

Ethnicity-of-Interviewer Effects Among Mexican-Americans and Anglos

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SURVEY researchers have long been aware that interviewers can affect the very responses they are assigned to gather. Fortunately, the variation in items attributable to who asks the questions is generally quite small (Tucker, 1983). However, race is one interviewer characteristic which exerts a systematic and significant biasing effect, particularly on answers to race-related questions. This study examines this "ethnicity"-of-interviewer effect in a survey of both Mexican-Americans and Anglos. As the fastest growing minority in the U.S., Hispanics have attracted increasing research interest. To reach them, bilingual interviewers have been used (e.g., Greenberg et al., 1983), making potential interviewer effects a practical methodological issue. In addition to posing a validity concern, Schuman and Converse (1971) note that interviewer effects represent a useful indicator of relations between the racial (and ethnic) groups, a "fact of social life."

The current thinking is that interviewer effects can be explained through a theory of general deference. Respondents try to avoid offending an interviewer, specifically on items which mention the inter-

Abstract A general interpersonal deference explanation for ethnicity-of-interviewer effects is tested with a random survey of Anglos and Mexican-Americans using Anglo and Hispanic interviewers and questions related to Mexican-American culture. The theory was most clearly supported among Anglo respondents. The mixed support found among Mexican-Americans suggests that deference is strongest when questions deal with the culture represented by the interviewer, not the respondent.

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viewer's race. Most studies supporting such a race-of-interviewer effect, however, have examined only blacks and whites. Hyman et al. (1954) found that blacks gave different responses to whites than to other blacks, presumably out of deference to the dominant "caste." Black responses to items regarding militant protest and hostility to whites are particularly sensitive to race of interviewer, while blacks' reports of discrimination, living conditions, and personal background are not (Schuman and Converse, 1971). Subsequent studies have supported a more general interpersonal deference theory, which accounts for interviewer effects on whites as well as blacks (Athey et al., 1960, Hatchett and Schuman, 1975-76, and Campbell, 1981). What's more, a face-to-face interview is not required; the race-of-interviewer effect in a telephone interview has been found which is similar in magnitude to that reported from a personal survey (Cotter et al., 1982). This finding is of particular interest, given the predominance of telephone surveys as a data-gathering method.

Other ethnic groups have also been examined for interviewer effects, but the focus of these studies has been on nonracially sensitive items. Weeks and Moore (1981) found that a difference in ethnicity (Cuban, Chicano, Puerto Rican, and Chinese) between interviewers and respondents did not affect responses. Similarly, Welch et al. (1973) reported that Mexican-Americans did not differ in their responses to Anglos and other Mexican-Americans. Both studies were based on personal interviews about general items, supporting the basic theory that general deference does not occur for questions which aren't related to ethnicity.

This study tests the general deference theory using a telephone survey of Mexican-Americans and Anglos, with both Hispanic and Anglo interviewers. Both general and ethnicity-related questionnaire items are examined, including questions not previously studied for interviewer effects—ethnic media behavior and ethnic environment. Possible bias in such items is particularly important, given their frequent use in measures of acculturation.

On the basis of previous research it is hypothesized that no interviewer effects will be found for nonethnicity-related items (e.g., education), but that both Anglos and Mexican-Americans will defer to opposite-ethnicity interviewers on questions related to Mexican-American culture. In addition, it is hypothesized that among Mexican-Americans this deference will extend to their self-reports of ethnic environment and behavior. In other words, according to the general deference theory we would expect respondents to overreport ethnic behavior when interviewed by someone from the same ethnic background, and underreport it when interviewed by someone else.

Methods

SAMPLE

Between February and May of 1984, telephone interviews were conducted with 1076 Texas residents over the age of 18, using a random-digit dialing technique.¹ In order to supplement the number of Mexican-American respondents, a special sample of persons with Hispanic surnames was selected. This random sample was drawn using telephone books from cities with large Hispanic populations.² An additional 142 interviews were added to the data using this method. The random-digit sample produced a completion rate of 55.7 percent and a refusal rate of 21 percent. The supplementary sample yielded a completion rate of 69.6 percent and a refusal rate of 8.8 percent.³ In both samples, interviewers asked for a male or female resident at random and made as many as five callbacks on different days to reach a respondent. Only after five unsuccessful attempts or if the number was non-working or a business was it replaced with another from the cluster.

