMER function.

Supplemental Materials

section S1. Rice statistics

Rice statistics at the province level were the same 1996 statistics as in our prior study (*1*). Shanghai and Beijing are their own provinces, but the administrative borders include surrounding farmland, so we used the statistics for these provinces. As a gut check, Shanghai and Beijing's percentages are similar to surrounding provinces (Jiangsu and Zhejiang for Shanghai; Hebei for Beijing). For Hong Kong, we used rice statistics from Guangdong Province, which borders Hong Kong. Guangdong is a part of the Cantonese cultural region, and is a major source of Hong Kongers historically.

section S2. Chair moving

In the main text, we write that observers only coded the first time a person walked through the chair trap. The one exception to this rule was for employees. Because employees all wear the same uniform, we worried that it would be difficult to remember which employee had walked through the chairs or not. Thus, we recorded all of the times employees walked through the chair trap. In the main text, we present analyses excluding employee observations altogether.

During observations in the US, coders realized that some café patrons were overweight to an extent that they had to move the chair. This was highly rare in China or Japan. Thus, coders added a column representing whether patrons were overweight to an extent that would affect whether or not they moved the chair. Because these patrons had no choice but to move the chairs, we excluded them from the analysis. Including them would increase the percentage of Americans moving the chair.

section S3. Controlling for observer

Besides the reliability checks, two coders made observations independently. Did the effect depend on the observer? We ran a model with a dummy variable representing Observer 1 versus Observer 2, as well as an interaction term between rice and observer. There was no significant main effect of observer B = 0.19, $P = 0.854$, nor interaction between observer and rice B = 0.67, $P = 0.655$. Thus, the effect did not depend on which observer recorded the data.

section S4. Hong Kong GDP per capita

We were unable to find GDP per capita data at the district level for Hong Kong. However, we were able to find 2013 median monthly household income for each district and Hong Kong as a whole. We used that to estimate GDP per capita for different districts. To do that, we calculated the percentage of each district compared to the value for Hong Kong as a whole. For example, if Hong Kong as a whole has a monthly household income of $1,000, and Kowloon District earns $1,100, Kowloon's percentage would be 110%. Then we multiplied these percentages by Hong Kong's GDP per capita in 2013 to get estimates of GDP per capita at the district level.

Although this is not ideal, these figures should provide rough estimates of GDP per capita. We also tried excluding Hong Kong as a whole, but the results were similar to the results in the main paper: GDP per capita at the district level was not significant $\gamma = -.03$, $P = 0.690$, $r_{\text{dist-level}} = -0.14$.

section S5. Age in districts

We tested whether younger districts would be more likely to have people sitting alone. However, age data for different cities and provinces across China are surprisingly hard to compare. Different regions use different age brackets, which makes them difficult to compare. The most widely used category across cities was 65 years and older. Beijing, Shanghai, and Hong Kong had data for this age category at the district level for 2013.

This data is not ideal for a couple reasons. First, it does not include Nanjing or Guangzhou. Second, the percentage of people 65 and above does not directly measure all age categories.

However, there is strong variation in age across districts. In Shanghai, people 65 and above made up 6.9% of the population in Minhang District and 24.5% in Jing'an District. If age has a strong influence, differences this large should be able to allow us to detect that influence. Older districts also tended to be wealthier.

section S6. Calculating effect sizes in GLMER

The GLMER function in R does not provide effect size estimates. To calculate effect sizes, we used the change in the province-level variance (pseudo-R^2) of the model with and without the key predictor. We took the square root of this to get the correlation *r*, which is a more familiar effect size. The regression tables present all of the unstandardized regression coefficients. It should be noted that group-level effect sizes tend to be larger than individual-level effect sizes (for example, a group-level correlation would be the correlation between US state-level income and state-level percent voting Democrat; that same individual-level correlation would be individual income and that individual voting Democrat).

In some cases, the effect size of rice at the city level was close to $r = 1$. That's possible with only 5 cities and when the pattern of chair moving fits well with rice. In cases where the effect size estimate approached 1, we also provided individual-level effect size estimates. These have the benefit of having a much larger sample, although they have the drawback of measuring a group-level phenomenon at the level of the individual.

When GLMER effect size estimates approached 1, we used an alternative method to calculate effect size. First, we calculated means for each group (city or district). Second, we calculated a simple correlation (such as between city rice percentage and percentage of people sitting alone). The downside of this method of estimating effect sizes is that it does not take into account the different sample sizes of the different groups. Thus, it would treat a district with 50 observations the same as a district with 2,000 observations.

In the case of the non-significant relationship between district-level age and chair moving (controlling for rice), the GLMER gave a negative regression coefficient, but the simple group-level correlation was positive. In this case, we compared a model with rice alone to a model with rice and age, then took the chi squared value and calculated an effect size (*r*) based on that. Because of these issues with effect size estimates in GLMER, readers wanting the most literal measure of effect size should use the unstandardized regression coefficients.

section S7. Graphing mean percent sitting alone

To estimate the mean percentage of people sitting alone in Figure 2, it was important to control for time of day effects. Thus, to create Figure 2, we calculated means and standard errors using a binomial generalized linear model that took into account time of day and day of the week.

