Collecting Data among Ethnic Minorities in an International Perspective

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This article examines strategies to reduce nonresponse rates among ethnic minorities. The authors review nonresponse rates and data collection strategies among ethnic minorities with respect to response rates and response bias in six European countries. The national statistical institutes of these six countries use different definitions of ethnic minorities. This is why the definitions of ethnic minorities and their impact on the number of members of ethnic minorities in the six countries are compared. Nonresponse rates are usually higher among ethnic minorities than among the native population. Dissecting the nonresponse phenomenon shows that contact rates among ethnic minorities are lower, nonresponse due to an inability to produce the required information is higher, and cooperation rates are higher among ethnic minorities than among the native population. Increasing the response rates among ethnic minorities should focus on enhancing the contact rate and reducing the number of nonrespondents who are unable to produce the required information.

Keywords: nonresponse reduction; tailored strategies; ethnic minorities

In recent years, nonresponse rates in survey research have increased in almost all developed countries (De Heer and De Leeuw 2002). Nonresponse can bias estimates of the target population if nonrespondents systematically differ from respondents with respect to the studied variables. Bias is more likely if the response is not equally distributed among various societal groups. In this case, some groups are under- or overrepresented and the nonresponse is selective. To reduce nonresponse bias, it is essential to

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increase the response rates of societal groups with below-average response rates. Ethnic minorities tend to have below-average response rates (Snijkers 2003; Schmeets 2004). The terms used to define them are not straightforward: foreigners, immigrants, people of foreign descent, and ethnic minorities are used throughout Europe (European Commission, Employment and Social Affairs DG 2004). These terms cover various realities, as is noted in this article in greater detail. The term ethnic minorities is used below to describe the specific target population.

Response rates among ethnic minorities were not always lower than those of the native population. In the 1980s, Bronner (1988) noted aboveaverage response rates among ethnic minorities in the Netherlands. Nowadays, however, response rates among ethnic minorities are usually considerably lower than among the native population (Schmeets 2004). Concerns about bias in survey estimates have stimulated survey methodologists to develop measures to reduce nonresponse among special groups (see Hox, De Leeuw, and Snijkers 2003). This study was motivated by the growing percentage of ethnic minorities, which is already considerable in Western societies (e.g., almost 20% in the Netherlands), and the reluctance to publish results about ethnic minorities because of their low response rates (Centraal Bureau voor de Statistiek 2005). To gain insight into the issue of collecting data among ethnic minorities, we examine strategies for collecting data among ethnic minorities at several European national statistical institutes (NSIs) and semiofficial statistical bureaus. Until now, there has been only a limited focus on response rates and potential bias and ethnic minorities. Much of the material in this article is thus explorative and should be interpreted as such.

This study has two aims. First, we are looking for successful strategies for collecting data among ethnic minorities that produce high response rates and low nonresponse bias. Second, cross-national research is becoming essential to support policies of international organizations and governments, and there is an increasing need for valid and reliable cross-national survey data (De Heer 1999). Nonresponse is an issue in cross-national research. As Couper and De Leeuw (2003) noted, "Only if we know how data quality is affected by nonresponse in each of the countries can we assess and improve the comparability of international and cross-cultural data" (p. 157). This is why we also compare relevant definitions of ethnic minorities as a necessary step toward evaluating nonresponse differences among countries.

In the next section, we describe our methods and data. The definitions and percentages of ethnic minorities are discussed in the third section. Nonresponse rates among ethnic minorities in the six countries are examined in the fourth

section, and strategies to reduce nonresponse rates among ethnic minorities and the discussion are presented in the final two sections.

METHODS AND DATA

We developed a questionnaire on response rate issues (final response rates, noncontact rates, refusal rates, and language difficulties), response definitions, definitions of ethnic minorities, approach strategies, and results of experiments. The questionnaire was sent to informants at the national statistical agencies. For practical reasons, we had to confine our analysis to six countries. The countries are included in the analysis based on a purposive sampling rationale (Creswell 1998). The selected countries all have decreasing response rates (De Heer 1999). As developed Western European countries, they constitute a homogeneous cluster. The countries in the final sample are Belgium, France, Germany, the Netherlands, Sweden, and the United Kingdom. In this article, we describe successful strategies survey organizations used to reduce nonresponse rates among ethnic minorities.

