

# Stabilizing through randomizing - online appendix

October 22, 2019

## 1 Overview

This online appendix is a compliment to the paper titled *Stabilizing through randomizing: A bootstrap approach to estimating item validity and latent concepts*. Here are some additional informations regarding the logic and operation of both the original Stimson model and the newly-introduced bootstrapping model. The other information provided here mostly concerns databases and question wording, which users can use to better understand and analyse the arguments and statistics presented in the main paper. It also includes other information such as factor loading scores, bootstrapped statistics, input and raw question data (where such data are my own to distribute) can be found under other folders of the paper's GitHub page. Also available from the repository are full paper replication materials. Please seek permission from data distributors before re-using this data for any further purposes than replicating the findings of this paper.

## 2 Further information on the Stimson dyad-ratios algorithm

To summarize the method briefly, Stimson's dyad-ratios calculator allows us to 'blend' different questions (on the same macro-concept) into a single longitudinal measurement by assessing the 'ratio change' in the 'index score' proportion of responses expressing a liberal (or conservative, if the user wishes to measure in this direction) position as a proportion of non-neutral responses<sup>1</sup>, each time the question is asked. The theory here supposes that responses to policy suggestions or evaluation can be split between these two general response categories, and that the key point of interest is how much of an aggregate shift there is from survey-to-survey between the liberal and conservative responses. With the input of these calculated 'index score' series, the calculator then aggregates and harmonizes the ratio changes from each individual series using a process similar to a principle components analysis, but with the addition of 'backward and

---

<sup>1</sup>See Stimson (1999, 39-40) for a more in-depth discussion on the theory and constructing of survey marginals, and dimensionality coding.

forward’ iterative recursions. Starting from the latest data point, the iterative recursion uses the variance in all question items to find a common underlying movement across the item series, covering gaps in missing data but only using existing data. Each item series will then have a relative ‘loading score’ regarding how well it ‘fits’ with the movements in other item series around it. These scores are the basis of a ‘weighted average’ contribution for each item series to the final estimation. We are then left with a single estimated line of public opinion over time, built from information from a range of difference sources and question types and covering any gaps in the time series that we previously had. See Appendix 1 in Stimson (1991), as well as Stimson (2018) for a more detailed explanation of the model itself.

### 3 Using the `bootstrap.dyads` R package

The model requires that a single extract function (as written and published by Stimson)<sup>2</sup> is first ran on the data. This code is included in the package files under the name ‘load\_functions.R’, and should be copied into the working directory where it can be called and loaded into the global environment using the ‘call.dr.code()’ function. A number of other small changes have been made to Stimson’s original code in order to produce the objects and statistics necessary for bootstrapped estimation and post-estimation, and to produce log files similar to those automatically produced by the WCalc and MCalc versions of the code. The most important additional argument (named print) is the ability to suppress the automatically generated output included in the original code. As the bootstrap model inherits all arguments from the original user-defined model, it is strongly suggested that the print and log options are set to false in order to maximize the efficiency and speed of the bootstrap<sup>3</sup>.

As well as the bootstrapped-mean item loading scores and the standard deviation of this mean, the distance between this statistic and the loading score calculated on a single run of the model (with no items excluded) is reported. A post-estimation function creates outputs in which the user can easily view the most ‘poorly-estimated’ (bootstrapped mean far lower or higher than single-run estimate) and ‘most imprecise’ items (high standard deviation of bootstrapped mean). Users can then compare this, and take into account the various item- and measurement- reported statistics stored as objects by both functions, and make their own decisions about which items to include or exclude in their final estimation of the latent concept.

