

Methodological Problems with Surveying Trust

Susanne Lundåsen¹,

¹Ersta Sköndal University College, P.O. Box 11189, 100 61 Stockholm, Sweden

Abstract

This contribution evaluates one attempt to measure social trust through a multitude of survey items. Cognitive interviews were used on a small sample of respondents to test question wordings. Data from a large postal survey carried out in 2009 to a sample of 12909 respondents with several items relating to trust is used to analyze the validity of the measurements and the multidimensionality of the concept. The survey data suggests that trust is a multidimensional concept. A major drawback is that the adding of survey items on trust seems to increase the proportion of internal missing values and don't knows.

Key Words: Social trust, generalized trust, question wording, dimensions of trust, measurement

1. Social Trust

The aim of this paper is to evaluate and describe attempts to improve the measurements of interpersonal trust. The data that is used comes from a pre-test and a mail survey carried out in 2009 in Sweden.

Social trust, or generalized trust, has been seen as the chicken soup of society in that it makes all kinds of social interaction run smoother (Uslaner, 2002). The fact that levels of social trust vary cross-nationally has been well established by surveys such as the World Values Survey, the European Values Study and the European Social Survey. Recently research has also given more attention to within country variations since the contextual factors that may explain variations in levels of social trust are community characteristics rather than country characteristics, and include ethnic diversity, religiosity, residential segregation and economic inequality. Previous research has found positive correlations between levels of social trust and economic growth (Zak & Knack, 2001). Other studies have found negative correlations between levels of social trust and corruption, economic inequality and gender inequality (Rothstein & Uslaner, 2005). In short, high levels of social trust at the aggregate level are associated with factors that are usually identified as desirable properties for a society.

Theoretically, many authors distinguish between different forms of trust; trust in people that are known and trust in strangers is one common distinction (Uslaner, 2002). Uslaner (2002) distinguishes between generalized and particularized trust. Particularized trust is trust in people that are known or whom the respondents have information about, while generalized (or social) trust is trust in strangers or people that respondents have little or

no information about. Other studies have come to similar conclusions regarding the two different dimensions of interpersonal trust (Freitag & Traunmüller, 2009).

Many studies are based upon the analysis of a single item in a questionnaire. Initially the item was used to assess misanthropy together with other items in an index (cf. Rosenberg, 1956). Given that only one item is used, one of the major drawbacks is that it is difficult to assess the reliability of the single item.

1.1 Pre-test of the Survey

Sweden is generally considered to be a high trusting society given that when responding to surveys a majority of its citizens repeatedly answer that “most people can be trusted”¹. Sweden therefore presents an interesting case for studies on trust. As has been argued by Patulny and Svendsen (2007), surveys are the most common way to investigate social or generalized trust, while qualitative methods are more common among studies on particularized trust.

In order to test to test how respondents reacted to the survey, a qualitative pre-test of the survey was carried out. This involved interviewers probing to discover how respondents thought when answering the questions, encouraging them to “think aloud” (DeMaio & Rothgeb, 1996). The pre-test was carried out by experienced interviewers at Statistics Sweden on a small group of presumptive respondents varying in age, ethnicity and gender.

From previous studies it is known that respondents have difficulties in interpreting the meaning of the general trust question (Uslaner, 2002; Dekker, 2003; Yamagishi, 2001; Smith, 1997). The authors, however, vary in their conclusions about the usefulness of the general trust item. Uslaner (2002; 2009) concludes that the measurement is reliable and taps a generalized trust that other items do not capture. Authors like Dekker (2003) and Yamagishi (2001) argue that the answers to the question are difficult to interpret given that the respondents probably have different heuristics when interpreting what “most people” actually means. In general, do respondents interpret the wording “most people” as trust in strangers or trust in people that are familiar? Results from the 2005/2006 World Values Survey indicate that there are differences between countries. For example, the concept of generalized trust as such has a very different meaning in countries like China than it does in Sweden (Lundåsen & Pettersson, 2009). Results indicate that the loading of the question is ambiguous and does not seem to clearly belong to either a dimension of trust in people that are distant/strangers or trust in people that are familiar (Lundåsen & Pettersson, 2009).

Results from the initial qualitative pre-test showed that the Swedish respondents also tended to interpret the question in different ways. Some respondents interpreted the question as dealing with trust in people that were known to them. When asked how they interpreted the meaning of the wording “most people” in the questions, the respondents answered as follows:

Most people to me are those that I meet daily (TP 3)

¹ This could be seen in the various rounds of the WVS, EVS and the ESS for instance.