Both Hispanic and Anglo bilingual interviewers were hired to administer the questionnaires. Each interviewer spoke fluent regional Spanish and unaccented English. If a respondent said he or she spoke some Spanish, the interviewer offered to do the questionnaire in Spanish or to clarify any words or phrases in Spanish. The first question put to respondents was which language they spoke with family and friends.

¹ Two hundred telephone exchanges were drawn at random without replacement from a list of all state exchanges. A working "seed" bank within each exchange was established during pretesting, and 20 random two-digit numbers were attached to each seed number (e.g., (512) 345-13—) to create the numbers in each of 200 "clusters." Four interviews were attempted in each cluster for a target sample size of 800. Those exchanges yielding two or more Hispanic interviews were oversampled to reach the final *N* of 1076.

² These areas included Laredo, Encinal, San Antonio, Corpus Christi, Alamo, Brownsville, Donna, Edcouch, Edinburg, Elsa, Hargill, Harlingen, Hidalgo, La Feria, Los Fresnos, Lyford, McAllen, Mercedes, Mission, Pharr, Port Isabel, Raymondville, Rio Hondo, San Benito, San Juan, Santa Rosa, Sullivan City, Weslaco, and El Paso. Numbers were randomly chosen from each community's listings, proportionate to its size, such that towns with larger populations contributed more respondents than others. The selection of telephone numbers was conducted by first choosing a random page, column, and location and then selecting the nearest number associated with an Hispanic surname.

³ The completion rates were calculated as follows: (completed interviews)/[(total numbers called) - (numbers out of service + numbers changed + business numbers + noneligible respondents)]. The total numbers called included "no answer" after five tries. The refusal rates were the proportion of those contacted who refused the interview. The distribution of telephone numbers yielding completed interviews reflects the actual distribution of numbers in exchanges across the state, and the demographic characteristics of respondents are consistent with 1980 state census parameters. A separate study by the authors showed that the two methods yielded samples which can be considered to represent the same population of Hispanics (Chang et al., 1985).

If some Spanish was spoken they were given the opportunity to be interviewed in Spanish. A total of 86 questionnaires were conducted in Spanish. Ethnicity of interviewer affected neither respondents' self-reported language nor the language spoken during the interview. Only those respondents questioned by interviewers who had either clearly Anglo or Hispanic surnames and who used their names in the questionnaire introduction were included in the analysis. Questionnaires were randomly distributed among these individuals, such that each interviewer conducted a cross-section of interviews from around the state. This procedure yielded 1004 total interviews for analysis. Of this total, Hispanics conducted 724 interviews, 199 (27.5 percent) of them with other Hispanics. Anglos administered interviews, 85 (30.4 percent) with Hispanics.⁴ As reflected in these proportions, no significant differences in response rates were found for the two groups of interviewers.

MEASURES

Respondents were considered Mexican if they said their ethnic background was wholly or partially Hispanic, which included Mexican-Americans, Puerto Ricans, and Cubans. Mexican-Americans accounted for most of the Hispanic respondents (86.4 percent).⁵ The culturally related items included ethnic media use, attitudes toward Mexican-Americans, attitudes toward bilingualism, and reports of ethnic interpersonal environment. Exact questionnaire items are included in the Appendix.

Results

The results support the deference theory most clearly among the Anglo respondents. As seen in Table 1, four of the six comparisons show statistically significant differences. Anglos were less likely to

⁴ The data examined in this study were part of a larger project which examined a cross-section of Texas residents, with a particular focus on the media behavior, political attitudes, and ethnicity of Hispanics. The total questionnaire took about 20 minutes to administer. The research was funded by a Gannett foundation grant to the first three authors.

