Social Trust Scale (ESS)

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1 Overview

Abstract

The Social Trust Scale of the European Social Survey (ESS) measures to what extent respondents trust and expect fairness from other people.

Keywords

Title: Social Trust Scale (ESS)

Author: Breyer

In ZIS since: 2015

Number of Items: 3

Reliability: Cronbach's Alpha = .52 to .85

Validity: evidence for construct validity

Construct: Social Trust

Catchwords: social, trust, fairness, help

Language Documentation: English

Language Items: English (source) and 26 further languages

URL Website: European Social Survey

URL Data archive: ESS (2002 – 2014), British Social Attitudes Survey (1997, 1998, 2000, 2004, 2005, 2007, 2008, 2010, 2011, 2012, 2013), British Election Study (2001, 2005, 2010), Health Survey for England (2000 – 2006), Citizenship Survey (2008 – 2009, 2009 – 2010, 2010 – 2011), Scottish Social Attitudes Survey (2000, 2004, 2007, 2009, 2010, 2011, 2013). For further, see data sources.

Item(s) used in Representative Survey: yes

Status of Development: validated, standardized

2 Instrument

Items

The items of the Social Trust Scale (ESS, 2012) are shown in Table 1.

Table 1

Items of the Social Trust Scale (ESS)

No	Item
1	Generally speaking, would you say that most people can be trusted, or that you can't be too careful[1] in dealing with people? Please tell me on a score of 0 to 10, where 0 means you can't be too careful and 10 means that most people can be trusted.
2	Do you think that most people would try to take advantage[2] of you if they got the chance, or would they try to be fair?
3	Would you say that most of the time people try to be helpful[3] or that they are mostly looking out for themselves?

[1]„Can't be too careful": need to be wary or always somewhat suspicious.

[2]"Take advantage": exploit or cheat; „fair": in the sense of treat appropriately and straightforwardly.

[3]The intended contrast is between self-interest and altruistic helpfulness.

The items are available in 27 languages on the European Social Survey website. The original scale was designed in British English and then translated by each national team. The questionnaire was translated into any language spoken as a first language by at least 5% of the population of a country. Beyond the English version, the test is available in the following languages: Albanian, Arabic, Bulgarian, Catalan, Cyprian, Czech, Danish, Dutch, Estonian, Finnish, French, German, Hungarian, Icelandic, Italian, Hebrew, Lithuanian, Norwegian, Polish, Portuguese, Russian, Slovak, Slovenian, Spanish, Swedish and Ukrainian. All translated questionnaires were pre-tested.

Response specifications

There is an 11-point rating scale for each item with different labelled ends. Alternatively to the following categories, the response "Don't know" is offered for each item.

- Item 1: 0 = "You can't be too careful", 10 = „Most people can be trusted"
- Item 2: 0 = „Most people would try to take advantage of me", 10 = „Most people would try to be fair"
- Item 3: 0 = „People mostly look out for themselves", 10 = „People mostly try to be helpful"

Scoring

A total score over all items can be computed for social trust. Low values indicate low social trust.

Application field

The Social Trust Scale measures to what extent respondents expect fairness from, and trust, other people. It is part of the module "Media and social trust" of the European Social Survey (ESS), a cross-national survey that has been conducted every two years across Europe since 2001. The Social Trust Scale has been part of the ESS in every round since beginning. In the sixth round, the survey covers 29 countries. Additionally to the Social Trust Scale, the questionnaire includes questions on a variety of core topics such as health, education and socio-demographic characteristics, as well as the Human Values Scale. The Social Trust Scale can be used as paper-pencil or computer-based test, in self-completion or face-to-face, as well as individual test or group test.

3 Theory

Social trust can be described as a generalized expectancy that the words or promises of others can be relied on (Rotter 1967, p. 651). Persons with high social trust believe that others will not knowingly or willingly do harm to them, but rather act in their interests (Newton, 2001, p. 202). There are two general perspectives on the origin of social trust. On the one hand, social trust can be described as an individual personality disposition that develops either in early childhood or as a result of positive experiences with others in consequence of high social and economic status. According to this perspective, social trust changes only very slowly. In contrast, social trust can also be described as a result of the social surrounding which adapts quickly to changing environments. According to this point of view, living in a trusting, democratic society encourages the development of trusting attitudes and behavior.

The concept of social trust is similar to political trust, as both contribute to social cooperation. However, social trust refers to interpersonal trust, whereas political trust deals with trust between citizens and political institutions. Social trust can be used as an indicator for the trustworthiness of societies and social systems (Newton, 2013).