[Most people means] Those who I have around me where I am. Where I live /.../ and where I work. Right, I haven't thought about all the billion people in the whole world, when I say most people ... but the people I meet every day. (TP 6)

Yes, well that means all the people. (TP 5)

I don't know really. I think mostly of those who you see in town, those who you just pass by [in the street] in some way. (TP 7)

The last respondent then elaborated on the response by adding that whether you decide to trust someone or not is also very much dependent on the context, and therefore the respondent thought that the question was too vague to answer as it lacked context.

It depends upon the situation entirely /.../ It is so different where you meet them /.../ if I know where he lives [then it is easier to know whether to trust someone or not] or if it is a complete stranger, it depends very much upon the context. (TP 7)

Caution is needed in making inferences from the general trust question, especially in a cross-country comparison, as meanings and interpretations of trust may differ.

Some studies have tried to resolve the ambiguity of the general trust question by using several different items tapping general trust (Zmerli, Newton & Ramón Montero, 2007). The results from the pre-test have shown that some respondents found these additional questions also to be difficult to answer and that one question about fairness could be interpreted as two different questions².

I could think like this, "Most people would try to take advantage of me". There you could answer yes or no. Then comes honest and fair /.../ You could take advantage of someone and still be honest and fair. (TP 3)

In this case we wanted to have several items asking about trust towards different groups; both those who are familiar and those who are presumably different in some way to the respondent. We departed from the questionnaire used in the 2005/06 World Values Survey that asks about trust towards a number of groups of people. We also added some questions regarding trusting people living in the home municipality and trusting people living in Sweden. The aim was to establish whether there is a threshold in terms of distances when the respondents start saying that they do not trust anymore. Hypothetically, the more distant or different someone is, the less trusting the respondents become. However, adding items also adds the risk of the respondent losing interest and not answering the question. In the pre-test, some respondents seemed to have some problems coping with many items and had some difficulties in comparing trust towards different geographical localities and problems understanding what trust towards those living within certain geographical entities really meant.

The respondents also expressed difficulties in grading items on scales with four different points or more, and tended to prefer questions with dichotomous answers (cf. Uslaner, 2009).

² The question was: "Generally speaking do you think that most people would take advantage of you if they had the chance or would they be honest and fair?" and a rating from 0-10.

1.2 Sample and Data Collection Procedure

When designing the survey we opted for the use of a mail survey³. Given that questions on trust and trusting behavior would probably be considered as sensitive by the respondents the mail survey seemed like the most appropriate method⁴.

The sample was constructed in two different steps. First, all of the Swedish (290) municipalities were divided into 16 different groups according to variations in municipal level characteristics. From the constructed 16 groups of municipalities, two municipalities were randomly drawn from each group and one extra municipality was added. In a second step a random sample of 400 individuals aged 18-80 within each municipality was drawn from the total population register. The total sample consisted of 13200 respondents.

Table 1: Sample size and overall response rate

	<i>N</i>
Total sample size	13200
Net sample	12909
Ineligibles	288
Sample without ineligibles	12621
Valid responses	6463
Net response rate	51.2 %

The period of data collection lasted from May 2009 to the end of November 2009. Three different mail reminders were sent out in order to increase the response rate.

1.3 Internal Missing Values

One aim of the survey was, as mentioned above, to be able to ask more questions related to trust and self-reported trusting behavior. A general problem was that the increase of items also produced an increase of missing internal system data or 'don't knows' on the trust items. In comparison, the separate generalized trust question (asked before the

³ The survey was financed by a grant from the Swedish Research Council.

⁴ In this case we also wanted to use a large sample and therefore the costs of using face-to-face interviews would have become substantial. A very approximate estimate of the cost of a face-to-face survey would be around 1.4 million USD.

different trust items) generated missing values and 'don't knows' in 13.2 % of the responses.

Table 2: Internal Missing Values on Trust Items in Percentages

	<i>System missing/no answer</i>	<i>Don't know</i>
Trust: Family	1.0	1.4
Trust: Relatives	2.2	1.6
Trust: Neighbors	6.0	1.7
Trust: Friends	1.8	2.0
Trust: Colleagues	16.0	7.1
Trust: Neighborhood	8.9	1.9
Trust: Municipality	19.2	2.1
Trust: Sweden	19.6	2.4
Trust: Different religion	21.6	2.0
Trust: Different nationality	19.2	1.9
Trust: Meet for the first time	16.7	1.7
Trust: General	11.9	1.9

The results from table 2 could indicate that there is a limit for the respondents after the level of neighborhood where an increasing number of respondents choose to give no answer or a 'don't know'. This could depend upon the difficulty of assessing levels of trust towards more distant and seemingly abstract entities and groups.

A further test shows that almost 60 % of the respondents gave a valid answer other than 'don't know' to all the items. Around 18 % answered 'don't know' to one or two different trust items. Less than 12 % answered 'don't know' to five or more items.