Germany and Belgium have mandatory participation in major surveys. This makes it difficult to compare the response rates since the number of refusals under these survey conditions is systematically lower than in other EU countries. In addition, the decentralized nature of the Federal Republic of Germany has resulted in sixteen state-level data-collecting institutes with their own far-reaching competences (Allum 1998). This federal data collection in Germany makes it very difficult to obtain comparable nationallevel data. Belgian law (Article 24) prohibits the Belgian national statistical institute from giving third parties data that are classified as to ethnicity (D. Luminet, personal communication, 2004). This makes it impossible to include response rates classified into ethnic groups. Because of these difficulties in obtaining comparable data, we decided to include information provided by ZUMA in Germany and APS Belgium, both semipublic organizations. National statistical institutes use different designs, fieldwork strategies, and other fixed factors related to survey organization (see De Heer 1999). With respect to these differences, the procedures at ZUMA and APS are comparable to those at national statistical institutes.

We collected data from various surveys. Ideally, to compare trends internationally, the data for analysis should contain a wide range of survey types over years. However, it is difficult to obtain comparable data, and sometimes it is simply not available. Nonetheless, informants at the statistical institutes provided extensive information. We mainly focus here on the

Survey on Living Conditions and the Labor Force Survey. Labor Force Survey information is available for all six countries, although France, the Netherlands, and the United Kingdom could not provide statistics by ethnic minorities. Belgium, France, the Netherlands, and Sweden have provided Survey on Living Conditions or Survey on Health information, although not all of them could provide response rates classified according to ethnic groups. The Labor Force Survey is mandatory in Germany and Belgium, so of course it gives less information on response rates and more specifically on cooperation rates. The German institute ZUMA conducts the Allgemeine Bevölkerungsumfrage der Sozialwissenschaften (ALLBUS; German General Social Survey), a general social survey. Results of the ALLBUS are available for the period from 1994 to 2002. We have also collected information on relevant definitions, sampling methods, and survey organizational information and can consult the rich results of several experiments on ethnic minorities conducted by the selected institutes.

DEFINITIONS AND NUMBERS OF ETHNIC MINORITIES

One of the most striking findings is that different definitions of ethnic minorities are used in the various countries. The size of the ethnic minorities and their countries of origin are among others determined by historical developments such as colonization or by specific legislation. The official definition of ethnic minorities in each country also affects official estimates of the size of its ethnic minorities, as Table 1 shows.

The official national definition in the six countries is given in the second column. Three countries (Belgium, France, and Germany) classify residents as members of ethnic minorities if they have a foreign nationality. Statistics Netherlands uses the following definition: "Every person residing in the Netherlands of whom one or both parents were born abroad" (Reep 2003). Statistics Sweden usually defines members of ethnic minorities as people who were born abroad. Residents of the United Kingdom self-identify, stating which ethnic group they belong to. Examples of questions on the ethnicity of a respondent can be found in a guide recently published by the Office of National Statistics (ONS; 2003). In the other countries, registration in the municipal base administration or census information are used to determine how many people are members of ethnic minorities.

The percentages of ethnic minorities in the total population according to this official national definition are shown in the third column of Table 1. According to the official definition, almost one in five residents of the

	Official National Definition	Ethnic Minorities according to Official Definition	Ethnic Minorities according to Citizenship
Belgium, 2004	Citizenship	8.2	8.2
France, 2004	Citizenship	12.2	12.2
Germany, 2003	Citizenship	8.9	8.9
The Netherlands, 2004	At least one parent born abroad	18.8	4.1
Sweden, 2003	Born abroad	12.0	5.3
United Kingdom, 2001	Self-identify	7.9	a

TABLE I
Percentages of Ethnic Minorities in Total National Populations

SOURCE: All the information is available on the national state institutes' Web sites (www. statbel.fgov.be; www.destatis.de; www.cbs.nl; www.scb.se; www.statistics.gov.uk). For France, the percentages are based on extrapolated estimations of 20% of the total population.

a. No data available.

