

Position paper

Minorities in general social surveys: what we can learn from the Swiss case and why the black box should be opened wider

Guy Elcheroth, Nicole Fasel, Lavinia Gianettoni, Brian Kleiner, Francesco Laganà, Oliver Lipps, Sandra Penic and Alexandre Pollien

Since early 2009, a working group in Lausanne has investigated and reflected on questions regarding representation of national minorities in Swiss surveys. Composed of social scientists from the then newly established Swiss Centre of Expertise in the Social Sciences (FORS) and the University of Lausanne's Research Centre on Methodology, Inequality and Social Change (MISC), the creation of this working group was a direct consequence of the new institutional opportunity and expectation that FORS and its host University should work hand in hand to improve the quality of nationwide Swiss social surveys. Combining data producer and data user perspectives, the working group joined a methodological interest in survey processes with a substantive interest in vulnerable populations and social exclusion. Combining these interests and approaches we soon arrived at the initial conclusion that the inclusion/exclusion of minority groups in/from general social surveys might be one of the most challenging and under-studied issues in contemporary survey research. Further, to make a concrete contribution to opening this persistent black box of survey research, the group chose to focus first on one particular type of minority: foreigners in Switzerland. Strongly correlated (in Switzerland as elsewhere) with manifold other markers of potential minority status, such as class position, socio-cultural capital, language, and ethnic identity, the identity inscribed in a person's passport thus became our empirical entry into a neglected and sometimes disconcerting facet of survey research.

Two empirical papers are now available, which describe in detail the theoretical frameworks and empirical methods used, as well as the findings obtained by the group (Lipps, Laganà, Pollien & Gianettoni, 2011; Laganà, Elcheroth, Penic,

Kleiner & Fasel, 2011). Rather than repeating these here, the present position paper pursues two goals: 1) to propose an integrated summary of the main empirical conclusions from both papers for the busy reader, and 2) to extrapolate, beyond the strict descriptive results of our analyses, to the more prescriptive outcomes of our reflections. We put forward a series of concrete recommendations for interested survey researchers regarding practices that appear, to our eyes, to be the most promising in dealing with the problem of minority bias in representative survey research.

These two papers are only meant to be a starting point, and should ideally encourage and stimulate further contributions to the much wider issue of minorities, broadly defined, in social surveys. We should therefore first say a few words about why this is an important – and possibly critical - issue for the future of surveys on large and heterogeneous populations. After presenting our findings and recommendations, we conclude by pointing out some promising avenues for future studies in this emerging field of research.

Why we need more research on minorities in general social surveys

The issue of minority bias fits within a wider realm of goals and concerns shared by survey researchers. First of all, the notion of an observed sample as a representative, unbiased, and sufficiently precise reflection of an underlying population that is not observed but which constitutes the real interest of a study, lies at the very heart of survey research. Whenever the relationship between a sample and its underlying population is not at the core of our attention, then we are not doing survey research, and we will not want to use statistical inference as a tool of generalisation from findings. Against this backdrop, a vague malaise has come to spread among survey researchers, who tend to know at least intuitively from their daily experience that certain parts of most broadly defined populations always have very small *de facto* chances of being represented in their survey samples. The combination of the ambition to survey highly diversified populations on a large scale, but with limited resources, typically leads to economically driven compromises where survey designs are judged *good enough* provided that they allow reaching and communicating effectively with a *large enough* majority group.

On the basis of insights gained from studies conducted in other European

countries (Deding, Fridberg & Jakobsen, 2008; Feskens, Hox, Lensvelt-Mulders & Schmeets, 2006, 2007), we anticipated that the invisible frontier between the *effectively* targeted majority and the implicitly relegated minority might be delimited by things like speaking (one of) the survey language(s), having material living circumstances and habits that make someone “reachable” by way of standard procedures, holding a system of beliefs about the self within society that make survey questions appear meaningful and oneself capable of answering them (in the eyes of both the respondent and the interviewer), and so on. To be sure, there is no deterministic relationship between a nationality inscribed on a passport and any of these factors, but there are good reasons to anticipate a substantial correlation in many cases.

