

The effect of individual characteristics on reports of socially desirable attitudes towards immigration

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Introduction

In recent years, Peter has been collaborating with different authors on the topic of ethnocentrism and attitudes towards foreigners (Heyder & Schmidt, 2003; Raijman, Semyonov, & Schmidt, 2003; Semyonov, Raijman, Yom Tov, & Schmidt, 2004; Davidov, Meuleman, Billiet & Schmidt, 2008). These studies examined different determinants of attitudes towards foreigners and immigration such as East/West Germany, threat perception, human values, political ideology, and income.

Inspired by this line of research, we would like to extend this work by examining an important factor in the study of attitudes towards foreigners when using survey research: social desirability. Social desirability can be defined as the tendency a respondent might have to adjust his or her answer so as to provide an answer in closer correspondence with a perceived norm. From this definition two things can be concluded.

First, we might expect an average tendency in the general population to provide socially desirable answers. That is, the mean of the answers given differs from the true mean. Such an average bias does not affect regression coefficients and correlations.

Second, different people may be more susceptible to social desirability than others. This implies that social desirability is a source of systematic stochastic errors. Such errors and the need to deal with them are of course to some extent always present in survey research (Sarvis & Gallhofer, 2007). However, if putative determinants of attitudes towards immigration are also related to a tendency to behave in a socially desirable way, part of the relationship between the ‘determinant’ and the attitude will be spurious.

This last conclusion is important for studies of the determinants of attitudes towards immigration because it affects the conclusions. For example, Weber (2010) suggested that due to Germany’s political regime history people with a right-wing ideology will be more prone to answer in a socially desirable way than left-wingers. If this is the case but it is not taken into account, then the relationship between ideology and the attitude will be suppressed. It will appear to be smaller than it is due to the differential effect of social desirability for left and right wingers.

In this short chapter we take advantage of a designed survey experiment from the European Social Survey (ESS) round 3 in Germany. Using structural equation models (SEM) we separate both random and systematic measurement errors from social desirability and investigate whether covariates such as ideology, fear of losing one’s job, age, sex, and education affect both the amount of socially desirable behavior and attitudes towards immigrants.

The first section will discuss the data and methods used. We then present the results and a short conclusion.

Data

We make use of the multitrait-multimethod experiments built into the ESS. In round 3 of the ESS, conducted in 2006, the following questions were asked in Germany:

1. *To what extent do you think Germany should allow people of the same race or ethnic group as most Germans to come and live here?(AllSame)*
2. *How about people of a different race or ethnic group from most Germans?(AllOth)*
3. *How about people from the poorer countries outside Europe?(AllPoor)*
4. *Would you say it is generally bad or good for Germany's economy that people come to live here from other countries?(BadEco)*
5. *...would you say that Germany's cultural life is generally undermined or enriched by people coming to live here from other countries?(CultUn)*
6. *Is Germany made a worse or a better place to live by people coming to live here from other countries? (Worse)*

These questions are all attitudes toward immigration. However, we will not focus here on the degree to which such attitudes form a scale (see e.g. Zick et al., 2008). Rather we discuss the measurement properties of the individual items, in particular looking at the effect of social desirability. For more information about the sample and fieldwork we refer to the ESS website¹.

Methods

The questions mentioned above were each asked in three different ways, i.e. using three different methods. The variation in methods consisted of agree-disagree versus disagree-agree scales versus direct questions. Each respondent received two of these forms in this split-ballot multitrait-multimethod design (Saris, Satorra, & Coenders, 2004).

As with all survey items, we can expect that the answers to the questions contain both systematic and random errors. The systematic errors are modeled as method factors, i.e. as the common reaction a respondent has when presented with a particular method, and a social desirability factor. In the case of attitudes towards immigration, we hypothesize that the German respondents will in general have a perception that it is not politically correct to be against immigrants.

This leads to the directions of politically correct answer shown in Table 1. Because the perceived direction of social desirability for the first trait (AllSame) could arguably be in either direction, the direction is not fixed for this trait, indicated by the stars. A plus in Table 1 indicates that the perceived norm corresponds to higher response categories and the minus that it corresponds to lower response categories. For example, trait 6 (*Worse*), "Is Germany made a worse or better place to live by people coming to live here from other countries?", was answered on an 11 point scale (DI11) which is labeled from 0 ("worse place") to 10 ("better place"). For this item the plus in Table 1 indicates that it is more politically correct to provide higher values.

Table 1. The socially desirable direction for each of the four methods for each of the six items.

		1	2	3		1	2	3
	<i>Method</i>	AllSame	AllOth	AllPoor	<i>Method</i>	BadEc	CultUn	Worse
1	DI4	*	+	+	DI11	+	+	+
2	AD5	*	-	-	AD5	+	+	+
3	DI4	*	+	+	DA11	-	-	-

Note: "DI" Direct question; "AD" Agree-disagree ; "DA" Disagree-agree; numbers indicate the length of the scales (4, 5 and 11 points).