Through the post-estimation function, the bootstrap package can and does make suggestions on these decision for the user, using the results of the bootstrap model. As well as visually reporting which items appear most problematic and thus ought to be dropped, the model pro-actively estimates a dyad-ratios model

---

<sup>2</sup>See: [http : //stimson.web.unc.edu/software/](http://stimson.web.unc.edu/software/)

<sup>3</sup>Users familiar with Stimson’s original code should be aware that the inputs must be defined slightly differently in this package, with a bespoke data argument included and variables specified by either their index location or name.

using the suggested remaining data, and then compares this estimation to the single-run, ‘full-data’ version. The default parameters for the model suggesting an item ought to be dropped are: 1) an over-estimation of the loading score (difference between the bootstrapped and non-bootstrapped estimates) of more than 0.05, 2) a bootstrapped-mean estimated loading score in between -0.3 or 0.3 (indicating little or no co-variance with the latent concept)<sup>4</sup>, or 3) a standard deviation of the bootstrapped mean greater than 0.2. Users can manually alter these values using the `max.diff`, `threshold`, and `sd.cut` arguments respectively if they so wish.

## 4 Further bootstrap example: Executive approval in Spain

The bootstrap model was also applied on Spanish macro-approval data, again kindly provided by the Executive Approval project. Figure 6 plots the single-estimated and bootstrap-suggested latent concepts of quarterly Spanish executive approval over the last near-40 years. The scale for approval data ranges from 0 to 100, with 100 indicating that the public would be unanimously satisfied with the performance of their government (or executive in general) in the case of Spain, and President in the case of the US. In the Spanish case, 18 item series covered 140 time points (quarterly between 1984q3 and 2019q2), with a total of 691 observations. Question topics ranged from direct measurements about satisfaction or dissatisfaction with “how the government is doing” (Anàlisis Sociològics, Econòmics y Polítics) to more hypothetical questions such as “Do you approve or suspend the firing of leading political leaders?” (Sociometrica)<sup>5</sup>. Given the length of the series and the high number of observations, the conditions for item exclusion were tightened to bootstrapped-mean standard deviation of 0.10. Figure 6 shows the bootstrapped-suggested and single-run estimations of Spanish executive approval from 1984 to 2019.

The two trend lines match each other very closely indeed, and bootstrapped statistics suggested removing a total of just five items. These included three general executive approval question series (sourced from Gallup, Centro de Investigaciones Sociológicas, Barómetro Iberoamericano de Gobernabilidad, and Cadena de Ondas Populares Españolas), and the above question from the Sociometrica polls on the firing of political leaders. The impact of removing these items is mainly to shift the mean value of the Spanish approval scale down by around 1.5 points, and to increase the eigenvalue estimate by around 5 points. The differences are most apparent in between moments of sharp changes in approval. This little difference between the two estimations in the case of Spanish executive approval met the expectations moving into the test. It is noteworthy however that the question seemingly more abstract and most-removed from measuring approval

---

<sup>4</sup>Following advice from Stimson’s R code documentation: “Correlations, in the case of time series, measure whether two series vary in or out of phase. Thus the cross-sectional interpretation of the negative correlation two items are inversely related does not hold. It is not unusual to observe negative “loadings” in extract analyses. They mean only that items move out of phase, not that they are opposites.” Read more at: <http://stimson.web.unc.edu/files/2018/07/ExtractDoc.pdf>

<sup>5</sup>A full list of sources for Spanish executive approval data and detailed question information is obtainable from the EAD team, who own this data.