Accepting the tacit compromise to leave closed the black box around the processes by which minorities are excluded (or, sometimes, included) might have the advantage that it allows circumventing a potentially painful process of redrawing more narrowly the boundaries of the populations we are actually studying appropriately, with the means at our disposal. But there is also a cost to such a position, as it implies a lack of precision in our understanding of actual selection processes. This lack of knowledge then precludes precise enough understanding of what “Swiss” (or any other generic label) actually stands for in survey outcomes such as “X% of the Swiss support policy Y” or “X% of the Swiss live in poverty”. Such lack of accuracy becomes problematic when similar statements are eventually interpreted literally (e.g., as a statement on the poverty rate among all Swiss residents), while the data production process actually involves a more narrowly defined effective reference population (which, to pursue the example, is in all likelihood at a lower overall risk of poverty).

The gap between all residents of Switzerland and residents that have a fair chance to be included in a general social survey is not random. This leads to another type of issue that might draw social scientists’ attention to the issue of minority bias: the substantive problem of the social mechanisms that produce social exclusion. The interesting question is to what extent mechanisms that generate non-participation in social surveys might overlap with mechanisms that impede social participation more generally. In this perspective, far from being just a technical issue, the study of survey non-representation can even contribute to a better understanding about how

members of certain social categories are prevented from taking part in certain social activities that are in theory open to everyone.

To spin this idea a little bit further, systematic bias in survey response also intrigues because it appears to betray a democratic ideal that is frequently projected onto surveys: one person, one voice. If surveys are to reveal the preferences, aspirations, or needs of the public as a whole, then every individual's position has to be represented *equally*. Unaccounted systematic differences make survey samples look more similar to a shareholders general assembly, where votes are weighted by individual assets, than to the idealised democratic public. The question of why such distortions sometimes are *not* a source of concern (in the eyes of interviewers, researchers, policy-makers, or the general public) is at least as interesting as knowing why they are in other cases. The tacit acceptance that some categories of people will remain silent in a survey might precisely be anchored in more or less implicit conceptions about variable levels of civic legitimacy within the overall public, that is, beliefs about different levels of entitlement to have one's preferences, aspirations, or needs being expressed and taken into account.

Whenever we as survey researchers embrace this tacit acceptance uncritically, we are at risk of producing findings and theories about social reality that are bounded to the reality experienced by the majority. Therefore, the substantive concern about processes that produce social exclusion, and that reproduce it in particular by way of exclusion from social surveys, goes hand-in-hand with the pragmatic concern to enhance the representativeness of surveys, not least in order to break societal and scientific cycles that render certain minorities invisible to the public eye (and leave the public indifferent to their fate).

Empirical conclusions on national minority representation in Swiss surveys

Driven by these motives, the eight members of the interdisciplinary working group have coordinated their efforts over the last two years to analyse systematically how survey non-response relates to ethno-national affiliations, across three major nationwide surveys: the Swiss Household Panel (SHP), the Swiss Labour Force Survey (SLFS), and the European Social Survey in Switzerland (ESS). Among other criteria, these surveys have been selected because of their overall methodological

rigor and high standards. Our goal was not to highlight any particular research project but, on the contrary, to document and start to explain minority bias as a phenomenon that is pervasive enough to be easily discernable even within survey research at its best. Another reason motivating our choice is that these surveys already have implemented or experimented with practices to deal with non-coverage or non-response, either in general (notably in the ESS) or by targeting foreigner populations more specifically (in the SLFS).

All together, the two resulting empirical papers propose answers to nine different research questions, all related to the representation of national minorities in Swiss social surveys. The first set of questions (1 to 3), which were studied by Lipps et al., address the overall issue of *who* is being excluded systematically, and allow delineation of the categories and subcategories along which minority bias operates in Swiss surveys. The second set of research questions (4 to 9, investigated by Laganà et al.) focus on *how* national minorities are either excluded from or included into surveys, and consider survey practices as explanatory factors. Let us summarise here the corresponding answers, suggested by the findings from both papers.

Question 1: Are Swiss social surveys generally biased against national minorities?