¹ See <http://www.europeansocialsurvey.org/>

The model was estimated by formulating the graph in Figure 1 as a SEM using the software Mplus 5.2 (Muthén & Muthén, 2007). In this graph, the three traits T are the first three attitudes toward immigration. The methods M represent a behavior that is stable across questions but different for different people. The social desirability factor SD represents the tendency to answer in the socially desirable direction, irrespective of one’s opinion or reaction to the method. To limit its size the graph shows only the first three traits but in the analysis all six traits and the covariates were included.

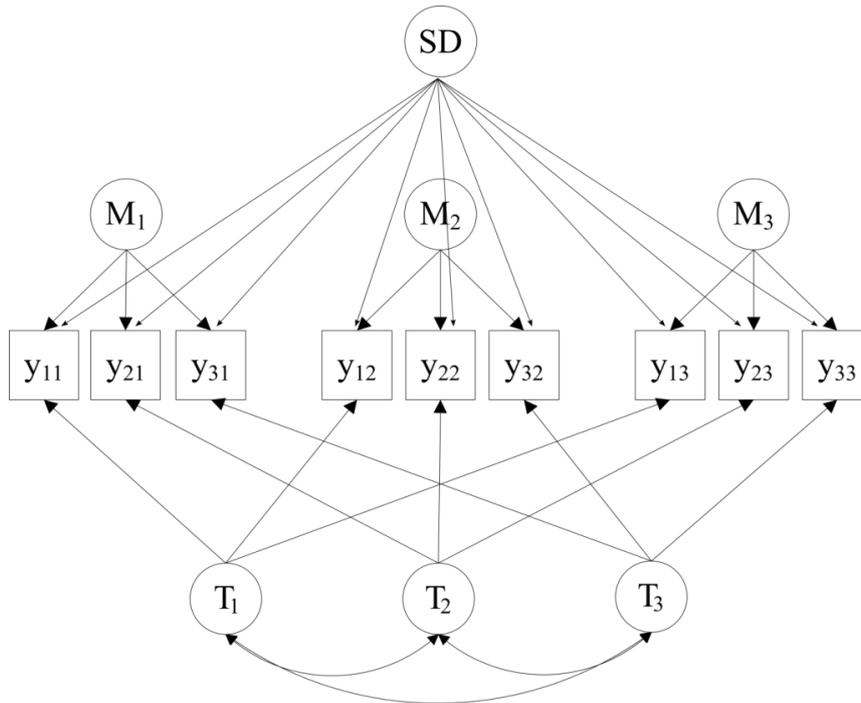


Figure 1. Model used to identify trait, method, and social desirability factors. The covariates and second MTMM experiment, also included in the model, are not shown for brevity. Thus, this figure shows only a part of the analysis for the purpose of illustration.

Results

The model partially shown in Figure 1 was estimated for all items, together with a set of covariates possibly related to both social desirable behavior and attitudes towards immigrants. As a validation of the “social desirability” factor, which was only identified through the experiment’s specific design, we regressed this factor on the presence or absence of another person during the survey interview. If the interviewer registered that another person was present during the interview, then we would expect significantly higher levels of socially desirable behavior. Indeed this turned out to be the case.

To assess the goodness of fit of the model, we examined the modification indices, expected parameter changes, and the power of the score test as suggested by Saris et al. (2009), using the computer program JRule for Mplus 0.91 (Oberski, 2010). Using this procedure we set the loadings of items 4 and 14 (see Table 2) on the social desirability factor free. After these adjustments the model appeared to fit well.

Table 2 shows the completely standardized model estimates, as well as goodness of fit. The top row of this table shows the abbreviated name of the trait. The traits are repeated for items that measure the same trait with a different method. The second row shows the

method used: direct, agree-disagree, or disagree-agree with 4, 5, or 11 scale points. Standardized estimates of the method effects, reliability coefficients, and effect of the social desirability factor with standard errors are shown below. Items measuring the two traits about race (AllSame and AllOth) are strongly affected by social desirability. The other items are less affected.

It can be seen in table 2 that the social desirability effects in these items had sizes similar to those found for the method effects. The reliabilities for the items are much higher. This suggests that social desirability is a systematic error distinct from method effect. It also demonstrates the powerful ability of this experiment to separate three important error sources in survey research: random error, method effect, and social desirability variance.

Simultaneously in this model the trait and social desirability factors were regressed on covariates. Table 3 shows the resulting standardized regression coefficients. It can be seen that the social desirability factor is significantly affected by political ideology and the presence of another person during the interview.²

This means that people who are on the ideological right are more sensitive to social desirability and also more likely to hold anti-immigrant attitudes. In effect, this causes a so-called 'suppressor effect', whereby the effect of ideology appears to be smaller than it truly is. This can be verified by the fact that simply running the multiple regression of the first item on ideology, fear of becoming unemployed, gender, and education level yields a (statistically significant) standardized regression coefficient of 0.052. Correcting for measurement error on the basis of the model the estimate of the effect would be about 0.063, whereas the estimate taking into account the effect of social desirability in Table 3 was 0.278. This shows that, at least in Germany, it is important to take into account the effect of social desirability.