⁵ The label *Mexican-American* is used throughout this study because it is the most common name applied to Hispanics in Texas. Many of the cultural items in the questionnaire refer specifically to "Mexican-Americans." Because of the common Spanish heritage, it is thought that the few non-Mexican-American Hispanics in this study would respond similarly in the case of the race-of-interviewer effect. By the same token, the few blacks (10 percent of the total) and other non-Hispanic ethnic respondents were included in the Anglo category for purposes of discussion because the theoretical distinction is between those interviewed by someone from the same ethnic background and by someone of a different ethnicity. Blacks, for example, would be expected to behave the same as whites when interviewed by an Hispanic.

Table 1. Ethnicity-of-Interviewer Effects on Mexican-American and Anglo Respondents: Cultural Evaluations and Issues

		Anglo Respondents		Mexican-American Respondents	
		Anglo Interviewer	Hispanic Interviewer	Anglo Interviewer	Hispanic Interviewer
<i>N</i> Interviewers/ <i>N</i> Respondents ^a		5/164	12/453	4/85	11/199
Prefer Mexican-American culture and customs to others	Agree	9.4%	23.2% ^b	58.1%	58.2%
	No opinion	19.3	30.0	26.0	18.5
	Disagree	71.3	46.8	15.9	23.3
Would rather associate with Mexican-Americans than with others	Agree	8.2	9.7	42.3	34.4
	No opinion	35.6	37.9	25.7	17.9
	Disagree	56.2	52.4	32.0	47.7
Mexican-Americans are a lot different from other people	Agree	31.2	19.8 ^b	41.5	25.8
	No opinion	19.8	14.7	2.8	12.4
	Disagree	49.0	65.5	55.7	61.8
Everyone should be able to speak Spanish	Agree	26.7	31.9 ^b	57.9	60.4
	No opinion	10.4	14.5	8.2	7.3
	Disagree	62.9	53.6	33.9	32.3
Grade school classes should be taught in Spanish and English	Agree	37.8	41.5 ^b	73.7	67.1
	No opinion	6.1	9.1	3.7	7.4
	Disagree	56.1	49.4	22.6	25.5
Everyone should be able to speak English	Agree	82.5	81.6	80.7	84.5
	No opinion	8.1	7.0	3.6	7.3
	Disagree	9.4	11.4	15.7	8.2

^a Although interviewer ethnicity is discussed as a characteristic of respondents, statistical tests are based on the *N* of interviewers, yielding an approximation of results obtained using the respondent as the unit of analysis, but a more conservative statistical test. Values represent the mean proportions of respondents selecting each response, averaged across interviewers.

^b Differences are statistically significant based on a one-tailed *t*-test (*df* = 15), *p* < .05.

disagree that they preferred Mexican-American culture when interviewed by a Hispanic rather than by another Anglo. Note that the *N* of interviewers is used for statistical tests, an approach used by, for example, Singer et al. (1983).

Similarly, Anglos were more likely to disagree that Mexican-Americans are a lot different from other people when asked by a Hispanic. Anglos were less favorable toward bilingualism when interviewed by an Anglo; they were more likely to disagree that everyone should be able to speak Spanish and that grade school classes should be taught in both English and Spanish when interviewed by an Anglo than by a Hispanic. Statistically significant results were not found, however, for the same items among Mexican-American respondents, and, in fact, the responses shown in Table 1 show effects in two directions. For two of the three cultural evaluation items, there appears to be a reverse deference effect. When interviewed by an Anglo rather than by another Hispanic, Mexican-Americans were more likely to agree that they would rather associate with other Mexican-Americans and that they are a lot different from others. For the language attitude

items, although Hispanics were more likely to agree that grade school classes should be bilingual when asked by an Anglo than when asked by another Hispanic, responses to the other two items showed very slight differences in the other direction.