4 Scale development

Item generation and selection

The Social Trust Scale has been used in every round of the ESS since its beginning in 2002. It consists of three items based on a scale measuring misanthropy by Rosenberg (1956, 1957). Each item represents opposite views – distrust vs. trust (item 1), exploitation vs. fairness (item 2) and selfishness vs. helpfulness (item 3). The scale was included in the ESS because it is important for many social, political, and economic phenomena such as efficiency of government, market economics, life satisfaction, happiness, or well-being. The items have remained the same between 2002 and 2012.

Samples

The sample was derived from the sixth European Social Survey (ESS) in 2012. Participants were randomly selected from all persons aged 15 and over resident within private households, regardless of their nationality, citizenship, language or legal status, in the following countries: Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Hungary, Ireland, Italy, Lithuania, Netherlands, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, United Kingdom (European countries), Albania, Iceland, Israel, Kosovo, Norway, Switzerland, Russian Federation, Ukraine (non-European countries).

The sampling frames differed between countries. Some countries provided registers of residents or households that are available for social research. If no registers were available, multi-stage sample designs were usually applied, in which so called primary sampling units (PSUs) were selected at the first stage. At the second stage of sampling, households or addresses within the PSUs were selected.

The final sample for the Social Trust Scale of ESS 6 consists of N = 54,673 people of 29 countries, thereof N = 25,214 male and N = 29,442 female. The average age is 47.08 years. See Table 2 for sample size, age, gender and educational level for each country.

Cases with the answer categories „Refusal", „Don't know" or „No answer" for one or several items were excluded from the following analyses, because these categories express neither approval nor refusal and can thus be interpreted as missing statements. For descriptive statistics, design weights were applied to correct for different sampling probabilities in the countries. See Table 2 for sample size, age, gender and educational level for each country.

Table 2

Sample size (N), gender (%), age (M, SD) and educational level (% based on ISCED) for each country and across all countries (total)

		Gender in %		Age		Educational level in %*		
Country	N	Male	Female	M	SD	1	2	3
Albania	1,201	45.6	54.4	41.96	18.22	44.2	36.6	17.3
Belgium	1,869	48.7	51.3	47.33	19.08	30.9	27.9	40.6
Bulgaria	2,260	43.1	56.9	52.48	16.73	26.6	50.3	23.1
Switzerland	1,493	50.0	50.0	47.41	18.78	20.8	45.1	33.8
Cyprus	1,116	43.4	56.6	45.94	17.88	28.2	37.1	34.6
Czech Republic	2,009	51.0	49.0	45.49	17.06	15.9	54.6	28.0
Germany	2,958	50.3	49.7	47.87	18.55	16.1	43.8	38.5
Denmark	1,650	50.5	49.5	48.70	19.02	26.7	32.0	41.0
Estonia	2,380	42.0	58.0	49.41	19.51	21.1	35.5	43.4
Spain	1,889	48.3	51.7	47.64	17.99	60.2	12.6	26.8
Finland	2,197	48.9	51.1	49.75	18.88	26.2	32.5	41.2
France	1,968	45.9	54.1	49.21	18.17	27.0	45.1	27.9

United Kingdom	2,286	43.4	56.6	49.07	19.03	36.0	26.4	33.9
Hungary	2,014	44.9	55.1	47.20	18.17	23.5	52.9	23.3
Ireland	2,628	48.2	51.8	44.82	17.63	31.7	27.3	40.1
Israel	2,508	45.8	54.2	44.31	19.08	15.5	38.9	43.9
Iceland	752	49.8	50.2	44.14	18.73	38.5	22.4	38.9
Italy	960	47.8	52.2	47.08	18.28	38.1	38.6	21.5
Lithuania	2,109	43.6	56.4	45.03	18.23	23.5	36.6	39.7
Netherlands	1,845	46.9	53.1	48.83	17.85	42.2	25.1	32.3
Norway	1,624	52.8	47.2	46.00	18.17	20.3	34.0	45.3
Poland	1,889	47.9	52.1	46.10	18.87	45.1	31.0	23.5
Portugal	2,151	39.9	60.1	49.96	18.95	69.9	19.4	10.6
Russian Federation	2,484	39.9	60.1	43.64	17.34	11.5	24.7	63.8
Sweden	1,847	51.3	48.7	47.83	19.01	22.9	34.5	42.1
Slovenia	1,257	45.9	54.1	48.31	18.85	22.7	53.7	23.4
Slovakia	1,847	43.1	56.7	46.73	16.06	11.0	62.6	25.9
Ukraine	2,178	38.4	61.6	45.84	18.20	13.1	24.4	62.1
Kosovo	1,295	47.8	52.2	41.90	17.28	49.7	39.7	10.6
Total	54,673	46.1	53.9	47.08	18.43	28.7	36.1	35.2

Note. Observations were weighted based on design weights. The educational level data do not sum up to 100% because the categories „Not possible to harmonise into ES-ISCED", "other" and missing values are not reported. [*]1 = ISCED 1-2: lower secondary education or less, 2 = ISCED 3-4: upper secondary education, 3 = ISCED 5-7: advanced vocational or sub-degree and tertiary education, BA or MA level.