Netherlands are members of an ethnic minority, which is the largest percentage in the six countries. The differing definitions make it difficult to compare ethnic minorities internationally. A possible solution might be to use the citizenship criterion for all the countries. Then the percentage of ethnic minorities in the Netherlands and Sweden decreases considerably, as is shown in the fourth column. If residents of the Netherlands with a Dutch and at least one other nationality are counted as members of ethnic minorities, the percentage of ethnic minorities in the total population increases to 10%. Unfortunately, there is no information available on double citizenships for Swedish citizens. If nationality is used as indicator, France has the largest percentage of ethnic minorities (12.2%). Comparing the relative percentages of ethnic minorities is difficult, however, even if the same definition is applied to all the countries. Applying the citizenship criterion yields different results depending on the laws for acquiring citizenship. Another promising option might be the country of birth criterion. Unfortunately, the required data are largely unavailable.

Table 2 shows where the ethnic minorities in the six countries are from. Relative percentages of the various ethnic groups are presented, and the most important countries of origin are given in percentages of the total population.

Unlike the definitions of ethnic minorities, the definitions of response rates are similar in the six countries. All their national statistical institutes use the American Association for Public Opinion Research response definition 2, which includes partial interviews in the numerator and excludes

Ethnic Minorities in the Six Countries according to Geographical Background TABLE 2

		Native Population			Percentage	age		
	Population M	Description	%	Europe	Africa	Asia	Other	Total
Belgium, 2004 Italy	10,396	Belgian nationality	91.7	5.9	1.2	8.0	0.2	100
Morocco Turkey ^a				}	8.0	0.4		
France, 2004 Maghreb	61,684	French nationality	87.8	6.1	5.0	6.0	0.2	100
Germany, 2003 Italy	82,537	German nationality	91.9	4.8	0.4	3.4	0.4	100
Yugoslavia ^c Turkey ^a				0.7		2.3		
The Netherlands, 2004 Germany	16,258	Allochtonous	81.0	5.9	3.1	6.5	3.6	100
Morocco Turkey ^a				i		1.9		
Indonesia Suriname and Antilles						2.5	2.8	
Sweden, 2003 Scandinavia Yngoslavia ^c	8,975	Born in Sweden	88.0	7.0 0.3	0.7	3.3	1.0	100
United Kingdom, 2001	58,789	"White," "mixed," "black" (British), or "Asian" (British)	92.1	1.2	2.0	4.4	0.4	100
India Pakistan		,				1.8		

SOURCE: All the information is available on the national state institutes' Web sites (www.statbel.fgov.be; www.destatis.de; www.cbs.nl; www.scb.se; www.statistics.gov.uk). For France, the percentages are based on extrapolated estimations of 20% of the total population. a. Turkey is classified as an Asian country.

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b. Tunisia, Algeria, Morocco, Mauritania, and Libya.

c. Serbia and Montenegro.

noneligible sampled units from the denominator given equal inclusion probabilities.¹

NONRESPONSE AMONG ETHNIC MINORITIES AND CURRENT STRATEGIES FOR COLLECTING DATA AMONG ETHNIC MINORITIES

The variety in the surveys, the different definitions of ethnic minorities, and the limited data available make it difficult to compare nonresponse rates directly in a meta-analysis. Nonetheless, the data corroborate the anecdotal evidence that in all six countries, the response rates for ethnic minorities are mostly lower than for the native population. The countries vary, however, in the degree to which the ethnic minority nonresponse rates differ from the native ones, as is shown in Table 3 in greater detail.

Dissecting nonresponse into noncontact, refusals, and other outcomes shows that in all six countries, ethnic minorities have lower contact rates (defined here as the ratio between the contacted sampled units and all the eligible sampled units; see the appendix) and relatively more nonrespondents due to inability to participate in survey research than the native population. This might help explain why France and Sweden, countries with a high number of minimum contact attempts, have relatively high response rates among ethnic minorities. Unlike the lower contact rates among the ethnic minorities, almost all the ethnic minority cooperation rates are higher than the native ones. Cooperation is defined here as the ratio between completed interviews and completed interviews + partial interviews + refused eligible units (Groves 1989). However, participation in some of the surveys is not voluntary, so no statements can be made about the cooperation rate. Moreover, in a group in which the noncontact rate is higher, the cooperation rate may decline if more sampled units are contacted. Establishing contact gives the people in the sample a first chance to refuse a request to take part in the survey. In fact, the ethnic minority refusal rates are increasing. Nonresponse due to inability to provide the required information, the third main reason for nonresponse, is always higher among ethnic minorities. Difficulty with the survey language is the main reason why this form of nonresponse is higher among ethnic minorities. It is, however, important to note that the three reasons for nonresponse—noncontact, refusal, and inability—are not so clearly distinguished. Sampled units who are not contacted have no opportunity to refuse to take part in a survey (Hox and De Leeuw 1998). Furthermore, sampled units can use their problems with the survey language as a friendly way to refuse a request to take part

