

The Changing Face of Respondents

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Abstract

With the ever changing population demographics in United States, survey researchers are faced with many challenges to ensure all sampled population groups are accurately represented, high quality data, and high response rates. Seldom is careful consideration given to the development and translation of the questionnaire, training of interviewers, approaches to contact respondents, and refusal conversion in regards to non-English speaking populations and foreign-born populations. This lack of consideration can result in respondents not understanding questionnaire items, low quality data, decreased response rates, and under representation of certain population groups in the sample.

The Welcome to the United States Survey (Welcome), sponsored by the U.S. Department of Homeland Security, consisted of the administration of a brief interview of visitors to the United States as they entered through land and air ports of entry. While the interview was only conducted in English and Spanish, the interviewers spoke with visitors from all over the world, thus encountering numerous cultures and languages. In many instances, the interviewers had to adapt their approach to potential respondents on the spot due to these cultural and linguistic differences.

This paper discusses the ever-increasing need for the survey research industry to evaluate methods used to conduct surveys given the population changes in the United States. Linguistic challenges are discussed in reference to the development of a questionnaire, specifically effectively proven translation methods. Additionally this paper discusses the need for interviewer freedom in how they approach potential respondents allowing them to adapt to cultural needs. Finally this paper presents lessons learned from the Welcome survey on how to contact and administer surveys to non-American populations that can be applied to future studies.

Key Words: translation, culture, methods

1. Introduction

The cultural diversity of the United States continues to change dramatically. According to recent population trends provided by the Census Bureau, 12% (34.2 million people) of the population in 2004 were born outside of the United States. Of that group, over half were born in Latin American countries, and another quarter were Asian-born. (The U.S. Census Bureau, 2005) Additionally, the Hispanic accounted for 50% of the growth of the United States between 2000 and 2006. The growth rate of Hispanics in that same time period was three times the growth rate of the entire U.S. population (Owens 2008).

With the ever changing population demographics in United States, survey researchers are faced with many challenges to ensure all sampled population groups are accurately represented, high quality data, and high response rates. In this paper, we identify some of these potential challenges. We present our experience with the Welcome to the United States Survey (Welcome Survey) to identify key challenges and potential solutions to ensure high quality data is captured and show how they can be used in other studies to assist in interviewing non-U.S. populations.

1.1 Traditional Survey practices

In many studies where the survey population is not American or English-speaking, the most important procedure is to ensure the questionnaire is translated in a manner that can be understood by the respondent. Dean et. al. stated “Attending to cultural and linguistic differences among populations when developing a new instrument is costly and time consuming, therefore, using existing questionnaires, of mono-cultural context, is the most frequently used approach in questionnaire development.”

Numerous translation methods are used, such as the direct translation, translation with back translation (English to Spanish and then Spanish back to English by two different translators), and translation by committee. Harkness (2003) provides an original framework for understanding instrument translation procedures. Within this conceptual framework, existing instruments are either adopted or adapted. Adopting involves directly translating the instrument into the target language. Adapting requires reviewing an existing questionnaire for cross-cultural appropriateness in the target language, adjusting the source language as necessary, then translating the questionnaire into the target language. In some studies, cognitive interviews are conducted after the translation of the instrument to ensure quality of the translation and understanding by the respondents.

2. Welcome to the United States Survey

The primary purpose of the Welcome Survey, sponsored by the Department of Homeland Security (DHS), was to collect information regarding how “welcome” foreign visitors felt upon processing into the US by DHS Customs and Border Protection (CBP) officers and Border Patrol agents. The data will be valuable for enhancing customer service training of DHS personnel, as well as further the efforts by Secretaries Condoleezza Rice and

Michael Chertoff in their initiative to make the US more attractive to foreign visitors as a place to visit, study, and do business.

RTI was contracted to collect the data for the Welcome Survey using an intercept method of sampling, recruiting, and interviewing international travelers at both land and airport ports of entry (POEs).

The sampled Ports of Entry (POEs) were selected primarily as a result of considering factors such as stratification (Northern land border POEs, Southern land border POEs, and airports), passenger flow (volume), DHS personnel and interviewer safety, and logistical concerns. With significant input from DHS and CBP, the eventual sample included a total of 11 selected POEs for data collection. Listed by strata, the 11 selected POEs were:

- 3 Northern land POEs;
- 4 Southern land POEs; and
- 4 Airport POEs.

This sampling scheme was intended to provide six distinct groups of estimates based upon the number of interviews needed for analysis: Northern land border (3 POEs), Southern land border (4 POEs), and each of the 4 sampled airports. A total of 939 completed interviews were required to meet the assumed levels of precision for this study. Completion of data collection resulted in a final respondent sample size of 960.