Item analyses

A confirmatory factor analysis was conducted using the three items as manifest variables. With three manifest variables and one latent factor, factor loadings need to be set equal to get the model identified. Therefore, a tau-equivalent model with equal factor loadings was tested. The model structure with standardized regression weights for Germany is presented in Figure 1.
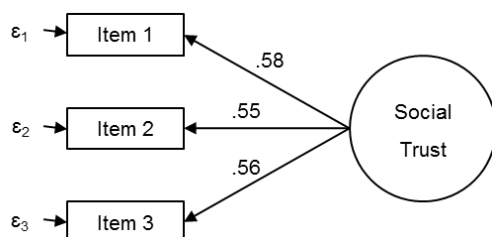

Figure 1. τ-equivalent measurement model for the Social Trust Scale. Structure and standardized parameters of the model for Germany, observations were weighted based on design weights. $N = $ 54,607, $RMSEA = .052$, $CFI = .975$, $\chi^2 (58) = 348.733$, $p = .000$.

Item parameter

Means and standard deviations for Germany and for the total sample are shown in Table 3. See Table 6 for reference values for each country.

Table 3
Mean and standard deviation of the manifest items for Germany and across all countries (total)

		Germany		Total	
No	Item	M	SD	M	SD
1	Generally speaking, would you say that most people can be trusted, or that you can't be too careful in dealing with people?	4.99	2.18	4.94	2.48
2	Do you think that most people would try to take advantage of you if they got the chance, or would they try to be fair?	5.92	2.02	5.52	2.33
3	Would you say that most of the time people try to be helpful or that they are mostly looking out for themselves?	5.16	2.01	4.87	2.37

Note. Observations were weighted based on design weights, scale from 0 = "You can't be too careful" to 10 = "Most people can be trusted" (item 1), 0 = "Most people would try to take advantage of me" to 10 = "Most people would try to be fair" (item 2), 0 = "People mostly look out for themselves" to 10 = "People mostly try to be helpful" (item 3), $N = 2,949$ (Germany), $N = 53,834$ (Total).

5 Quality criteria

Objectivity

For the Social Trust Scale, the structured interview methods of CAPI (Computer Assisted Personal Interview) or PAPI (Paper And Pencil Interview) was used. These interviews are personally conducted by specially trained and selected interviewers. The survey includes a standardized questionnaire format and written instructions. Fixed categories are used to rate the scale. As a result, a high objectivity of application is achieved. Furthermore, a high objectivity of interpretation is ensured, as a norming sample is available for the Social Trust scale (see descriptive statistics).

Reliability

For the Social Trust Scale, the reliability for each country and across all countries (total) has been estimated (see Table 4). According to Cortina (1993), Cronbach's alpha provides an appropriate indicator for reliability for tau-equivalent models with equal factor loadings.
For further analyses, all ESS data sets are available at http://www.europeansocialsurvey.org/.

Table 4

Cronbach's Alpha for the Social Trust Scale for each country and across all countries (total)

	N	Cronbach's α
Albania	1,201	.52
Belgium	1,869	.70
Bulgaria	2,260	.78
Cyprus	1,116	.77
Czech Republic	2,009	.84
Denmark	1,650	.74
Estonia	2,380	.72
Finland	2,197	.73
France	1,968	.65
Germany	2,958	.69
Hungary	2,014	.81
Iceland	752	.69
Ireland	2,628	.77
Israel	2,508	.70
Italy	960	.73
Kosovo	1,295	.68
Lithuania	2,109	.79
Netherlands	1,845	.72
Norway	1,624	.71
Poland	1,898	.65
Portugal	2,151	.76
Russian Federation	2,484	.70
Slovakia	1,847	.83
Slovenia	1,257	.74
Spain	1,889	.69
Sweden	1,847	.74
Switzerland	1,488	.69
Ukraine	2,178	.85
United Kingdom	2,286	.72
Total	54,637	.78

Note. Observations were weighted based on design weights.