(text continues on p. 294)

TABLE 3
Response Rates among Ethnic Minorities Based on the Official Definition of Ethnic Minorities in Each Country in the Six Studied Countries

	Mode	Response	Noncontact	Refusals Inability	Inability	No Opportunity to Interview	Other	п
Belgium								
Labor Force Survey—Mandatory								
France								
Health 2003	Face to face							
French		67.0	9.3	7.9	1.4		14.3	22,083
Non-French		0.89	12.0	8.4	2.8		8.8	3,003
Difference scores		+1.0	+2.7	+0.5		+1.4	-5.5	
Labor Force Survey—Not available								
Germany								
ALLBUS 1994	Face to face							
Germans		54.4	2.7	38.1	3.7		6.0	5,788
Non-Germans		50.4	5.0	20.5	22.9		1.2	341
Difference scores		4.2	+2.3	-17.6		+19.2	+0.3	
ALLBUS 1996	Face to face							
Germans		53.9	4.2	37.7		0.5		6,109
Non-Germans		60.4	5.8	16.4	15.8		1.6	379
Difference scores		+6.5	+1.6	-21.3		+12.1	+1.1	

(continued)

TABLE 3 (continued)

	Mode	Response	Noncontact	Refusals	Inability	No Opportunity to Interview	Other	u
ALLBUS 2000	CAPI							
Germans		47.6	5.8	41.0	1.9		3.7	5,010
Non-Germans		48.1	10.5	20.7	15.7		4.9	324
Difference scores		+0.5	+4.7	-20.3		+13.8	+1.2	
ALLBUS 2002	CAPI							
Germans		48.8	4.6	31.8	4.6		11.0	5,052
Non-Germans		38.2	6.9	21.3	15.8		17.7	361
Difference scores		8.6-	+2.3	-10.5		+11.2	+6.7	
Labor Force Survey—Mandatory								
The Netherlands								
Survey on Living Conditions 1998	CAPI/CATI							
Native population		63.2	4.5	23.3	1.9	5.8		32,467
Ethnic minorities		51.6	9.5	20.5	8.0	7.4		5,850
Difference scores		-11.6	+5.0	-2.8	+6.1		+1.6	
Survey on Living Conditions 2004	CAPI							
Native population		65.6	4.5	23.2	0.1	9.9		25,735
Ethnic minorities		56.8	9.5	18.4	7.7	7.6		4,857
Difference scores		-8.8	+5.0	4.8	+7.6	+1.0		
Labor Force Survey—Not available								

	25,735	4,857					6,488	986			79,506	12,301			
	9.9	7.6	+1.0												
	0.1	7.7	+7.6				1.3	3.1	-1.8		0.7	1.2	+0.5		
	23.2	18.4	4.8				14.6	15.2	+0.6		6.7	6.7	0.0		
	4.5	9.5	+5.0				4.6	14.7	+10.1		7.4	17.3	+9.9		
CAPI	65.6	56.8	-8.8			CATI/face to face	79.3	8.99	-12.5	99.8% CATI	85.0	74.8	-10.2		
Survey on Living Conditions 2004	Native population	Ethnic minorities	Difference scores	Labor Force Survey—Not available	Sweden	Survey on Living Conditions 2001	Native population	Ethnic minorities	Difference scores	Labor Force Survey 2003	Native population	Ethnic minorities	Difference scores	United Kingdom	Labor Force Survey—No

NOTE: ALLBUS = Allgemeine Bevölkerungsumfrage der Sozialwissenschaften; CAPI = computer-assisted personal interview; CATI = computer-assisted telephone interview. Figures have been rounded off and may not add up to 100%.

classification table available

in a survey. Members of ethnic minorities might also poorly communicate their reluctance in such a way that the interviewer codes it as a nonresponse due to language problems instead of as a refusal.