Preparations for the Welcome Survey data collection effort resembled those of most field data collection projects. The questionnaire was carefully developed in concert with the DHS and CBP project managers. Given the study population (i.e., international travelers who may or may not have a strong command on the English language), every effort was made to use wording and response options that were easy to comprehend, efficiently answered, and absent of strong cultural references. In addition to English, the questionnaire was also translated and made available in Spanish¹.

Additional preparation included an effective training program which ensured FIs were provided with all information and materials necessary to effectively conduct interviews (e.g., recruiting instructions and aids, specific information about each port, copies of the questionnaire, and anticipated frequently asked questions from respondents). Also, discussions between the interviewers and the trainers assisted in anticipating potential respondent objections to participating in the study.

¹ DHS and CBP recommended, based on their own experience with procedures and interactions with international visitors, that these two translations would sufficiently serve the vast majority of potential respondents. This proved to be true, as only 8.9% of the sample were coded nonrespondents due to language barrier.

3. Description of Interview Administration

The administration of interviews was influenced by numerous factors, including the location of interviewing, sampling, recruiting, and eligibility protocols.

Location. An important aspect to successful data collection was the location, which varied by POE, for recruiting and screening selected sample members. At the land POEs, FIs approached and recruited vehicles and pedestrians after they passed through the Primary Inspection process to be interviewed. At the airports, the FIs approached and recruited passengers after they passed through the Primary Inspection process and were waiting to retrieve their luggage.

Sampling. Based on the survey precision requirements and the port-specific information provided by DHS, RTI initially proposed a POE-specific 1-in-N sampling rate. Aspects that were considered in developing these paradigms included, but were not limited to, expected number of visitors per day, peak times of visitors, number of CBP processing areas, number of interviewer staff per location, expected time per interview, and number of feasible work hours per data collection day. The sampling procedures which applied this approach differed by port type, as described below:

- *Airports* – RTI initially anticipated utilizing a *1-in-Nth* sampling rate at airports. However, the logistics of where data was collected precluded us from establishing a pre-visit rate. The FIs began sampling by approaching, recruiting, and screening the 3rd person they observed clearing CBP’s Primary Inspection. Once that initial recruitment was completed, the FI then followed a simple “turn and select” approach to identify the next sampled person. The FI turned, selected, and approached the next person she saw to be sampled into the study. The turn and select approach was still random in that the FIs did not control or manipulate the flow of passengers.
- *Land POEs* – Sample selection at the land POEs involved CBP officers and Border Patrol agents identifying at the point of the Primary Inspection booth any vehicle for which the driver was a non-US Citizen. Upon identifying such a vehicle, and determining the vehicle had cleared Primary Inspection, the CBP officer and Border Patrol agent would direct the driver to go to the designated Welcome Survey recruiting area. Given limited traffic flow on the actual data collection days, RTI set the selection rate to 1-in-1 (i.e., the CBP officers and Border Patrol agents working in the Primary Inspection booths directed every vehicle clearing Primary inspection, in which the driver was a non-US Citizen, to the recruiting area).

Recruiting. Upon being sampled for inclusion in the survey, the FI would attempt to recruit the visitor. Recruiting procedures involved determining eligibility, explaining the sponsorship, purpose and voluntary nature of the study, and obtaining respondent cooperation to complete the brief interview.

Eligibility. Not everyone selected was eligible to participate in the survey. In order to be eligible to complete the interview, a sample member had to be:

- a Non-US Citizen;
- an English or Spanish speaker; and
- someone not sent to Secondary Inspection².

Administering the Questionnaire. The FIs used a handheld electronic data collection device to conduct the 5-minute interview (an HP iPAQ). The iPAQ provided functionality to manage all cases and provide questionnaire functionality to ensure the interview was administered effectively and efficiently. The iPAQ was programmed in both English and Spanish; the FIs had an option to toggle between languages on each question. The FIs used the iPAQ and read the question to each respondent. The FIs also used a laminated questionnaire as a type of show card booklet to assist in the flow of the questionnaire, which provided additional understanding.

4. Challenges

As with most data collection efforts, the interviewers encountered many challenges in the administration of the Welcome Survey. In this section we focus on the following three key challenges:

- Linguistics
- Cultural Barriers
- Interviewing non-U.S. populations

We also present solutions to each of these challenges the FIs were able to develop throughout the data collection period.

4.1 Linguistics

The respondent's ability to understand the questionnaire was the primary linguistic challenge facing the project team. Although we anticipated diversity in languages spoken in airports, we planned on meeting language requirements on what was considered the We Globalization tendencies and demographic shifts which demand the understanding of cultures and languages to be able to reach others effectively (Cronin, 2003). The need for understanding other cultures and languages is such that to respond to such needs, institutions of higher education require diversity training in most fields of study. As the need for information from diverse populations increases, survey research is charged with finding ways to bridge linguistic and cultural gaps and ensuring accurate representation in research studies.