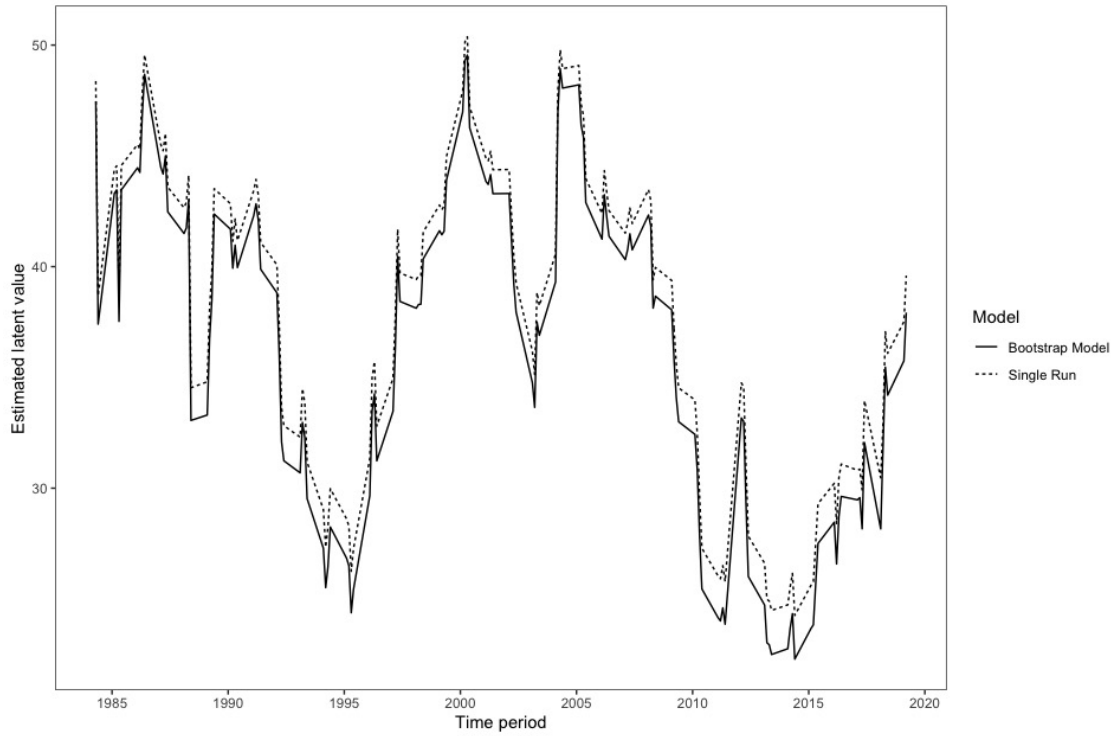


Figure 1: Bootstrapped and non-bootstrapped Stimson dyad-ratios estimation of Spanish executive approval. Bootstrapped model: 647 observations, 13 item series. Eigenvalue estimate: 89.4%. Single run: 691 observations, 18 item series. Eigenvalue estimate: 85.0%. See the paper's GitHub page for bootstrapped item statistics report: <https://github.com/patrick-eng/Dyad-Online-Repository/BootstrapResults>.

in a direct sense (the principle of firing leaders) was recommended for exclusion.

## 5 Databases Used in this Research

### 5.1 Cross-national sources for immigration, foreigners, and diversity items

#### **Eurobarometer**

The Mannheim Eurobarometer Trend File 1970-2002, [Computer file]. GESIS Study ZA3521, 2nd. edition (2.01), Cologne, Germany.

Eurobarometer 59.2 (2003). European Opinion Research Group, Brussels [Producer]. GESIS Data Archive, Cologne. ZA3905 data file version 1.0.1, doi:10.4232/1.10956.

#### **European Social Survey**

European Social Survey Cumulative File, ESS 1-8 (2018). Data file edition 1.0. NSD - Norwegian Centre for Research Data, Norway - Data Archive and distributor of ESS data for ESS ERIC. doi:10.21338/NSD-ESS-CUMULATIVE.

#### **European Values Study**

EVS (2015): European Values Study Longitudinal Data File 1981-2008 (EVS 1981-2008). GESIS Data Archive, Cologne. ZA4804 Data file Version 3.0.0, doi:10.4232/1.12253

#### **World Values Survey**

Inglehart, R., C. Haerpfer, A. Moreno, C. Welzel, K. Kizilova, J. Diez-Medrano, M. Lagos, P. Norris, E. Ponarin and B. Puranen et al. (eds.). 2018. World Values Survey: All Rounds - Country-Pooled Datafile Version: <http://www.worldvaluessurvey.org/WVSDocumentationWVL.jsp>. Madrid: JD Systems Institute.

### 5.2 British immigration opinions data

#### **British Election Study *Panel Studies***

Clarke, H. et al. , British General Election Study, 2001; Cross-Section Survey [computer file]. Colchester, Essex: UK Data Archive [distributor], March 2003.