Various ethnic minority response outcomes are presented in Table 3. Response outcomes are divided into response, noncontact, refusals, inability to provide the required information, and other reasons for nonresponse. As is clear from Table 3, detailed information on the various ethnic minority response rates is not always available.

Except for some minor adjustments, no special strategies are currently in use at the NSIs for collecting data among ethnic minorities. In the United Kingdom, however, the ONS uses language cards that are distributed to interviewers for use at ethnic minority households if prospective respondents cannot speak English (M. McConaghy, personal communication). ONS may also have relatives act as translators or use paid translators. This method is described in greater detail in the Reducing Inability section. In Germany, the Federal Office of Statistics somewhat oversamples ethnic minorities (Gruber 1997).

REDUCING NONRESPONSE AMONG ETHNIC MINORITIES

Obtaining response is a process influenced by several factors. The first step is to locate the sampled unit. The sample frame might not provide the necessary information for locating sampled units. Second, contact has to be established. Once this is done, the sampled unit has to agree to take part in the survey and has to be able to provide the required information. The failure of any of these steps will lead to nonresponse. To reduce nonresponse, it is important to distinguish its potential causes. In this section, alternative causes of nonresponse and ways to reduce nonresponse outcomes are discussed, so that tailored strategies for collecting data among ethnic minorities can be developed. Recommendations are mainly based on the personal experiences and judgments of practitioners from the selected survey organizations. Experimental evidence of ethnic minority nonresponse reduction is rare. Some of the recommendations have already been tested in experimental settings. Others need to be tested in future experiments.

Reducing Noneligible Sampled Units

Because of high ethnic minority mobility and complex household structures (Centraal Bureau voor de Statistiek 2004), the ethnic minority sample frame is usually not as good as the native one. This can result in more

TABLE 4
Response Outcomes before Fieldwork Adjustment (Three Contact Attempts, January and February 2004) and after Fieldwork Adjustment (Six Contact Attempts, March–December 2004) in the Dutch Survey on Living Conditions

Survey on Living Conditions 2004	Response	Noncontact	Refusals	Incapable	No Opportunity to Interview	n
Native population January–February	64.4	5.4	23.6	0.1	6.5	4,553
Native population March–December	65.9	4.3	23.1	0.1	6.6	21,185
Ethnic minorities January–February	50.8	13.0	20.4	7.2	8.6	852
Ethnic minorities March–December	58.1	8.8	18.0	7.8	7.4	4,005

noneligible sampled units among ethnic minorities. Of course, researchers and survey organizations are often unable to control the quality of the sample frame, and this is consequently mainly of theoretical interest. The fact remains, though, that more sampled units are needed to reach a certain desired sample size.

Reducing Noncontacts

One efficient way to reduce the number of noncontacted sampled units is by increasing the number of contact attempts after earlier noncontact. In the Netherlands, the minimum number of contact attempts after earlier noncontact was increased from three to six in March 2004 (Snijkers and Kockelkoren 2004). This had a very positive effect on the contact and response rate, in particular among ethnic minorities. Response rates of first-generation ethnic minority members or residents of the Netherlands born abroad with at least one parent born abroad (Reep 2003) increased in the Dutch Survey on Living Conditions from 47.1% to 53%² since this rise in the number of contact attempts. For the native population, this increase was only 1.5% from 64.4% to 65.9%. The increase was most striking in the response rates among first-generation non-Western foreigners, which rose from 43.0% to 51.5%. The general native and ethnic minority response outcomes in this survey before and after this fieldwork procedure adjustment are presented in Table 4.

A similar result was noted in Germany, where the number of minimum contact attempts in the ALLBUS 2002 was ten instead of four. As a result,

the contact rate among sampled units with the German nationality increased from 94.2% in 2000 to 95.4% in 2002. For non-Germans, this increase was from 89.5% in 2000 to 93.1% in 2002. Because many features of the design changed simultaneously in the two surveys, these results should be interpreted with care.