Validity

Construct validity is fulfilled when the scale measures the construct in a way that it is consistent with existing theories and definitions. Therefore, the total social trust score was correlated with other scales from the ESS. According to Newton (2013), social trust is associated with political trust, as both forms of trust are similar to each other. Newton (2001) also suggests that participation in voluntary

organizations encourages social trust, because it leads to respect, understanding, openness, social engagement and cooperation. Furthermore, according to the success and well-being theory, social trust correlates positively with a higher socio-economic status, happiness, optimism and good health. Finally, according to (Schwartz, 2003a), the value of security from the Human Values Scale includes safety and stability of society, of relationships, and of self, which implies social control. By contrast, high social trust means relying on the actions of other people and partly giving up control. Therefore, a high social trust should correlate negatively with the security dimension of the Human values scale.

According to Newton (2013), social trust is an indicator for the trustworthiness of societies and social systems. Hence, the criterion validity was evaluated by the association of social trust with perceived democracy, the perceived quality of the educational system, and the perceived quality of the health system of countries.

The following scales from ESS 6 were used to examine construct validity:

- Political trust (α = .91): "Using this card, please tell me on a score of 0-10 how much you personally trust each of the institutions I read out. 0 means you do not trust an institution at all, and 10 means you have complete trust. Firstly…"
    - "…[country]'s parliament?"
    - "…the legal system?"
    - "…the police?"
    - "…politicians?"
    - "…political parties?"
    - "…the European Parliament?"
    - "…the United Nations?"
- Participation in voluntary organizations:
    - "In the past 12 months, how often did you get involved in work for voluntary or charitable organisations?"
- Socio-economic status (SES):
    - "There are people who tend to be towards the top of our society and people who tend to be towards the bottom. On this card there is a scale that runs from top to bottom. Where would you place yourself on this scale nowadays?"
- Happiness:
    - "Taking all things together, how happy would you say you are?"
- Optimism:
    - "I'm always optimistic about my future."
- Security, Human values scale (α = .62):
    - "Now I will briefly describe some people. Please listen to each description and tell me how much each person is or is not like you."
        - "It is important to him/her to live in secure surroundings. He/she avoids anything that might endanger his/her safety."

- "It is important to him/her that the government ensures his/her safety against all threats. He/she wants the state to be strong so it can defend its citizens."
- Country's democracy:
  - "How democratic do you think [country] is overall? Choose your answer from this card where 0 is not at all democratic and 10 is completely democratic."
- Country's education:
  - "Now, using this card, please say what you think overall about the state of education in [country] nowadays?"
- Country's health system:
  - "Still using this card, please say what you think overall about the state of health services in [country] nowadays?"

Table 5

Correlations of the Social Trust Scale with relevant variables

	Social Trust
Political trust	.44
Participating voluntarily	.13
SES	.22
Happiness	.28
Optimism	.14
Security (HVS)	-.16
Country's health system	.21
Country's democracy	.25
Country's education	.19

Note. Pearson correlation coefficients. All correlations are significant,

$p < .001$ (two-tailed). Observations were weighted based on design

weights and population weights.

Practical importance of the validity coefficients can be interpreted according to Cohen's (1992) standards: small effect ($r = .10$), moderate effect ($r = .30$), strong effect ($r = .50$).

Consistent to expectations, social trust correlates positively at a moderate level with political trust. It also correlates at a small level with participation in voluntary organizations, higher socio-economic status, happiness, optimism, as well as with country's health system, democracy and education. On the other hand, social trust correlates negatively at a small level with the security dimension of the Human Values Scale. Altogether, the expected relations could be confirmed by data. The results indicate validity for the Social Trust Scale.

Descriptive statistics (scaling)

The values for skewness range from -.86 (Netherlands) to .26 (Bulgaria). The values for kurtosis range between -.47 (Slovenia) and 1.16 (Denmark). Across all countries, skewness is -.35 and kurtosis is -.22. According to Miles and Shevlin (2001), deviations from normality ≤ 1 can be neglected. As deviations for nearly all countries are ≤ 1, and the kurtosis for Denmark and Norway (1.08) is close to 1, the assumption of a normal distribution can be considered as given. This is confirmed by a comparison with the normal probability plots.

In Table 6, reference values in terms of means and standard deviations for the Social Trust Scale in Germany and for the total sample (across all countries) are presented. Data are retrieved from the European Social Survey 6 and can be used to compare the scale values of another study with the values of a representative sample from different countries.

For further analyses, all ESS data files including descriptions of the selected variables can be downloaded in SPSS, Stata, SAS and other formats sets at http://www.europeansocialsurvey.org/.