Heath, A., Jowell, R. and Curtice, J.K., British Election Panel Study, 1997-2001; Waves 1 to 8 [computer file]. 4th Edition. Colchester, Essex: UK Data Archive [distributor], July 2002.

Clarke, H. et al. , British Election Study Six-Wave Panel Survey, 2005-2009 [computer file]. Colchester, Essex: UK Data Archive [distributor], January 2011.

Fieldhouse, E., J. Green., G. Evans., H. Schmitt, C. van der Eijk, J. Mellon and C. Prosser (2018) British Election Study Internet Panel Waves 1-14. DOI: 10.15127/1.293723

### **British Election Study** *Face to Face Surveys*

Clarke, H. et al. , British Election Study, 2005: Face-to-Face Survey [computer file]. Colchester, Essex: UK Data Archive [distributor], November 2006.

Whiteley, P.F. and Sanders, D., British Election Study, 2010: Face-to-Face Survey [computer file]. Colchester, Essex: UK Data Archive [distributor], August 2014.

Fieldhouse, E., Green, J., Evans, G., Schmitt, H., van der Eijk, C., Mellon, J., Prosser, C. (2016). British Election Study, 2015: Face-to-Face Post-Election Survey. [data collection]. UK Data Service. SN: 7972, <http://dx.doi.org/10.5255/UKDA-SN-7972-1>

Fieldhouse, E., Green, J., Evans, G., Schmitt, H., van der Eijk, C., Mellon, J., Prosser, C. (2018). British Election Study, 2017: Face-to-Face Post-Election Survey [data collection]. <http://doi.org/10.5255/UKDA-SN-8418-1>

### **British Social Attitudes Survey**

Social and Community Planning Research. (1996). British Social Attitudes Survey, 1983-1991; Cumulative File. [data collection]. UK Data Service. SN: 2955, <http://doi.org/10.5255/UKDA-SN-2955-1>

Social and Community Planning Research. (1996). British Social Attitudes Survey, 1994. [data collection]. UK Data Service. SN: 3572, <http://doi.org/10.5255/UKDA-SN-3572-1>

Social and Community Planning Research. (1998). British Social Attitudes Survey, 1995. [data collection]. UK Data Service. SN: 3764, <http://doi.org/10.5255/UKDA-SN-3764-1>

Social and Community Planning Research. (1999). British Social Attitudes Survey, 1996. [data collection]. 2nd Edition. UK Data Service. SN: 3921, <http://doi.org/10.5255/UKDA-SN-3921-1>

National Centre for Social Research. (2001). British Social Attitudes Survey, 1999. [data collection]. UK Data Service. SN: 4318, <http://doi.org/10.5255/UKDA-SN-4318-1>

National Centre for Social Research. (2005). British Social Attitudes Survey, 2003. [data collection]. UK Data Service. SN: 5235, <http://doi.org/10.5255/UKDA-SN-5235-1>

National Centre for Social Research. (2007). British Social Attitudes Survey, 2005. [data collection]. 2nd Edition. UK Data Service. SN: 5618, <http://doi.org/10.5255/UKDA-SN-5618-1>

National Centre for Social Research. (2010). British Social Attitudes Survey, 2008. [data collection]. UK Data Service. SN: 6390, <http://doi.org/10.5255/UKDA-SN-6390-1>

NatCen Social Research. (2014). British Social Attitudes Survey, 2011. [data collection]. 2nd Edition. UK Data Service. SN: 7237, <http://doi.org/10.5255/UKDA-SN-7237-2>

NatCen Social Research. (2014). British Social Attitudes Survey, 2013. [data collection]. UK Data Service. SN: 7500, <http://doi.org/10.5255/UKDA-SN-7500-1>

NatCen Social Research. (2019). British Social Attitudes Survey, 2017. [data collection]. UK Data Service.