Yes. Self-declared national background is a very strong predictor of survey inclusion, across all three analysed surveys. This does not mean that *all* foreign nationalities are underrepresented in Swiss surveys. There are actually substantial variations across communities. Minority bias is extreme for nationals from the former Yugoslavia, Albania, Turkey, as well as from outside Europe (hereafter, we will refer to these groups together as “non-Western-Europeans”), There is no substantial bias however against nationals from neighbouring countries (Germany, France, Italy, Austria, and Liechtenstein). Furthermore, minority bias cannot be reduced to a class effect: even when controlling for relevant social and economic factors, there is still a significant net bias due to national affiliations.

Question 2: Are there subcategories within national minorities that are especially concerned?

Yes. Minority bias is strongest among the least educated. This is true in particular among non-Western-Europeans, for which a particularly large social bias *within* communities added to the national bias between communities.

Question 3: Does possible underrepresentation in cross-sections increase in panel surveys through attrition?

Yes. Overall, attrition bias follows similar patterns as cross-sectional minority bias. As a cumulative consequence, minority bias becomes even stronger in longitudinal studies.

Question 4: Do additional efforts to establish contact or convert reluctant respondents result in less minority bias?

No. From our analyses, more efforts to reach and recruit respondents using the same survey routines lead to including more respondents of the same type. Longer contact chains and attempts to convert reluctant respondents result in (even) *more* minority bias, rather than less.

Question 5: Are more experienced interviewers more capable of reducing minority bias?

No. In the current Swiss survey landscape, interviewer learning processes and incentive structures seem to produce a cumulative advantage in favour of respondents from the national majority. More experience appears to help interviewers to recruit (even) more majority respondents and, in all likelihood, to develop economically rewarding strategies to focus their efforts on “easy” respondents. It therefore results in more rather than less minority bias.

Question 6: Do common weighting procedures result in statistical estimates free of minority bias?

No. In Switzerland, a common procedure consists in adjusting survey data for the cumulative share of all foreigners, merged into a single statistical category. This results in the overrepresentation of minorities from close and economically prosperous European sending countries, while the remaining minority communities are still largely underrepresented. As a plausible consequence, weighted statistical estimates remain largely conservative – and difficult to interpret – indicators regarding the situation of vulnerable populations.

Question 7: Does the correction of bias between national categories, by way of stratified sampling, also affect bias within national categories (either positively or negatively)?

Probably not, but it might depend on the overall survey context. The larger part of the evidence suggests that sampling with national strata is neutral with regard to bias *within* national minority groups. But in combination with more survey languages, it might even have *positive* effects on the representation of socially disadvantaged groups within national categories. We still need more evidence on possible desirable spill-over effects, but it is safe to dismiss counter-productive side effects.

Question 8: Do additional survey languages help to recruit members from minority groups, in particular among the socially disadvantaged?

Yes, but only to a limited extent. It seems that as long as first contacts are still conducted in national languages, this might remain a critical obstacle to enhancing the representation of minority communities overall, and of the socially disadvantaged within these communities, in a more consequential way.

Question 9: Do more survey languages help to keep (socially disadvantaged) members from minority groups in the sample of longitudinal studies?

Yes. Once minority respondents have been included in a panel study, they are as likely as majority respondents to remain in, provided that they can be interviewed in their own language. This is true for socially disadvantaged as well as for other minority members.

Implications for survey practitioners

We now formulate ten concrete suggestions that, given the currently available evidence, appear to be good advice for survey designers or users who want to deal effectively with the problem of minority bias in their own research. None of these recommendations will be entirely new to readers of the international literature on survey methodology (see e.g., Feskens, Hox, Lensvelt-Mulders & Schmeets, 2006; Groves, 2006; or Peytchev, Baxter & Carley-Baxter, 2009), but none of them is trivial to raise in the Swiss context: a fully-fledged implementation of any of these proposals would involve surpassing some currently established routines. Each is based on a collective interpretation of the correlational findings reported by Lipps et al. and Laganà et al., in the context of the wider theoretical and empirical literature. These empirically informed initial recommendations carry a twofold invitation to survey

practitioners and researchers: first, to creatively try out promising practices and, second, to assess their impact, ideally by way of randomised survey experiments. Outcomes from such evaluation studies could then contribute to building the wider and more systematic knowledge-base that is still required to solidify and refine the recommendations, in an iterative fashion.

