

“You’re Not From Around Here, Are You?” How Regional Accent Affects Survey Cooperation

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Abstract

Interviewers' voices can influence phone interview cooperation, yet we know little about how their accents and regional speech variation (e.g., pace) impact response. Taken together, these carry many associations and inferences for respondents. For example, a shared accent may increase feelings of liking and affiliation between respondent and interviewer, producing higher cooperation. Conversely, a dissimilar accent may increase feelings of social distance and increased refusals. Despite little information about accent effects in survey interviews, many US phone surveys employ interviewers from outside the sampled region. Using digital audio recordings to classify interviewer accent, we evaluate the impact of accent and regional speech variability on cooperation and refusal in several phone surveys, comparing results by in-region and out-of-region calls. We hypothesize that interviewers' regional accent, speech rate, pitch variability, and fluency predict first contact outcome, controlling for their personal and professional characteristics. We discuss findings in the context of interviewer training and staffing best practices, and potential accent effects on survey error.

Key Words: interviewers; interviewer effects; RDD; phone survey; data collection; survey error

1. The Human Interaction Component of Participation Decisions

Survey designers and methodologists often assume that survey decisions happen reflectively, rationally, thoughtfully, and logically. We assume that potential respondents engage in a detailed, if quick, cost-benefit analysis that contrasts the values of participating with its costs and risks. However, ample evidence suggests that response decisions, like other small everyday decisions, are more affective and emotional than rational and reflective (Neuman, Marcus, Crigler, & MacKuen, 2007; Schwarz & Clore, 2007). In the phone survey context, potential respondents likely take cues from their reaction to and interaction with the interviewer who called them. *Does the person seem likable? Does this person sound like me, or like someone I would usually like? Will they be fun to talk to for 30 minutes?*

Yet we know little about the role of accent and regional speech variation in this process. This paper briefly summarizes a research plan focusing on the role of accent and regional speech variation in phone survey cooperation.

1.1 Is There a Link Between Accent, Liking, and Cooperation?

In short, principles of liking, persuasion, and cooperation support the hypothesis that people are more likely to participate in surveys if the interviewer sounds like them or a member of their community (Groves, Cialdini, & Couper, 1992). Further, talking to

someone that sounds like them, or at least sounds familiar, may put potential respondents in a good mood, which has a positive impact on cooperation (Schwarz & Clore, 2007).

Interestingly, there is little research on interviewer accent, and very limited evidence that it increases cooperation. One of the earliest studies on this topic found that speaking with a “standard American” pronunciation reduced refusals (Oksenberg & Cannell, 2001). More recently, Conrad, Broome, Benki, et al., (2013) find no influence of accent or matched accent, while Palmen, Gerritsen, & Bezooijen, (2012) find a marginal negative impact of nonstandard Dutch accent on cooperation.

1.2 What’s in an “Accent” and How is it Operationalized?

There are myriad features of accent and regional speech variation, including word choice, word pronunciation, vowel and consonant vocalization (or lack thereof, such as dropping *rs* in US East coast speech, and adding *rs* in US Midwest speech), and use of formalities like “Sir” and “Ma’am” common in the US South. For the purposes of this paper, we will refer to accent and all other regional variation simply as “accent.”

Each of these features can be operationalized in various ways. For example, raters can be trained to code whether a respondent has any regional accent, and potentially with training, which accent. Raters can also be trained to code more specific aspects of regional speech variation, such as word choice and pace. Very specific acoustic measures, such as pace, may be measured mechanically using acoustic analysis software like Praat (Boersma, 2001) as well.

1.3 Research Gaps and New Questions

Although there is no clear evidence that accent has any systematic effect on phone survey participation, particularly in the most recent studies of the topic, most survey methodology on accent has been “main effects” oriented (e.g., “Is there an effect of accent or not?”). Accent has tended to be coded globally and relatively simplistically (e.g., “Does the interviewer use standard pronunciation,” or “Does the interviewer’s accent match the respondent’s?”). However, a Simpsons’ Paradox may exist, in which there is no strong, measurable or replicable main effect of accent on cooperation, but accent effects exist within subgroups of the population (e.g., types of accents or respondents) or as a result of specific accent characteristics (e.g., pace).