### 5.3 Dutch immigration opinions data

Aarts, Kees, Todosijevic, Bojan, and van der Kaap, Harry. Dutch Parliamentary Election Study Cumulative Dataset, 1971-2006. Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributor], 2010-09-13. <https://doi.org/10.3886/ICPSR28221.v1>

Sociaal en Cultureel Planbureau (The Netherlands Institute for Social Research), Culturele Veranderingen in Nederland (Cultural Change in the Netherlands) 1995. Available from: [https://www.scpdata.nl/study\\_units/view/1](https://www.scpdata.nl/study_units/view/1)

Sociaal en Cultureel Planbureau (The Netherlands Institute for Social Research), Culturele Veranderingen in Nederland (Cultural Change in the Netherlands) 1997. Available from: [https://www.scpdata.nl/study\\_units/view/1](https://www.scpdata.nl/study_units/view/1)

Sociaal en Cultureel Planbureau (The Netherlands Institute for Social Research), Culturele Veranderingen in Nederland (Cultural Change in the Netherlands) 2000. Available from: [https://www.scpdata.nl/study\\_units/view/1](https://www.scpdata.nl/study_units/view/1)

Sociaal en Cultureel Planbureau (The Netherlands Institute for Social Research), Culturele Veranderingen in Nederland (Cultural Change in the Netherlands) 2002. Available from: [https://www.scpdata.nl/study\\_units/view/1](https://www.scpdata.nl/study_units/view/1)

Sociaal en Cultureel Planbureau (The Netherlands Institute for Social Research), Culturele Veranderingen in Nederland (Cultural Change in the Netherlands) 2004. Available from: [https://www.scpdata.nl/study\\_units/view/1](https://www.scpdata.nl/study_units/view/1)

### 5.4 Source for US and Spanish executive approval data

Carlin, Ryan E., Jonathan Hartlyn, Timothy Hellwig, Gregory J. Love, Cecilia Martinez-Gallardo, and Matthew M. Singer. 2019. Executive Approval Database 2.0. Available for download at [www.executiveapproval.org](http://www.executiveapproval.org).

## 6 Question Items Used in Public Opinion Measures

The following tables display the questions used in the public opinion measures and their sources for Britain and the Netherlands. Their labels can be cross-referenced with the factor loading scores reported on the paper's GitHub page: *[https : //github.com/patrick – eng/Dyad – Online – Repository/LogFiles](https://github.com/patrick-eng/Dyad-Online-Repository/LogFiles)*. Following Stimson's guidelines, identical questions asked across survey houses have been coded as being the same question item. As such, there may be two entries for the same variable name (and with the same descriptive statistics) but listed under different survey sources. For exact question wording, sources and other information regarding the Spanish and US executive approval measures, I must defer to the Executive Approval Project who kindly donated and maintain ownership and intellectual property over the data: *[http : //www.executiveapprovaldata.org](http://www.executiveapprovaldata.org)*.