Countries with a high minimum number of contacts, such as Sweden, where Statistics Sweden uses twelve minimum contact attempts in the Labor Force Survey, also have relatively high ethnic minority contact and response rates. The ethnic minority response rate in Sweden was 74.8% in the Labor Force Survey 2003 and 66.8% in the Survey on Living Conditions 2001.

Another way to reduce the number of ethnic minority noncontacted sampled units is by extending the data collection period in hours and days. Ethnic minorities relatively often do shift work (Seifert 1992) and are often in their country of origin for lengthy periods of time although officially registered in the country of the survey organization (Blohm and Diehl 2001). A longer fieldwork period increases the probability of finding a sampled unit at home. The mode of data collection can also have a different and greater impact on the contact rate among ethnic minorities than among the native population. Telephone coverage among ethnic minorities is usually lower; therefore, a computer-assisted personal interview contact mode is preferred to a computer-assisted telephone interview (CATI) mode. CATI should be at least held in a mixed-mode design.

Reducing Refusals

One common way to increase survey participation is by offering monetary incentives to sampled units. In the literature, references are often made to experiments demonstrating the positive effect of incentives on response rates (see, e.g., Groves and Couper 1998; Singer 2002). With regard to ethnic minority groups, however, the evidence is mixed. To persuade respondents in the 2004 Statistics Netherlands experiment "A Tailored Approach Strategy for Young Moroccans and Turks for the Dutch Family and Fertility Survey," a gift voucher of €10.00 was promised in an advanced letter and by the interviewers. However, the incentive did not produce any major effect on the response rates (Van den Brakel, Vis-Visschers, and Schmeets forthcoming). Unlike earlier ALLBUS surveys, the ALLBUS 2002 survey included a €10.00 coin as incentive. The German cooperation rate (see the appendix) increased from 53.7% in 2000 to 60.1% in 2002, but the cooperation rate among non-Germans decreased in the same period from 70.0% to 64.2% ³

These figures should be interpreted with care. The incentives were not given in an experimental setting, and the ALLBUS 2002 was conducted by a different survey agency than the ALLBUS 2000. So the changes in non-response may also be due to differences between the survey agencies. This might, nonetheless, suggest that ethnic minorities are more indifferent to opportunity costs and social exchange hypotheses.

Anti Athiainen (personal communication, 2004) from Statistics Sweden noted that incentives for ethnic minorities should be used with caution, especially lottery tickets, since Muslims are forbidden by their religion to gamble or bet.

Refusing to take part in a survey can also have to do with not being familiar with the survey organization. This problem can be tackled by announcing the upcoming survey in the popular ethnic minority media (A. Athiainen, personal communication, 2004). This can inform people about the survey organization and the upcoming survey and decrease anxiety about providing personal information (Dumas and Théroux 2004). Publicly announcing the upcoming survey also increases the perceived legitimacy of the survey (see Cialdini 1993; Groves and Couper 1998).

Reducing Inability

This category of nonresponse is always higher among ethnic minorities, mainly because of difficulties with the survey language. There are three main ways to reduce the number of sampled units who cannot participate in a survey due to language problems: (1) the survey organization can use questionnaires in other languages, (2) respondents can be interviewed by interviewers with the same ethnic background, and (3) nonresponse due to language problems can be reduced by allowing relatives to act as translators.

None of the NSIs in the study have questionnaires translated into ethnic minority languages. Statistics Sweden has had experience using multilingual surveys. There used to be survey translations in twelve languages. However, this was reported to be not worth the effort (O. Wessberg, personal communication, 2004). Now only an English translation is available. ONS United Kingdom is obliged by law to have questionnaires in Welsh as well as English. Translating questionnaires can be a very costly operation. Ethnic minorities in the six countries are extremely heterogeneous, so except perhaps in Germany, with a large Turkish minority, translations into more languages are needed to cover the sampled units who cannot participate because of language problems. Even if a whole ethnic minority is from one country, there can be various regional languages. Moreover, cultural differences and meanings can complicate translations (Schoua-Glusberg

and Miller 2004). Nevertheless, Blohm and Diehl (2001) noted that, at least in Germany, using bilingual questionnaires can reduce nonresponse due to language problems.