Thus we propose three research questions to guide this study.

Question 1: *Are people more likely to participate in a survey with an interviewer who sounds like them (i.e., has a similar accent) than one who doesn’t?*

Question 2: *Which regional speech characteristics matter most for encouraging participation?*

Question 3: *Do any regional accents have a strong positive main effect, or are there only effects via interaction with respondent’s accent?*

2. Method & Analysis Plan

2.1 Sample and Accent Measurement

The research project will involve a sample of interviews and interviewers from among ICF's many national RDD surveys. Because this paper is reporting a research plan, we will discuss possible sampling approaches, and their pros and cons.

2.1.1 Selecting Surveys

National surveys are the most likely candidates for this study, primarily because they offer the most variability in interviewer and respondent accent. The effect of interviewer accent can be assessed with regional or local surveys as well, as long as there is variability in interviewer accents or respondent accents. One basic design involves selecting surveys that use call centers from one US region to call into another US region. For example, a national US survey that uses a call center based in the South would employ interviewers who, on average, have Southern accents. This survey could be used to study the effect of a Southern accent on cooperation in regions around the US, including the South. If multiple call centers are used for that survey, and those call centers are located in US regions with differing accent characteristics, the effects of those accent characteristics could be assessed as well.

However, this approach has several limitations. First, it assumes that, "on average" interviewers in a call center have an accent consistent with the region in which it is located. It also assumes that they speak that accent in similar ways (i.e., that the accent is similarly "thick"). Variability in accent and accent "thickness" is masked in such a design. Thus, this study will employ a more direct measure of accent, and selection of individual interviews with a defined accent.

2.1.2 Sampling Interviewers by Accent

There are multiple ways to measure accent. Table 1 shows several methods ordered from simple to complex.

Table 1. Possible Accent Measures and their Trade-offs

| <i>Accent and Regional Speech Measure</i> | <i>Pro</i> | <i>Con</i> |
|---|--|---|
| Supervisor selects interviewers with prototypical regional accent | Simplest to implement Supervisors know interviewers well, and also know regional speech characteristics | Very subjective Selection process not replicable |
| Supervisor selection with second supervisor validation/agreement | Removes some of the subjectivity of single supervisor selection | Less objective than other methods |
| Single coder rating | Simple to implement More control over measurement than supervisor selection | Takes more time Individual coder's rating may not accurately represent true value of characteristics |

| | | |
|--|--|--|
| Multiple coder rating (independent or confirmation) | Allows for measuring variability of accent rating among coders | More time-intensive |
| Mechanical measurement | Removes subjectivity of coder assessments | Only possible for some measures (e.g. pace, pitch variability) |

2.2 Cooperation Outcomes

Survey cooperation occurs along a continuum (see Figure 1), and every contact with a household can end in one of many potential outcomes, from hang-up to completed interview. For the purposes of this study, we divide the cooperation continuum into seven outcomes: hang-up, hard refusal, soft refusal, unscheduled call-back, scheduled call-back, completed screener questions (if applicable), and completed full interview. The reasoning behind this ordering is that hang-up is the lowest level of cooperation because the potential respondent does not even express their response decision to us. Clearly the respondent did not want to participate on that call. But they are also not actively refusing. Hard refusals provide more information about the respondent’s intention, and we know that they are firm in their decision (at least on that call)¹. Soft refusals, comparatively, offer less resistance than hard refusals. Appointments, whether scheduled or unscheduled, are an interesting cooperation level. While some survey researchers argue that call-backs represent “polite refusals”, we believe there are good reasons for considering them separately from refusals. Unscheduled call-backs usually occur when a potential respondent cannot or will not participate on the call, but does not refuse to participate either, and thus the interviewer sets a callback for another day. Scheduled callbacks, on the other hand, require additional cooperation from the potential respondent. In these situations, the respondent generally provides a day and time of day, or at least a day and time range, for the call-back. This involves more active cooperation from the respondent, and provides a foot-in-the-door for the interviewer. Finally, answering survey questions is the pinnacle of cooperation. If the survey involves screener questions, then we can divide this into two levels of cooperation on a given call.