Recommendation 1: Samples should be based on reliable population registers whenever available and stratified by the main cleavages that are likely to organise the distribution of relevant indicators in the target population.

Recommendation 2: It is important to invest in the right survey languages and to be clear about the part of population that will be lost as a consequence of the actual language policy of the survey.

Recommendation 3: As the language and mode of first contact will always be critical, these need to be planned particularly carefully.

Recommendation 4: Assumptions about daily routines among respondents (which will affect the chances to establish contact at all, as well as the quality of actual contact) should not be taken for granted or transposed mechanically from one survey to the next. Instead, they should always be critically assessed for specific target populations and draw whenever possible on relevant knowledge, such as might be provided by community members serving as key informants.

Recommendation 5: Overall survey experience of interviewers should not be taken as a guarantee for optimal implementation of contact procedures when it comes to minority members. Specific socio-cultural competences of interviewers should be assessed and possibly prioritised when composing a field team; linguistic skills or knowledge about relevant cultural and social norms required to interact appropriately with members from the main target communities can be critical assets.

Recommendation 6: The impact of interviewer reward schemes should be critically reflected on when designing a survey. It is very likely that whenever they are based on the mere number of completed interviews, instead of being proportional to actual interviewer efforts, interviewers will be encouraged to concentrate their energy on potentially “easy” respondents and discouraged from developing effective strategies for recruiting rare or “difficult” respondents. Rewards based on actual

working hours, for example, should be considered as a potentially fairer and methodologically more efficient alternative.

Recommendation 7: Individual and collective learning processes regarding appropriate communication codes and strategies should be actively promoted. This implies that contact and interview debriefings should be conceived as a systematic tool to allow interviewers to learn from their own experiences and researchers to get relevant real-time feedback on the implementation of fieldwork procedures.

Recommendation 8: Coverage and non-response bias should always be assessed and monitored using all available register and para-data, to inform data producers about the efficiency of the design strategies, and to inform data users about actual selection processes that need to be considered when interpreting findings.

Recommendation 9: The main benchmark against which the quality of the survey design should ultimately be assessed are specific biases (that are sensitive to the research goals), rather than arbitrarily defined overall response rates.

Recommendation 10: Possible post-stratification weights should be developed empirically by way of testing, instead of assuming homogeneity within the categories that are used to attribute different weights to individual respondents.

We are aware that, in the field, limited resources rather than lack of knowledge or good will constitute the critical obstacles to implementing methodological recommendations. In practice, the question will typically come down to how to define priorities rationally and how to balance different requirements, which cannot all be met simultaneously. We might therefore complement the ten recommendations with five much more general suggestions, which aim to help survey practitioners find their own way when negotiating difficult compromises, in order to approach as far as feasible methodological high ideals:

Be critical: The fact that most of the established measures usually used to improve data quality failed to effectively handle minority bias should encourage critical reflection of such procedures, their concrete objectives, and their capacity to meet them.

Be specific: There are no universally valid criteria for making decisions about sampling procedures, survey modes and languages, field team composition, or

contact strategies. Any good design strategy needs to be target-population-centred. In particular, survey researchers should be clear about which minority groups have to be represented accurately in their sample in order to address the main research goals, and then define the priorities of the survey design accordingly.

Be consistent: The design strategy needs to be in line with the research questions, and the interpretation of findings should refer to the strategy used. For example, if an accurate representation of vulnerable minority groups has not been defined as a priority in the survey design process, then the resulting data should not be used to make statistical inferences regarding levels of vulnerability in the overall population (as this will inevitably lead to statistics that embellish social reality rather than reflect it).

Be holistic: Specific measures to handle minority bias should be considered within an integrated perspective rather than in isolation. This is important because interaction effects of separate survey design parameters can be as important as their simple effects. For example, costly implementations of survey interviews in additional languages might prove inefficient as long as the mode and language of the first contact are not optimal.

Be creative: The fact that no perfect solution exists and that no satisfactory set of solutions to minority bias have been implemented so far compels us to try out new methodological avenues, to empirically assess their impact, and to openly debate failures and successes on the road to truly representative surveys.

