

Reporting Summary

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Statistics

For all statistical analyses, confirm that the following items are present in the figure legend, table legend, main text, or Methods section.

n/a Confirmed

- ☐ ☒ The exact sample size (n) for each experimental group/condition, given as a discrete number and unit of measurement
- ☐ ☒ A statement on whether measurements were taken from distinct samples or whether the same sample was measured repeatedly
- ☐ ☒ The statistical test(s) used AND whether they are one- or two-sided
Only common tests should be described solely by name; describe more complex techniques in the Methods section.
- ☐ ☒ A description of all covariates tested
- ☐ ☒ A description of any assumptions or corrections, such as tests of normality and adjustment for multiple comparisons
- ☐ ☒ A full description of the statistical parameters including central tendency (e.g. means) or other basic estimates (e.g. regression coefficient) AND variation (e.g. standard deviation) or associated estimates of uncertainty (e.g. confidence intervals)
- ☐ ☒ For null hypothesis testing, the test statistic (e.g. F , t , r) with confidence intervals, effect sizes, degrees of freedom and P value noted
Give P values as exact values whenever suitable.
- ☒ ☐ For Bayesian analysis, information on the choice of priors and Markov chain Monte Carlo settings
- ☒ ☐ For hierarchical and complex designs, identification of the appropriate level for tests and full reporting of outcomes
- ☒ ☐ Estimates of effect sizes (e.g. Cohen's d , Pearson's r), indicating how they were calculated

Our web collection on [statistics for biologists](#) contains articles on many of the points above.

Software and code

Policy information about [availability of computer code](#)

Data collection All participant data were collected through Qualtrics, an online survey platform. All participants were recruited through TurkPrime.

Data analysis All data was analyzed in R (version 3.5.0). The R code for analysis for the main study and the pilot studies have been deposited at Harvard Dataverse, <https://dataverse.harvard.edu/dataset.xhtml?persistentId=doi:10.7910/DVN/BSUNGB>

For manuscripts utilizing custom algorithms or software that are central to the research but not yet described in published literature, software must be made available to editors/reviewers. We strongly encourage code deposition in a community repository (e.g. GitHub). See the Nature Research [guidelines for submitting code & software](#) for further information.

Data

Policy information about [availability of data](#)

All manuscripts must include a [data availability statement](#). This statement should provide the following information, where applicable:

- Accession codes, unique identifiers, or web links for publicly available datasets
- A list of figures that have associated raw data
- A description of any restrictions on data availability

The materials and data for the main study and the pilot studies have been deposited at Harvard Dataverse, <https://dataverse.harvard.edu/dataset.xhtml?persistentId=doi:10.7910/DVN/BSUNGB>

Field-specific reporting

Please select the one below that is the best fit for your research. If you are not sure, read the appropriate sections before making your selection.

☐ Life sciences ☒ Behavioural & social sciences ☐ Ecological, evolutionary & environmental sciences

For a reference copy of the document with all sections, see [nature.com/documents/nr-reporting-summary-flat.pdf](https://www.nature.com/documents/nr-reporting-summary-flat.pdf)

Behavioural & social sciences study design

All studies must disclose on these points even when the disclosure is negative.

Study description	The study is quantitative and cross-sectional, with seven daily diary surveys administrated to each participant.
Research sample	We recruited 1131 participants. A total of 1044 participants (out of 1131) met the criteria for inclusion in the analyses, for an attrition rate of 8%. All 87 participants who were not included in the analyses failed to complete any of the diaries. Participants were individuals residing in the United States. A total of 472 (45%) participants identified as Male; 529 (51%) identified as Female; one (.1%) identified as Male/Genderfluid; one (.1%) identified as Non-Binary; and 41 (4%) did not provide valid responses. Participants ranged in age from 18 to 77 years (M = 36.77; SD = 11.34). To recruit a representative sample with respect to gender and ethnicity, we established quotas using population distribution statistics from the American Community Survey conducted by the U.S. Census Bureau and created surveys targeted towards a quota for each group.
Sampling strategy	We determined the sample size from a power analysis using an alpha value of .05 and effect sizes from our pilot tests and from previously published data. We further over-sampled to account for an attrition rate of 13% in our pilot studies. We describe our power analysis more in detail in our methods section in the manuscript. We recruited our participants with online sampling.
Data collection	Data were collected through Qualtrics, an online survey panel. Participants who signed up for the study accessed the survey through a link, and completed the survey on their own computers in their own homes. As such, the researchers were not present during the study are unlikely to invoke any experimenter effects.
Timing	Data were collected beginning August 20th, 2018, and ended on September 1st, 2018.
Data exclusions	We included data on the basis that they were a complete observation. Specifically, an observation was deemed complete if the participant has completed a) at least one abilities test (emotional or cognitive abilities), b) the corresponding measure(s) of self-views, and c) at least one of the daily diaries. These exclusion criteria were established a priori in our Stage 1 registered report. An abilities test was deemed complete if participants responded to at least half of the items. A total of 1044 participants (out of 1131) met the criteria for inclusion in the analyses, for an attrition rate of 8%. All 87 participants who were not included in the analyses failed to complete any of the diaries. We further excluded outliers based on a priori rules. In the main study, using the criterion identified a priori, we identified 11 outliers on the emotional abilities test (all with low scores), 15 outliers on self-views on emotional abilities (also all with low scores; four of these were also outliers on the emotional abilities test), and two outliers on relationship satisfaction (both with high scores). There were no outliers on the other measures. The outliers were removed from the analyses, consistent with our a priori decision.
Non-participation	87 (8%) participants out of 1044 participants dropped out from the survey such that they completed the initial questionnaire, and none of the subsequent daily diary surveys.
Randomization	Participants were not allocated into experimental groups.

Reporting for specific materials, systems and methods

We require information from authors about some types of materials, experimental systems and methods used in many studies. Here, indicate whether each material, system or method listed is relevant to your study. If you are not sure if a list item applies to your research, read the appropriate section before selecting a response.

Materials & experimental systems		Methods	
n/a	Involved in the study	n/a	Involved in the study
☒	☐ Antibodies	☒	☐ ChIP-seq
☒	☐ Eukaryotic cell lines	☒	☐ Flow cytometry
☒	☐ Palaeontology	☒	☐ MRI-based neuroimaging
☒	☐ Animals and other organisms		
☐	☒ Human research participants		
☒	☐ Clinical data		

Human research participants

Policy information about [studies involving human research participants](#)

Population characteristics	See above.
Recruitment	Participants were recruited through TurkPrime. On TurkPrime, we posted our survey with a brief description (see details in supplementary information). Participants who saw the survey had an opportunity to begin the survey, until the sample size was fulfilled.
Ethics oversight	This study was approved by the Social Science, Humanities, and Education research ethics board at the University of Toronto (protocol ID 31813).

Note that full information on the approval of the study protocol must also be provided in the manuscript.