In a comparison (see table 3) with the World Values Survey (WVS), which asked a small number of the same questions with face-to-face interviews, the proportion of 'don't knows' varied between 2.0-4.7 %. There were also differences in the distribution of responses, indicating that there might be a component of social desirability in answers

regarding trust towards others. From previous studies it is known that questions regarding, for example, attitudes towards ethnic groups are susceptible to social desirability (Stocké & Hunkler, 2007). Respondents will, to a certain degree, try to infer the socially desirable answer.

Table 3: Comparison Between Swedish Local Postal Survey on Trust and WVS in Sweden 2005/2006 Face to Face Survey, Percentages Who “Trust completely” and “Not at all” in Parentheses

	<i>Local Trust Survey</i>	<i>WVS</i>
Trust: Friends ⁵	42.1 (0,2)	50.2 (0.1)
Trust: Neighborhood	18.1 (2.9)	41.0 (1.4)
Trust: Different religion	2.6 (13.2)	16.4 (8.0)
Trust: Different nationality	3.7 (9.7)	19.3 (2.2)
Trust: People you meet for the first time	1.2 (13.9)	6.1 (6.0)

Here the difference is especially striking in the distribution of the most trusting alternatives (trust completely) and the least trusting alternative (no trust at all) between the two different surveys. The most similar distribution of responses is in the item concerning trust in friends/people you know personally. This could indicate that social desirability has an impact on trust towards different groups where it could be considered socially undesirable *not* to trust people of different religions and different nationalities in Sweden, and the effect is stronger in face-to-face interviews than in a self-completion postal survey (cf. Stocké & Hunkler, 2007).

1.4 Bias from the sample

It could be expected that some bias might be introduced, given the mode of data collection. For example, the survey required the respondents to be fluent in reading Swedish. Those born outside Sweden were slightly underrepresented in the survey compared to their share of the population in the 33 municipalities. The reported levels of education do not differ from the average levels of education in any significant way. In the present mail survey, only mail reminders were used.

Furthermore it seems likely that those who have low trust in others tend to be underrepresented in a survey like this (cf. Rostila, 2007). Individuals with low levels of

⁵ The wording differs between the two surveys, in the trust survey it is trust in friends and acquaintances, and in the WVS the question is trust in people you know personally.

trust towards others are presumably less likely to trust the intentions of researchers and are less likely to respond to survey questionnaires.

1.5 Trust as a Multidimensional Concept

One of the major advantages of using more than one survey item is the possibility of testing for the reliability and consistency of scales. Markus Freitag and Richard Traummüller (2009) argue that there are several distinct forms of trust. Trust in people that are known is distinct from trust in people that are strangers or different. However, these dimensions of trust are not opposed to each other as has been suggested. They are actually positively correlated with each other. Those who place much trust in family and friends are also more likely to trust people in general, and strangers (Freitag & Traummüller, 2009). Other studies also point at similar multidimensional results (cf. Sturgis & Smith, 2010).

In order to test whether these two dimensions of trust exist, a confirmatory factor analysis was run. The result is shown in the figure 1 below.