The same problems apply to interviewers with the same ethnic background as the respondents. Moreover, unforeseeable problems can arise. Sensitive questions posed by interviewers with the same ethnic background can result in more traditional answers (Dotinga et al. 2005). Sometimes the interviewer and the sampled person come from different political resistance or guerrilla groups in the home country. Or there can be a fear of refugee spying by the translator on behalf of the home country (A. Ahtiainen, personal communication, 2004). In practice, it is not usually easy to recruit qualified interviewers with the same ethnic background as potentially difficult respondents (Blohm and Diehl 2001). Nevertheless, interviewers with the same ethnic background can play a useful role in the tracing and contacting before the actual interview (A. Ahtiainen, personal communication, 2004). But at least for general surveys with the target population consisting of all the residents of a country, using interviewers with the same ethnic background as the respondents would probably not be cost efficient.

Another way to reduce nonresponse due to language problems is to have a relative older than the age of fifteen translate, perhaps a nonresident. This method is sometimes used by ONS United Kingdom to avoid nonresponse, provided the quality of the study does not suffer as a result. Posing questions about sensitive topics with a young relative as a translator could produce socially desirable answers. Another problem with relatives acting as translators is the introduction of the measurement error involved in simultaneous translations.

RECOMMENDATIONS AND DISCUSSION

Collecting data from ethnic minorities is not easy. Getting a sufficient response is particularly difficult among ethnic minorities. Nonresponse can have serious consequences for researchers since the survey estimates may be biased. Overall response rates have declined virtually all across the globe in recent years (De Heer 1999). In the Netherlands as well as elsewhere, this trend of decreasing response rates is even more troublesome among ethnic minorities. Weighting techniques can partially make up for nonresponse bias, but correcting for selectivity cannot be unlimited. This is especially the case if specific societal groups have very low response rates. Then the assumption that the responding segment is more or less representative of the

nonresponding segment is questionable. The only good solution to missing data is thus not to have any (Allison 2001). Of course, this is an impossible scenario, but it is still essential to put great effort into designing and executing research projects for minimizing missing data. To do so, we have studied strategies for reducing nonresponse internationally. Most of the recommendations in this article are best practices, as experiments in this field are rare. In the perspective of a growing European Union, more experiments and better contact between the NSIs are called for.

Based on the response rates and experiences of some other European statistical offices, we have considered various ethnic minority nonresponse reduction strategies. Comparing the ethnic minorities in different countries is quite a daunting task in itself since each country has its own history with its own ethnic minorities, and matters are complicated even more by the different definitions of ethnic minorities. Ethnic minorities are not the same thing in every country. Different definitions of ethnic minorities are used by different governments. A resident of Germany with German nationality but born in Turkey is classified in Germany as a German, but a Dutch resident born in the Netherlands whose Dutch father was born in Belgium is classified as an immigrant in the Netherlands. These different definitions greatly affect the size and structure of ethnic minorities. A recently published internal document of the European DG Employment and Social Affairs gives some clear examples of the effect of using different definitions of ethnic minorities on some socioeconomic statistics (European Commission, Employment and Social Affairs DG 2004).

Low ethnic minority response rates can bias survey estimates. Depending on the definition, the ethnic minority percentage of the total population is already about 10% and increasing in all six countries. Other countries (e.g., the United States) now already have a much higher percentage of ethnic minorities in their population. Better ethnic minority response rates are also needed to give good estimates of subpopulations. As Couper and De Leeuw (2003) noted, differences in response rates may threaten the validity of comparative studies. Differences between samples may not reflect differences between populations but might result from response and definition differences.

Detailed information on ethnic minority response outcomes is not always available, as Table 3 shows. More information on specific fieldwork procedures (e.g., time of contact attempts) is needed to more precisely evaluate response processes among various societal subgroups. This information is often not centrally available or not accessible to outsiders. Increasing ethnic minority response rates should involve tailoring the survey design in

such a way that the response probability is maximized under time and budget constraints (Snijkers 2003). Of course, this also holds true of strategies for encouraging ethnic minorities to take part in survey research. However, this study show that, except for some small modifications, none of the six countries had special strategies for collecting data among ethnic minorities.