Towards a new agenda for research on minority bias

Insights gained about the issues already investigated also allow us to clarify which issues might be given priority next. Ideally, each of the ten initial recommendations might be transformed into a testable research hypothesis, and could hence inspire its own piece of evaluation research. Randomised experiments should provide more definite causal evidence, in particular about the impact of factors like linguistic arrangements, contact strategies, composition of field teams, or interviewer payment schemes on the representation of minorities in general surveys. In the Swiss context, the recent introduction of a full population register opens important new perspectives for such research, and invites us to take advantage of

register information available on non-respondents, and to describe them in more detail than possible so far. But there is no single royal avenue to grasp the complex issue of minority bias. At least three complementary lines of research can be identified, each requiring a different methodological approach.

First, *correlational studies* on the relation between different types of survey procedures and minority bias should be extended to a more comprehensive approach to compare cumulative data quality across existing surveys. To overcome the rather artificial distinction between survey non-response, partial response, or arbitrary responses, it appears wise to look not only at *whether* minority respondents answer survey questions, but also at *how* they answer them. For example, compulsory surveys or very insistent recruitment procedures could result in pushing minority respondents into strong “satisficing” modes of survey participation, especially if they are not accompanied by simultaneous measures to make the survey accessible and relevant for minorities. It is therefore important to develop indicators of *meaningful* survey participation, rather than just formal survey participation.

Second, in a more qualitative line, *ethnographic approaches* to interviewer experiences and interviewer-respondent interactions should provide a more fine-grained understanding of the micro-processes by which certain types of respondents are excluded from survey participation, on the basis of reciprocal expectations, perceptions, and communicative practices.

Third, *simulation studies* should provide a more detailed picture of the actual consequences of minority bias (and hence of different survey arrangements that produce or reduce such bias) on the accuracy of statistical indicators or models based on the corresponding survey data. These estimates are particularly needed because they would locate the debate on the relative cost of different survey options within a more realistic framework. Rather than wondering how much it costs to get *any* indicator of poverty, inequality, vulnerability, and so on, such evidence would put us in a position to ask how much it costs to get an *accurate and precise enough* such indicator.

Against this backdrop, we would anticipate that opening the black box and engaging with some of the strategies outlined here to improve minority participation in general social surveys will ultimately not only be cost- but also a gain-factor, even from a simple “economic” point of view. Hopefully, the ideas and findings presented

in the working group's first publications will encourage more survey researchers to engage with the agenda that we have outlined here, enrich it, and push further the difficult but necessary debate on minorities in general social surveys.

References

Deding M., Fridberg T. and Jakobsen V. (2008). Non-response in a survey among immigrants in Denmark. *Survey Research Methods* 2 (3), pp. 107-121.

Feskens R., Hox J. Lensvelt-Mulders G. and Schmeets H. (2006). Collecting Data among Ethnic Minorities in an International Perspective, *Field Methods* 18 (3), pp. 284-304.

Feskens R., Hox J., Lensvelt-Mulders, G. and Schmeets, H. (2007). Non-response among Ethnic Minorities: A Multivariate Analysis. *Journal of Official Statistics*, 23(3), 387-408.

Groves, R., M. (2006). Nonresponse rates and nonresponse bias in household surveys. *Public Opinion Quarterly*, 70 (5), 646-675.

Laganà, F., Elcheroth, G., Penic, S., Kleiner, B. & Falsel, N. (2011). National minorities and their representation in Swiss surveys (II): Which practices make a difference? FORS Working Paper Series, paper 2011-3. Lausanne: FORS (forthcoming in *Quality and Quantity*).

Lipps, O., Laganà, F., Pollien, A., & Gianettoni, L. (2011). National minorities and their representation in Swiss surveys (I): Providing evidence and analysing causes for their under-representation. FORS Working Paper Series, paper 2011-2. Lausanne: FORS (forthcoming in M. Lago & J. Font (Eds.), *Surveying ethnic minorities and immigrant populations: methodological challenges and research strategies*. Amsterdam University Press).

Peytchev, A., Baxter, R. and Carley-Baxter, L. (2009). Not all survey effort is equal. Reduction of nonresponse bias and nonresponse error. *Public Opinion Quarterly*, 73 (4), 785-806.