Table A.1 - Question Items Used in British Immigration Opinions Measurements

Label	Question Wording	Survey	Topic	Mean	S.D.
BES_CULT	Do you think that immigration undermines or enriches Britain's cultural life?	BES	Culture	0.539	0.047
BES_ECON	Do you think immigration is good or bad for Britain's economy?	BES	Economy	0.488	0.079
BES_NUM	Do you think that too many immigrants have been let into this country, or not	BES	Numbers	0.745	0.056
BES_WELF	Immigrants are a burden on the welfare state.	BES	Welfare	0.675	0.050
BSA_ECON	Immigrants generally are good for Britain's economy	BES	Economy	0.504	0.165
BSA_CRIME	Immigrants increase crime rates	BES	Crime	0.545	0.082
BSA_CULT	Immigrants make Britain more open to new ideas and cultures	BES	Culture	0.384	0.132
BSA_JOBS	Immigrants take jobs away from people who were born in Britain	BES	Jobs	0.568	0.060
BSA_JOBS	Immigrants take jobs away from people who were born in Britain.	BSA	Jobs	0.568	0.060
BSA_AUS	Do you think Britain should allow more settlement, less settlement, or about the same amount as now by people from Australia and New Zealand	BSA	Numbers	0.750	0.049
BSA_ASI	Do you think Britain should allow more settlement, less settlement, or about the same amount as now by Indians and Pakistanis	BSA	Numbers	0.969	0.010
BSA_EEC	Do you think Britain should allow more settlement, less settlement, or about the same amount as now by people from the European Economic Community	BSA	Numbers	0.859	0.027
BSA_WIN	Do you think Britain should allow more settlement, less settlement, or about the same amount as now by West Indians	BSA	Numbers	0.960	0.014
BES_NUM	Do you think that too many immigrants have been let into the country or not?	BSA	Numbers	0.745	0.056
BSA_NUM	Do you think the number of immigrants to Britain nowadays should be increased a lot, increased a bit, kept the same, reduced a bit, or reduced a lot?	BSA	Numbers	0.944	0.010
BSA_CRIME	How much do you agree or disagree with the following statements: Immigration increases crime rates	BSA	Crime	0.545	0.082
BSA_ECN2	On a scale of 0 to 10, where 0 is extremely bad and 10 is extremely good, would you say it is generally bad or good for Britain's economy that migrants come to Britain from other countries?	BSA	Economy	0.566	0.079
BSA_CULT2	On a scale of 0 to 10, would you say that Britain's cultural life is generally undermined or enriched by migrants coming to live here from other countries?	BSA	Culture	0.551	0.035

Label	Question Wording	Survey	Topic	Mean	S.D.
BSA_FAM	About the families (husbands, wives, children, parents) of people who have already settled in Britain. Would you say in general that Britain should . . . be stricter in controlling the settlement of close relatives OR be less strict in controlling the settlement of close relatives?	BSA	Family Reunification	0.856	0.015
ESS_CULT	Would you say that [country]’s cultural life is generally undermined or enriched by people coming to live here from other countries?	ESS	Culture	0.478	0.089
ESS_IMM2	How about people of a different race or ethnic group from most [country] people?	ESS	Numbers	0.456	0.062
ESS_LIVE	Is [country] made a worse or a better place to live by people coming to live here from other countries?	ESS	Impact	0.530	0.080
ESS_IMM1	To what extent do you think [country] should allow people of the same race or ethnic group as most [country] people to come and live here ?	ESS	Numbers	0.359	0.048
ESS_ECON	Would you say it is generally bad or good for [country]’s economy that people come to live here from other countries?	ESS	Economy	0.522	0.099
ESS_IMM3	How about people from the poorer countries outside Europe?	ESS	Numbers	0.513	0.061
EVS_JOBS	Do you agree or disagree with the following statement? When jobs are scarce, employers should give priority to [country nationality] people over immigrants	EVS	Jobs	0.613	0.068
ESS_CULT	A country’s cultural life is undermined by immigrants/A country’s cultural life is not undermined by immigrants	EVS	Culture	0.478	0.089
EVS_NEIGH	On this list are various groups of people. Could you please tell me any that you would not, generally speaking, like to have as neighbours? Immigrants/Foreign Workers	EVS	Xenophobia	0.210	0.171
EVS_NEIGH	On this list are various groups of people. Could you please tell me any that you would not, generally speaking, like to have as neighbours? Immigrants/Foreign Workers	WVS	Xenophobia	0.210	0.171
EVS_PRI~Y	Do you agree or disagree with the following statement? When jobs are scarce, employers should give priority to [country nationality] people over immigrants	EVS	Jobs	0.613	0.068
EVS_PRI~Y	Do you agree or disagree with the following statement? When jobs are scarce, employers should give priority to [country nationality] people over immigrants	WVS	Jobs	0.613	0.068