Dissecting the nonresponse phenomenon into contact, refusals, and other causes means considering alternative reasons for each outcome (Groves and Couper 1998). Ethnic minorities seem to have lower contact rates and higher nonresponse rates than the native population due to language problems. The low contact rates are closely connected to sociodemographic and socioeconomic characteristics of ethnic minorities. For example, ethnic minorities are more likely to be urban residents, who are known to be difficult to contact (Groves and Couper 1998; Feskens et al. 2004). This suggests that researchers should concentrate on enhancing ethnic minority contact rates to enhance ethnic minority response rates.

An efficient way to increase the ethnic minority contact rate is by increasing the minimal number of contact attempts after earlier noncontact and using a longer data collection period. In particular, raising the minimal number of contact attempts can have a positive effect on the response rates and can be tailored for use with ethnic minorities. Increasing the number of contact attempts in Germany and the Netherlands resulted in a relatively higher rise in contact and response rates among ethnic minorities than among the native population. This might also explain why the largest difference between ethnic minority and native response rates is observed in the Netherlands. Until March 2004, the Netherlands and Belgium were the only ones of the six countries with a low number of contact attempts (De Heer 1999). Unlike Belgium, contact rates cannot be increased in the Netherlands by substitution. Reducing the number of noncontacted sampled units can also have a positive effect on bias reduction, as Lynn, Clarke, Martin, and Sturgis (2002) noted, "It is the difficult to contact who are most different from the easy to get" (p. 142). However, establishing contact with more ethnic minority sampled units by increasing the number of contact attempts can also lead to an increase in the measurement error by bringing in more respondents with language difficulties. This could be a possible hypothesis for a later experimental test.

Nonresponse rates due to refusals are not as high as one might initially think. In fact, they are usually lower among ethnic minorities than among the native population. This form of nonresponse is nonetheless also growing among ethnic minorities. Incentives are usually used to increase the cooperation rate among sampled units. The results of an experiment in the

Netherlands and a fieldwork adjustment in Germany show, however, that this had only a very limited effect if any among ethnic minorities. Future research could focus on why incentives seem to be, at least in European countries, less effective in raising the cooperation and response rates among ethnic minorities. Ethnic minority unfamiliarity with the survey or survey organization can be overcome by announcing the upcoming survey in a more tailored way.

Nonresponse due to inability to provide the required information is higher among ethnic minorities, specifically the older members, mainly due to language problems. Depending on the sensitivity of the survey topic, language problems can be overcome by having younger relatives act as translators. Translating questionnaires or using interviewers with the same ethnic background are probably not cost effective.

Obtaining responses from ethnic minorities is not as easy as from native populations, but it is not impossible. Response rates and experiments show that special attention should be devoted to lower contact rates among ethnic minorities. Countries with high numbers of contact attempts already have relatively high response rates among ethnic minorities, and recent developments at Statistics Netherlands also reveal striking increases of contact and response rates among ethnic minorities.

APPENDIX American Association for Public Opinion Research (2000) Definitions

Response 2 =
$$\frac{I + P}{(I + P) + (R + NC + O) + (UH + UO)}$$
Contact rate 3 =
$$\frac{(I + P) + R + O}{(I + P) + R + O + NC}$$
Cooperation rate 3 =
$$\frac{I}{(I + P) + R}$$

NOTE: I = complete interview; P = partial interview; R = refusal and break off; NC = noncontact; O = other; UH = unknown if household/occupation; HU = housing unit; UO = unknown, other.

NOTES

- 1. In the appendix, different response definitions according to American Association for Public Opinion Research definitions are given in a more formal way.
- 2. A comparison is made between the response rates of the first 2 months of 2004 and in the period from March to December 2004.
- 3. In 2002, all the interviews conducted in the past 4 weeks were rejected due to doubts about whether all the rules had been followed (Blohm et al. 2003). This resulted in far more nonanalyzed interviews than in Allgemeine Bevölkerungsumfrage der Sozialwissenschaften (German General Social Survey) 2000. If the nonanalyzed interviews were interpreted as refusals, there would be an increase in the cooperation rate from 51.5% to 52.8% among the German sampled units and a reduction from 65.3% to 49.5% among the non-German sampled units.

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