Other items were examined which dealt specifically with ethnicity, so only Mexican-Americans' responses were included in Table 2. Again, results are found both for and against the deference hypothesis. Three items are supportive (one statistically significant): Hispanics reported watching more TV news in Spanish and having more Mexican-American friends and neighbors when interviewed by another Hispanic than by an Anglo. On the other hand, they reported reading less in Spanish and perceived having a Spanish-language newspaper as less important when interviewed by a Hispanic than when interviewed by an Anglo.

Other noncultural questionnaire items were also examined for interviewer effects (not shown here). The only ones which produced substantial differences between Hispanic and Anglo interviewers (although not statistically significant) were education and income. When interviewed by an Anglo, Mexican-Americans reported higher educational attainment and higher family income than when interviewed by a Hispanic.

Although no interviewer effects were expected for ethnicity items (in Table 2) among Anglos (given that so few reported ethnic behavior), two statistically significant differences were found supporting the deference hypothesis. Every Anglo (100 percent) interviewed by another Anglo said having a Spanish paper to read was not important, while 96 percent told Hispanic interviewers it was not important. Similarly, 99 percent of Anglos told Anglo interviewers that half or fewer of their friends were Mexican-American while 96 percent gave those responses to Hispanic interviewers.⁶ Other analyses were conducted for other questionnaire items, but no significant differences were found and the results are not reported. For example, respondents were asked to evaluate various Hispanic political groups, and to indicate how well the media were doing in reporting on "people like them." These ambiguous reference items and the appraisals of specific groups were apparently not subject to the same interviewer effects found for more personally direct items relating to cultural behavior and attitudes. Respondents were also asked about their general media use and at-

⁶ For the items in this study where significant differences were found, calculating η^2 —the proportion of variance in responses attributable to interviewer ethnicity—produced values between 1 and 3 percent, comparable to the size of effects found in previous studies.

Table 2. Ethnicity-of-Interviewer Effects on Mexican-Americans: Ethnic Media, Interpersonal Environment, and Socioeconomic Status

	<i>Anglo Interviewer</i>	<i>Hispanic Interviewer</i>
<i>N</i> Interviewers/ <i>N</i> Respondents ^a	4/85	11/199
How much TV news watched in Spanish		
None	73.8%	65.7%
At least some	26.2	34.3
Overall, how much TV watched in Spanish		
None	46.2	45.5
At least some	53.8	54.5
How much radio listened to in Spanish		
None	41.0	42.2
At least some	59.0	57.8
How many newspapers and magazines read in Spanish		
None	67.5	85.3 ^b
At least some	32.5	14.7
Importance of having daily newspaper to read in Spanish		
Not important	42.7	49.6
At least a little important	57.3	50.4
How many Mexican- American friends		
Half or less	62.2	38.7
More than half	37.8	61.3
How many Mexican- American Neighbors		
Half or less	69.1	42.2 ^b
More than half	30.9	57.8

^a Although interviewer ethnicity is discussed as a characteristic of respondents, statistical tests are based on the *N* of interviewers, yielding an approximation of results obtained using the respondent as the unit of analysis but a more conservative statistical test. Values represent the mean proportions of respondents selecting each response, averaged across interviewers.

^b Differences are statistically significant based on a one-tailed *t*-test (*df* = 14), *p* < .05.

titudes toward the (English language) media. A complete list of the questionnaire items is available from any of the first three authors.

Discussion

This study shows that an ethnicity-of-interviewer effect exists for both Mexican-Americans and Anglos in a telephone survey context. The results partially confirm hypotheses derived from a theory of inter-

personal deference. Even presumably more "objective" self-reports of behavior and conditions are subject to interviewer effects as are the more "subjective" attitudinal items (although not always in the predicted direction).

The responses by Anglos to the cultural evaluation and bilingualism items are most compatible with the deference theory. Those questions may be considered the most potentially sensitive to an Hispanic interviewer and, indeed, showed the strongest effects. However, those same items failed to show interviewer effects among Hispanics themselves. The latter results are nevertheless consistent with those reported by Cotter et al. (1982), who found a general lack of interviewer effects among blacks when the questions were about blacks. The authors suggested that blacks felt no need to alter responses about their own race but that deference effects would be found if blacks were asked about whites. We would expect similar findings in this study had Mexican-Americans been asked about Anglos.