Label	Question Wording	Survey	Topic	Mean	S.D.
EB.NUM	Generally speaking, how do you feel about the number of foreigners living in [COUNTRY]?Are there too many, a lot but not too many, or not many?	EB	Numbers	0.536	0.042
EB.DISTURB	Some people are disturbed by the opinions, customs and way of life of people different from themselves. Do you personally, in your daily life find disturbing the presence of people of another nationality?	EB	Xenophobia	0.133	0.024
EB.FAMILY	For each of the following statements, could you please tell me whether you tend to agree or whether you tend to disagree; Legally established immigrants from outside the European Union should have the right to bring members of their immediate family into the UK	EB	Family Reunification	0.600	0.063
EB.RIGHTS	For each of the following statements, could you please tell me whether you tend to agree or whether you tend to disagree; Legally established immigrants from outside the European Union should have the same social rights as UK citizens	EB	Social Rights	0.354	0.038
EB.RIGHTS2	Still thinking of these people [people living in [COUNTRY] who are not from European Community countries], do you think their rights should be?	EB	Social Rights	0.766	0.128
EB.SEND~K	For each of the following statements, could you please tell me whether you tend to agree or whether you tend to disagree; All immigrants, whether legal or illegal, from outside the European Union and their children, even those who were born in the UK, should be sent back to their country of origin	EB	Repatriation	0.210	0.043
EB.SEND~K2	For each of the following statements, could you please tell me whether you tend to agree or whether you tend to disagree; Legally established immigrants from outside the European Union should be sent back to their country of origin if they have been convicted of serious offences	EB	Repatriation	0.810	0.023
EB.SEND~K3	For each of the following statements, could you please tell me whether you tend to agree or whether you tend to disagree; Legally established immigrants from outside the European Union should all be sent back to their country of origin	EB	Repatriation	0.250	0.056
EB.SEND~K4	For each of the following statements, could you please tell me whether you tend to agree or whether you tend to disagree; Legally established immigrants from outside the European Union should be sent back to their country of origin in they are unemployed	EB	Repatriation	0.390	0.054

Label	Question Wording	Survey	Topic	Mean	S.D.
ESS_GAY*	Please say to what extent you agree or disagree with each of the following statements: Gay men and lesbians should be free to live their own life as they wish	ESS	NA	0.058	0.020
ESS_TRUST*	Generally speaking, would you say that most people can be trusted, or that you can't be too careful in dealing with people?	ESS	NA	0.402	0.029
ESS_SATIS*	And on the whole, how satisfied are you with the way democracy works in [country]?	ESS	NA	0.450	0.052

\* Question items used only in the 'InvalidMood' estimation.

Table A.2 - Question Items Used in Dutch Foreigners and Diversity Opinions Measurements

Label	Question Wording	Survey	Topic	Mean	S.D.
ESS_CULT	Would you say that [country]'s cultural life is generally undermined or enriched by people coming to live here from other countries?	ESS	Culture	77.56	2.59
ESS_IMM2	How about people of a different race or ethnic group from most [country] people?	ESS	Numbers	61.28	6.21
ESS_LIVE	Is [country] made a worse or a better place to live by people coming to live here from other countries?	ESS	Impact	55.73	7.95
ESS_IMM1	To what extent do you think [country] should allow people of the same race or ethnic group as most [country] people to come and live here ?	ESS	Numbers	67.09	5.23
ESS_ECON	Would you say it is generally bad or good for [country]'s economy that people come to live here from other countries?	ESS	Economy	56.80	7.79
ESS_IMM3	How about people from the poorer countries outside Europe?	ESS	Numbers	54.17	4.67
EB_NUM	Generally speaking, how do you feel about the number of foreigners living in [COUNTRY]?Are there too many, a lot but not too many, or not many?	EB	Numbers	55.86	6.59
EB_DISTURBS	Some people are disturbed by the opinions, customs and way of life of people different from themselves. Do you personally, in your daily life find disturbing the presence of people of another nationality?	EB	Xenophobia	87.43	2.86
EB_FAMILY	For each of the following statements, could you please tell me whether you tend to agree or whether you tend to disagree; Legally established immigrants from outside the European Union should have the right to bring members of their immediate family into the Netherlands	EB	Family Reunification	42.92	7.47
EB_RIGHTS	For each of the following statements, could you please tell me whether you tend to agree or whether you tend to disagree; Legally established immigrants from outside the European Union should have the same social rights as Dutch citizens	EB	Social Rights	74.47	2.11
EB_RIGHTS2	Still thinking of these people [people living in [COUNTRY] who are not from European Community countries], do you think their rights should be?	EB	Social Rights	35.33	8.81