Conclusion

When studying a politically sensitive topic, the issue of social desirability is important. The importance lies not only in the potential bias caused in means, but also in the study of relationships, as in regression analysis or SEM. The tendency to behave in a socially desirable manner differs across respondents, thus causing measurement errors.

In this chapter we investigated the hypothesis that some determinants of attitudes towards immigrants are also determinants of social desirability, causing a bias in the estimated relationship between these determinants and the attitudes if the social desirability factor is not taken into account.

In the case of Germany we found that people who are on the ideological right are more likely to hold anti-immigrant attitudes and are more sensitive to social desirability when asked about these attitudes. This has direct implications for the study of attitudes to immigrants in Germany. Particularly, when studying the effect of ideology and education on these attitudes, social desirability should be taken into account.

In this analysis we were able to separate social desirability from other systematic factors (method effects) and random measurement errors through the use of a particular experimental set-up. This demonstrates a way of studying three error sources simultaneously, an example that could be of interest to survey methodologists.

Similar phenomena may occur in other countries. In future studies it would therefore be of interest to investigate this same hypothesis with regard to the comparison of countries.

² There may also be an effect of the education level, although this effect is only statistically significant at the 10% level ($p=0.075$).

Table 2. Standardized parameter estimates (with s.e.) of the method effects, reliability coefficients, and effect of the social desirability factor on the item. Model chi-square is 189 on 136df ($p = 0.0017$), RMSEA = 0.012. The sample size was 2916 Germans. Standardized social desirability effects greater in absolute value than 0.1 are shown in **bold**.

Trait	AllSame	AllOth	AllPoor	BadEco	CultUn	Worse	AllSame	AllOth	AllPoor	BadEco	CultUn	Worse	AllSame	AllOth	AllPoor	BadEco	CultUn	Worse
Method	DI4			AD5			DI4			DI11			AD5			DA11		
Item #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Method effect	0.212 (0.020)	0.212 (0.020)	0.205 (0.019)	0.277 (0.021)	0.276 (0.021)	0.304 (0.023)	0.500 (0.019)	0.499 (0.019)	0.460 (0.018)	0.345 (0.025)	0.331 (0.024)	0.323 (0.024)	0.190 (0.022)	0.190 (0.022)	0.182 (0.021)	0.477 (0.022)	0.458 (0.021)	0.443 (0.021)
Reliab. coef.	0.824 (0.031)	0.748 (0.023)	0.850 (0.032)	0.896 (0.010)	0.791 (0.015)	0.923 (0.011)	0.916 (0.006)	0.781 (0.015)	0.934 (0.006)	0.833 (0.016)	0.671 (0.023)	0.613 (0.025)	0.818 (0.013)	0.753 (0.019)	0.692 (0.021)	0.822 (0.011)	0.804 (0.015)	0.743 (0.018)
Soc. desirab	0.434 (0.062)	0.168 (0.037)	0.038 (0.026)	-0.110 (0.039)	0.014 (0.010)	0.015 (0.011)	0.146 (0.078)	-0.034 (0.024)	-0.031 (0.022)	0.035 (0.024)	0.034 (0.023)	0.033 (0.023)	0.447 (0.064)	0.173 (0.038)	0.039 (0.027)	-0.015 (0.010)	-0.014 (0.010)	-0.107 (0.039)

Table 3. Standardized regression coefficient estimates (with standard errors) for the regressions of social desirability and attitudes to immigration on the covariates.

	Social desirability	AllSame	AllOth	AllPoor	BadEco	CultUn	Worse
Left-right self-placement (0 left- 10 right)	-0.288** (0.105)	0.278** (0.062)	0.251** (0.026)	0.211** (0.022)	-0.193** (0.029)	-0.214** (0.022)	-0.167** (0.023)
Fear of unemployment within the next 12 month (1 very likely – 4 not likely at all)	0.039 (0.122)	-0.117 (0.065)	-0.129** (0.035)	-0.107** (0.029)	0.113** (0.034)	0.098** (0.031)	0.090** (0.031)
Gender (0 male, 1 female)	0.004 (0.082)	0.022 (0.045)	0.009 (0.024)	-0.011 (0.020)	-0.047 (0.023)	0.047 (0.021)	0.002 (0.021)
Education level (0 Not completed primary - 7 Second stage of tertiary education)	-0.160* (0.090)	-0.061 (0.052)	-0.102** (0.026)	-0.105** (0.021)	0.173** (0.025)	0.182** (0.022)	0.164** (0.022)
Other person present at interview	0.137** (0.036)						

Note: ** p-value < .05; * p-value < .1

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