Other items showed mixed results and may require different explanations beyond deference. In the cases where Hispanics exaggerated their ethnic behavior (TV news watched in Spanish) and proportion of ethnic contacts (friends and neighbors), a cultural affinity or "halo" effect may be at work. This phenomenon represents, perhaps, an effort to appear more like the ethnic group represented by the interviewer, which calls for either enhancing or diminishing reported ethnic characteristics, depending on who asks the questions. Although not overtly cultural, education and income questions may also be said to produce responses resulting from this process. Mexican-Americans are no doubt aware of the socioeconomic disparity between themselves and Anglo society and may shade their status to more closely match the perceived status of the interviewer.

Conversely, two items related to Spanish-language print media use produced results contrary to this explanation. Reading and perceived importance of Spanish-language print media were greater when Mexican-Americans responded to Anglo interviewers than when they responded to other Hispanics. Further study is needed to examine which types of ethnicity-related items show a cultural affinity effect and which a reverse affinity effect, and why.

The results discussed above, although based on an *N* of 1004, used the interviewer as the unit of analysis, thus producing a more conservative test than when the number of respondents is the unit of analysis. Additional research employing a greater number of interviewers than available here is needed before stronger conclusions are drawn, particularly regarding the Mexican-American respondents. What is more, to more fully test the deference theory among Mexican-Americans, other

questions need to be examined. Specifically, items should be included which ask Hispanics to evaluate Anglos and Anglo culture, so as to better approximate classic studies of blacks and whites which originally generated the interpersonal deference explanations.

As the Spanish population in the U.S. continues to grow, it will become even more important for surveys to include them in order to be representative. To do so, bilingual interviewers will no doubt be used. This study shows that ethnicity of interviewers can exert a significant biasing effect on a variety of cultural questions, even over the phone.⁷ Fortunately, this effect is not large—respondents were not prompted to fundamentally alter their attitudes (from agree to disagree, for example), but they did shade their responses depending on who they talked with. Whether this bias results from general deference, as other work has suggested, or from other processes, such as cultural affinity, is left to future research.

Appendix: Questionnaire Items

1. About how much of the *news* you watch on television is in Spanish? Would you say—none of it, less than half, about half, more than half, all of it?
2. *Overall*, about how much of the television you watch is in Spanish? Would you say—none of it, less than half, about half, more than half, all of it?
3. How much of the time that you listen to the radio is it in Spanish? None of the time, less than half, about half, more than half, all or most of the time?
4. About how many of the newspapers and magazines you read are in Spanish? Would you say—none, less than half, about half, more than half, all of them?
5. How important is it for you to have a daily newspaper to read in Spanish? Would you say—not important at all, a little important, somewhat important, very important?
6. About how many of your neighbors would you say are Mexican-Americans? Almost all, about $\frac{2}{3}$, about $\frac{1}{2}$, about $\frac{1}{3}$, very few, none?
7. How many of your friends are Mexican-American? Almost all, about $\frac{2}{3}$, about $\frac{1}{2}$, about $\frac{1}{3}$, very few, none?
8. Would you agree or disagree with the following statements? I prefer Mexican-American culture and customs to other culture and customs. Agree strongly, agree, no opinion, disagree, disagree strongly (the following items shared the same scale).
9. Given the choice, I would rather associate with Mexican-Americans than with other people.
10. Mexican-Americans are a lot different from other people.
11. Everybody who lives in Texas ought to be able to speak English.
12. Everybody who lives in Texas ought to be able to speak Spanish.
13. Grade school classes in Texas ought to be taught in both English and Spanish.

⁷ In this study the interviewers' names, and slight accent in some cases, were presumed to inform respondents of interviewer ethnicity. Unfortunately, there were too few respondents questioned by "nameless" interviewers for reliable comparisons. It would be informative in future studies to determine if concealing interviewer ethnicity reduces its effect on response bias.

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