Label	Question Wording	Survey	Topic	Mean	S.D.
EB_SEND~K	For each of the following statements, could you please tell me whether you tend to agree or whether you tend to disagree; All immigrants, whether legal or illegal, from outside the European Union and their children, even those who were born in the Netherlands, should be sent back to their country of origin	EB	Repatriation	83.95	5.47
EB_SEND~K2	For each of the following statements, could you please tell me whether you tend to agree or whether you tend to disagree; Legally established immigrants from outside the European Union should be sent back to their country of origin if they have been convicted of serious offences	EB	Repatriation	20.20	3.63
EB_SEND~K3	For each of the following statements, could you please tell me whether you tend to agree or whether you tend to disagree; Legally established immigrants from outside the European Union should all be sent back to their country of origin	EB	Repatriation	83.43	6.85
EB_SEND~K4	For each of the following statements, could you please tell me whether you tend to agree or whether you tend to disagree; Legally established immigrants from outside the European Union should be sent back to their country of origin in they are unemployed	EB	Repatriation	65.00	6.73
EVS_NEIGH	On this list are various groups of people. Could you please tell me any that you would not, generally speaking, like to have as neighbours? Immigrants/Foreign Workers	EVS	Xenophobia	88.50	4.97
EVS_NEIGH	On this list are various groups of people. Could you please tell me any that you would not, generally speaking, like to have as neighbours? Immigrants/Foreign Workers	WVS	Xenophobia	88.50	4.97
IMMEE	Do you think that people coming from Eastern Europe who wish to work in the West should be accepted without restrictions, be accepted but with restrictions, or not be accepted?	EB	Numbers	33.24	8.65
ASYLE2	Do you think that those seeking asylum be accepted without restrictions, be accepted but with restrictions, or not be accepted?	EB	Asylum	70.68	13.62
RACED	Some people are disturbed by the opinions, customs and way of life of people different from themselves. Do you personally, in your daily life find disturbing the presence of people another race?	EB	Racism	91.02	1.22
IMMNUMB2	Would you again like to express an opinion on those types of government policies, and say for each of them whether you think the government is doing too much, just enough or too little about it? The policy on the number of foreigners received.	SCP	Numbers	12.70	3.36

Label	Question Wording	Survey	Topic	Mean	S.D.
ASYLE	Allowing asylum seekers to enter the Netherlands has frequently been in the news during the last few years. Some people think that the Netherlands should allow more asylum seekers than the government currently does. Other people think that the Netherlands should send asylum seekers who are already staying here back to their country of origin. Of course, there are also people whose opinion lies somewhere in between. And where would you place yourself on this line?	DPES	Asylum	32.15	4.49
ETHNICM	There is disagreement in the Netherlands about foreigners and ETHNIC MINORITIES. Some people and parties think that these people should be able to live in the Netherlands while preserving all customs of their own culture. Others think that these people, if they stay in the Netherlands, should completely adjust themselves to Dutch culture. Of course, there are also people whose opinion is somewhere in between. And where would you place yourself on this line?	DPES	Xenophobia	22.44	4.40

## References

- Stimson, J. A. (1991), *Public Opinion in America: Moods, Cycles, and Swings*, Westview Press, Boulder.
- Stimson, J. A. (1999), *Public Opinion in American: Mood, Cycles, and Swings*, 2nd edn, Westview Press, Boulder.
- Stimson, J. A. (2018), ‘The Dyad Ratios Algorithm for Estimating Latent Public Opinion: Estimation, Testing, and Comparison to Other Approaches’, *Bulletin of Sociological Methodology/Bulletin de Methodologie Sociologique* **137-138**(1), 201–218.