Table 6

Reference values for the Social Trust Scale for each country and across all countries (total)

	N	M	SD
Albania	1,201	3.73	2.15
Belgium	1,869	5.16	1.62
Bulgaria	2,251	3.59	2.00
Cyprus	1,116	3.74	1.97
Czech Republic	2,002	4.71	2.04
Denmark	1,650	6.83	1.49
Estonia	2,378	5.41	1.80
Finland	2,196	6.42	1.46
France	1,968	4.99	1.59
Germany	2,958	5.36	1.63
Hungary	2,013	4.87	1.94
Iceland	749	6.34	1.54
Ireland	2,628	5.60	1.90
Israel	2,540	5.26	1.88
Italy	959	4.58	1.94
Kosovo	1,294	4.06	2.10
Lithuania	2,106	5.10	1.84
Netherlands	1,845	5.98	1.46
Norway	1,622	6.58	1.40
Poland	1,898	4.29	1.85
Portugal	2,151	4.06	1.84
Russian Federation	2,482	4.69	2.07
Slovakia	1,838	4.04	2.01

Slovenia	1,257	4.89	1.95
Spain	1,888	5.08	1.72
Sweden	1,845	6.17	1.60
Switzerland	1,493	5.92	1.59
Ukraine	2,169	4.50	2.23
United Kingdom	2,282	5.64	1.59
Total	54,613	5.10	2.00

Note. Observations were weighted based on design weights.

Further quality criteria

There are three possible levels of measurement invariance: When configural invariance is given, the factor structure is equivalent between countries. Metric invariance means that the factor structure and the item loadings are equivalent. For scalar invariance, the factor structure, the item loadings and the intercepts need to be equivalent across countries. For the Social Trust Scale, measurement invariance was investigated by structural equation modeling. As the model for this scale is only identified with equal factor loadings, only metric invariance and scalar invariance could be investigated. To test metric invariance, all items were constrained to load on the same factors and the factor loadings were constrained to be invariant across countries, whereas the variance of the latent social trust variable and the items' intercepts were allowed to differ between countries (see Figure 1). To investigate scalar invariance, all items were constrained to load on the same factors and the factor loadings as well as the items' intercepts were constrained to be invariant across countries. As suggested by Cheung and Rensvold (2002), we used the change in CFI as decision criteria whereby a ΔCFI > .01 between two invariance levels suggest that the lower level of invariance should be accepted. Results are shown in Table 7 below.

Table 7

Measurement invariance for Social Trust across all 29 countries

	RMSEA	CFI	χ²	*df*
Metric invariance across countries	.055	.970	398.494***	59
Scalar invariance across countries	.088	.854	1,777.943***	114

Note. Observations were weighted based on design weights, *N* = 54,607, ***$p \leq$ .001.

The model of metric invariance shows a very good fit across countries. However, for the model of scalar invariance, CFI and RMSEA suggest a low model fit. This is confirmed by a comparison of the chi-square-values, which reveals a big difference between the two models (ΔCFI = .12). According to Chen (2007) and Cheung and Rensvold (2002), only the model of metric invariance can be accepted. The results suggest equivalent meanings of the items of the Social Trust Scale across countries. However, item intercepts and thus item difficulties differ between countries.

6 Literature and data sources

Data sources

The scale has been used in the following studies:

- British Social Attitudes Survey: 1997, 1998, 2000, 2004, 2005, 2007, 2008, 2010, 2011, 2012, 2013
- British Election Study: 2001 (General), 2005 (Face-to-Face Survey), 2005-2010 (Nine-Wave Panel Survey), 2010 (Campaign Internet Data), 2010 (Face-to-Face Survey)
- European Social Survey (ESS): 2002, 2004, 2005, 2008, 2010, 2012, 2014
- Health Survey for England: 2000, 2001, 2002, 2003, 2004, 2005, 2006
- Citizenship Survey: 2008-2009, 2009-2010, 2010-2011
- Scottish Social Attitudes Survey: 2000, 2004, 2007, 2009, 2010, 2011, 2013
- Exploring Data, Second Edition: Teaching Datasets, 1958-2005
- International Social Survey Programme (ISSP) 1998
- New Russia Barometer VII, 1998 (similar)
- Democracy and Social Transition in the Baltic Sea Region Estonia/Latvia/Lithuania 1999
- International Social Survey Programme (ISSP) 2004, Norwegian part
- European Quality of Life Survey, 2007
- World Values Survey, 2007 – Norwegian part
- ONS Omnibus Survey, Confidence in Official Figures Module, 2007 (similar)
- National Child Development Study: Sweep 8, 2008-2009
- Finnish National Election Study 2011
- 1970 British Cohort Study: Forty-Two-Year Follow-Up, 2012

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