Figure 1. Continuum of Cooperation Outcomes

¹ For current purposes, hostile refusals are considered a subset of hard refusals, despite the fact that they are often dealt with differently in survey operations, and represent a qualitatively different type of refusal than hard refusals.

2.2.1 A Final Note on Sampling Based on Outcomes

In addition to the sampling and selection approaches discussed above, it may be useful to consider sampling based on call outcomes when the research is done retrospectively (i.e., from existing call paradata or recordings). Ignoring call outcome in the sampling plan will obtain outcomes proportional to their occurrence in the sample as a whole. However, if clear and compelling hypotheses can be expressed about the relationship between accent and specific outcomes (e.g., refusals, appointments, and completed interviews), then it is more statistically-efficient to sample in such a way that equal numbers of each disposition are present in the final data set.

2.3 Analysis Steps to Answer Research Questions

The specific analysis methods used and models estimated will, of course, depend on the final design. However, the analysis will proceed in the following general steps, using the following general methods.

- 1) Compare means and proportions between key accent groups (e.g., interviewer accent, respondent accent, and combinations of interviewer and respondent accent), and between interviewers with specific regional speech characteristics
- 2) Binary and ordinal logistic regression predicting cooperation outcomes from accent characteristics and other control variables

Table 2 connects the study's three primary research questions with specific analysis techniques.

Table 2. Linking Research Questions to Analysis Techniques

| <i>Research Question</i> | <i>Analysis</i> |
|--|---|
| Question 1: <i>...interviewer sounds like them?</i> | Predict cooperation, refusal, and other dispositions (individually or grouped) from accent and pace similarity ² |
| Question 2: <i>...regional speech characteristics matter most...?</i> | Compare standardized effect sizes between features of accent (e.g., pace, pronunciation) |
| Question 3: <i>...any effects of specific regional accents overall?</i> | Compare cooperation rates across interviewers with specific regional accents |

3. Conclusions and Reflections

We began this project with only an intuition that interviewer accent may influence cooperation in phone surveys, and little knowledge of the literature on the topic. Upon further study, the literature appears to show mixed results, and it is difficult to discern

² Note that this requires also coding respondent accent, which will be conducted similarly to methods used to code interviewer accent.

whether that is due to the context (e.g., US v. Dutch samples), method of coding and analysis (e.g., using “standard pronunciation” as a proxy for “accent”, and focusing on accent itself versus accent matching), and potential changes in effects over time. One lesson from the existing literature is that speaking with standard American pronunciation increased phone survey cooperation a generation ago. However, its effect may have diminished over time. This could be due to changes in the broader culture, but is more likely due to decreasing response rates in surveys generally. Phone interviewers of the 1970s and 1980s had more opportunities for their vocal characteristics (intentional or unintentional) to influence cooperation. As contact rates have declined and hang-up rates have increased, there are fewer chances for interviewer accents to have an effect.

Further, past research has varied in its coding and methods, both in how it defines and measures accent and in the analysis methods and control variables included. In the most current and comprehensive study of interviewer voice, Conrad et al (2013) find no influence of accent similarity between interviewer and respondent. However, they only explored accent as a secondary feature of the study, and only report the single “accent similarity” operationalization. It is possible that other operationalizations or coding protocols could produce different results. We recommend that future research focus on further disaggregating features of accent and regional accent, such as pace, vowel pronunciation, word choice, and formalities, to develop a fuller picture. Further, research should respondent assessments of the interviewer’s accent, liking, and other assessments that reflect the degree to which social psychological factors under interviewers’ control can influence participation.

Finally, it is important to note that positive or negative effects of interviewer accent do not suggest that interviewers with or without specific accents should be passed over in hiring and promotion. Nor should they be scored negatively for their natural accents. Indeed, the largest effects on cooperation come from other vocal features like volume, pace, and clarity. However, to the degree that specific regional speech characteristics improve cooperation, interviewers can be trained to adopt them regardless of their natural accent. Survey interviewers use their voices as tools to gain cooperation. Their training, promotion, and mentoring systems should reflect evidence-based best practices regarding the human voice’s effect on cooperation.

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