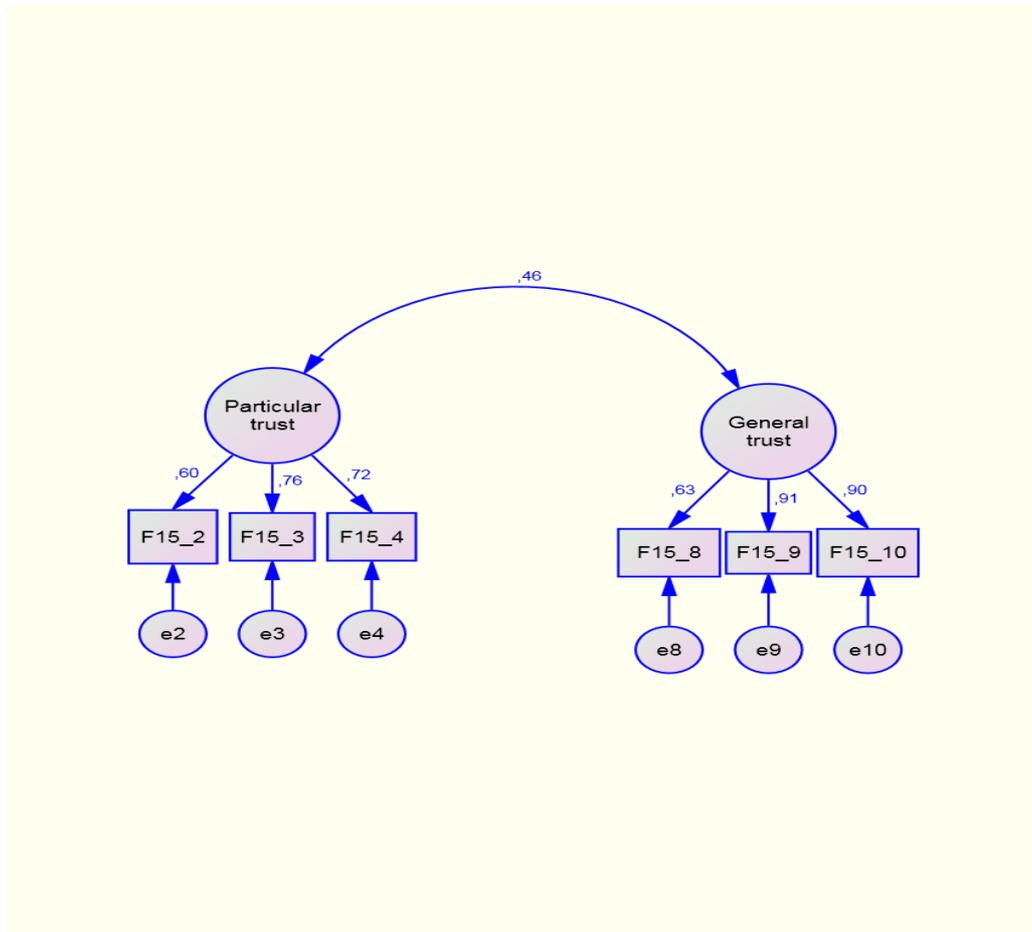


Figure 1: Confirmatory factor analysis; RMSEA=0,050; p=0,000; Chi-square=134,998; Chi-square/df=16,875, N=6463. Variables: F15_2=trust in relatives; F15_3=trust in friends; F15_4=trust in neighbors; F15_8=trust in those who live in Sweden; F15_9=trust in people with a different religion; trust in people with a different nationality

The confirmatory factor analysis verifies the multidimensionality of trust and the reliability of the items assessing these two different, but correlated dimensions of trust.

It has furthermore been argued that questions regarding past trusting behavior are better at predicting actual trusting behavior in experiments than for instance the general trust question (Glaeser et al, 2000). One of the criticisms of the dichotomous general trust question has been that it seemed to express the respondents' own trustworthiness rather than their inclination to trust others (Glaeser et al, 2000). In short, the trustworthy respondents were more likely to keep their promises but not more likely to place trust in strangers in the experiments that followed. Are the items expressing generalized trust in figure 1 also connected to self-reported trusting behavior?

Table 4: OLS regression, generalized trust item scores as dependent variable

	<i>Unstandardized coefficient</i>	T-value
Constant	3.99***	20,78
Gender	0,25***	
Education (low to high)	0,37***	7.87
Income	0,11***	4.45
Trust behavior: sum	0,22***	12.00
Wallet back if stranger finds it	0,93***	19.81
R ² adjusted/N	0,219/3773	

In order to test this, questions on trusting behavior were used to control whether those with high levels of trust towards strangers and towards people that were different to themselves (generalized trust) also reported trusting behavior more often. The result (table 4) shows that those with higher scores on the trust items also reported trusting behavior more often. This result indicates that those who report to trust others also coherently tend to report a more trusting behavior.

2 Concluding Discussion

The task of improving measurement of trust is difficult in several ways. First the ambition of researchers to add items to surveys in order to get a more specific view of respondents' attitudes is often in conflict with the respondents' lack of interest or such detailed attitudes as expressed in the questionnaire. From a certain point of view the argument raised by Uslaner (2009) in favor of a single trust item seems to be supported by the respondents as they seem to prefer dichotomous alternatives rather than the four-point scale of the other trust items. On the other hand, the qualitative study also confirmed the results from previous studies showing that respondents tended to answer the question using very different heuristics as frames of reference. This may be especially

problematic in country comparative studies. However, there has been a stability in the measurements of the general trust question across time in Sweden, which has been used as an argument in support of the validity of the question (cf. Rothstein, 2005).

There also seems to be a certain degree of social desirability when reporting trust towards different groups of people, and this could be seen in the comparison between surveys using different methods. The postal survey is probably less sensitive to social desirability as it is a self-completion survey. However, it is difficult to assess the amount of social desirability given that the contexts of the two different surveys were different. In a postal survey respondents answer the questions in any order they prefer, it is therefore also possible that questions asked after the items of interest can affect the respondents (Schwarz, 1999).

The result of the analysis also confirms that trust is a multidimensional concept. The measurements used for tapping trust in others and people that are different to oneself also seem to be connected to self-reported trusting behavior. But there also seems to be a trade-off between trying to make assessments of different types of trust that are as detailed as possible, and what respondents are willing or able to answer. The more items, the higher the proportion of ‘don’t knows’ and missing values. The items connected to the dimension of generalized (or social) trust are also positively correlated with self-reported trusting behavior.

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