To estimate means in Figure 3, we limited the analysis to the main part of the day where we had at least 100 observations each from rice and wheat regions. This ensures that the mean estimates in the graph reflect the most adequately sampled hours of the day. All statistical analyses include all day parts.

section S8. GDP per capita

For GDP per capita, we ran analyses using GDP and log GDP per capita. Results were similar regardless of which version was used. Hong Kong is a strong outlier in GDP per capita, so we re-ran analyses excluding Hong Kong. Results were largely similar.

section S9. Alternative predictors

We used several alternative predictors that other researchers have used to predict cultural differences:

- To calculate average temperature, we added the average temperature in the hottest month (July) and coldest month (January).
- For pathogen prevalence, we used human-transmitted diseases from a 1976 study in China plus more recent figures from the Chinese Statistical Yearbook. For more details, see the supplemental materials of our previous study (*1*).
- Internet penetration data came from 2007 (*1*). Internet penetration rates after 2007 are so high they approach a ceiling effect, with little variation between places.
- Percentage of non-local residents came from the 2010 National Census (section: 我国流动人口最新状况).
- There is evidence that historical indicators of economic development predict cultural differences better than economic indicators right now (*1*, *41*). Thus, we used economic indicators from the 1996 *Statistical Yearbook* for percent employed in private industry, percent self-employed, and percent employed in the service sector. However, the main text uses 2013 GDP per capita. Thus, the analyses cover both modern and historical economic indicators (20 years prior).

Because our earlier study did not include Hong Kong, we had to search for Hong Kong statistics. For some of these variables, Hong Kong has easily available statistics, so we added Hong Kong for these (internet penetration and employment in service sector). For pathogen prevalence, we used the value for Guangdong because (a) the indicator is historical, and Hong Kong was largely settled by people from Guangdong and (b) the measure of pathogen prevalence came from a study in Mainland China and is not directly comparable to data sources for Hong Kong. Excluding Hong Kong from the pathogen prevalence analysis made little difference to the results. For other variables, we left Hong Kong blank because the original data source did not include Hong Kong and could be hard to compare directly (sociogram self-inflation, percent employed in private industry, percent self-employed, and percent non-local residents).

section S10. Chair moving validity checks

To test whether chair moving reflects psychological constructs that differ between individualistic and collectivistic cultures, we tested a sub-sample of café-goers (N = 42) on several psychological measures. After passing the chair trap, a research assistant approached the café-goer with a paper questionnaire that included measures of psychological constructs. Because more people do *not* move the chair than move the chair, research assistants approached every chair mover and every fourth non-mover.

First, participants completed five items measuring self-efficacy (*39*). For example, one item read, "I can always manage to solve difficult problems if I try hard enough" (如果我努力去做的话，我总是能解决难题的). Participants rated each item from one (*strongly disagree*) to seven (*strongly agree*).

Participants also completed five items measuring internal versus external locus of control (*37*). Participants read competing statements, one that emphasizes control over one's own life and one

that emphasizes external forces. Participants have to choose the statement they agree with more. For example, one statement reflecting internal control read, "When I make plans, I am almost certain that I can make them work." The statement reflecting external control read, "It is not always wise to plan too far ahead because many things turn out to be a matter of good or bad fortune anyhow." We coded the number of internal locus statements participants chose. Because these statements are binary choices, we analyzed responses as a series of binomials, using the GLM function (with a binomial link) in the program R. We used Nagelkerke r-squared as a measure of effect size.

Participants also completed the 10-item triad categorization task (*36*). In each triad, participants see three words, such as *panda*, *banana*, *monkey*. In each triad, two items can be paired together because they belong to the same abstract category (pandas and monkeys are mammals) and two because they share a functional relationship (monkeys eat bananas). People in China and Hong Kong tend to choose more relational pairings than Americans, and people in cultures with more interdependent historical subsistence styles tend to choose more relational pairings than people in cultures with more independent subsistence styles (*1*, *3*, *4*, *36*).

As in our prior research (*1*, *34*), we analyzed eight items, excluding two items that have a slightly different structure. In most items, there is one pairing that does not fit either type of categorization. This allows us to screen out non-serious responding. However, for two items, *any* pairing leads to a sensical response, such as with *stamp*, *postcard*, *letter*. Yet non-sensical responses are rare, and, in our experience, results are highly similar whether these two items are included or not. Similar to the internal locus of control analysis, the triad task is best analyzed as a series of binomials (relational vs. categorical). We analyzed it using a GLM with a binomial link in the program R.

Participants also reported their gender, age, social status, and where they grew up. Based on where people grew up, we coded whether participants grew up in rice (> 50% farmland devoted to rice) or wheat regions (< 50%). For the triad task, the main text reports the simple results. Controlling for gender, age, social status, and rice/wheat, the difference between chair movers and non-movers remained significant ($P = 0.008$). For internal locus of control, we found a non-significant trend whereby people from rice areas reported less internal locus of control ($P = 0.313$), which we included in other analyses. Controlling for age, gender, rice/wheat, and social status, the difference between chair movers and non-movers remained in the marginally significant range ($P = 0.130$).

Participants also completed the sociogram task (*12*). In the sociogram task, participants draw a diagram of their social network, using circles to represent the self and friends. Researchers then measure the size of the self and friend circles and calculate whether participants drew the self larger than they drew friends (self-inflation). People from individualistic cultures tend to self-inflate more than people from collectivistic cultures (*12*).

Despite the small sample, there was a marginal trend whereby people from rice areas self-inflated less than people from wheat areas B = -2.90, $P = 0.143$. This fits with prior findings (*1*), although the sample is small and should not be considered adequately powered for this test. There was a non-significant trend whereby people who moved the chairs had more self-inflation B = 2.90, $P = 0.233$. However, there was also an interaction between chair moving and gender B = -7.78, $P = 0.040$. The interaction revealed that, among men, chair movers showed more self-inflation. Among women who moved the chair, this was not the case. However, because the sample is small, this pattern should be considered tentative.

section S11. Ethics statement

These studies were carried out in accordance with ethical and Institutional Review Board guidelines.