² This 3rd criterion was only applied at the land border POEs via the CBP officers and Border Patrol agent's involvement with the recruiting process. If a vehicle was identified as needing Secondary Inspection, the driver would be directed to that area, thus foregoing the Welcome Survey recruitment area at the POE. Conversely, at airport POEs, neither the passenger nor the FI would have knowledge of whether or not the passenger was being routed to Secondary Inspection (at the time of intercept at the baggage claim area). Therefore, this 3rd criteria was difficult, if not impossible, to apply when sampling and recruiting airport passengers.

Only when the population studied understands, is able, and is willing to answer a question should other methodological issues be addressed (Fowler, 1995). Basic understanding of the languages in use would be crucial to determining success in reaching sample members from different countries. Tom Smith stated, “Questions in multiple languages are said to be functionally equivalent if they are measuring the same construct, and in doing so take into account fundamental differences between language and cultural groups.” (Smith 2002) Within that framework the research team was challenged to:

- 1) Produce translations in oral and written form that would meet the vocabulary needs of diverse Hispanic populations and
- 2) To meet educational levels among Hispanics, which according to research (Weech –Maldonado et al, 1999) can be very low.

If the questionnaire was not translated into language that would be easily understood by respondents, the potential for item non-response would increase, thus compromising the quality of the data received.

We anticipated that the majority of those crossing the Southern land border would be Spanish-speaking visitors. We also anticipated a large contingent of Spanish-speaking visitors at the airports, as well as visitors from many other countries. Given the resources of the project and associated analysis which indicated approximately 90% of these visitors could comprehend either English or Spanish, the only alternate translation of the questionnaire was Spanish. The translation was completed by DHS language specialists and back translated by RTI’s language specialists. This ensured the wording of the questions would be a) appropriate for most Spanish-speaking visitors and b) basic enough so that the majority of the Hispanic population would be able to understand the questions.

We also created a flipchart (i.e., laminated paper) version of the questionnaire in both English and Spanish to aid those less proficient with their verbal English skills. We assumed that if respondents understood any English, they’d be able to better follow along using the flipchart. The flipchart was used at all of the ports and was especially helpful with Asian and Middle Eastern visitors passing through the airports.

4.2 Cultural challenges

Because eligible sample members for the Welcome Survey were to be only non-U.S. citizens, this study demanded that the protocol and interviewers carefully consider the cultural aspects of respondent interactions. The populations to be sampled were located in Northern land ports, Southern land ports, and in international airports across the United States. Nationalities were expected to vary, although most of the Southern land port respondents were presumed to be of Hispanic origin. The team’s expectation was that the majority of the respondents approached for interviewing in airports would have a basic understanding of English. It was also expected that the sample in our southern land ports would be made up largely of Spanish speakers.

In the design stage, the project team discussed the numerous cultures that the interviewers would be contacting and the potential for offending visitors through their approaches. It was decided to hire two Hispanic women to conduct the interviews. It was necessary to have Spanish-speaking interviewers given the anticipated large contingent of Spanish-speaking respondents. However, the project team also thought about the impressions the interviewers would have on visitors to the U.S. For some respondents, the interviewers would be the first non-authoritarian (i.e., non-CBP) people they would come in contact with. Additionally, women were selected as interviewers under the assumption that visitors from other cultures, especially male dominated cultures from Asia and the Middle East for example, would be more willing to cooperate with female interviewers than with males.

The conclusions we come to in this section are completely anecdotal as we did not collect any data or experiments on how respondents reacted to Hispanic women as interviewers. However, the results are worth noting for future studies. We found that respondents at the Southern land POEs were more open with the interviewers than at the Northern land POEs. For example, more Southern land border respondents provided comments to “other-specify” questions than at the Northern land POEs. We attribute this to the fact that the Hispanic respondents felt more comfortable speaking with the interviewers of their same ethnicity.

At the airports we noticed two key results. First, many people were willing to at least engage in conversation with the interviewers. We believe the ethnicity of the interviewers was integral to gaining cooperation from the visitors. The fact that the first contact in the U.S. was with a woman of a non-white ethnicity seemed to help visitors feel more comfortable in answering questions about their entry experience. Additionally, the interviewers noticed unanticipated challenges and then applied certain culturally-sensitive approaches that eased the recruiting process. For example, the interviewers noticed that when they bowed to Asian visitors before they began speaking, they became more engaging. When speaking with Middle Eastern women, they noticed the women would sometimes have a look of concern or fear in their eyes. The interviewers realized it was because the women didn’t want to speak without permission from their husbands. In some cases, the interviewers were able to briefly explain the study to the husbands and essentially gain their permission to speak to their wives. In other cases, the husbands would not allow the interviewers to speak to their wives. While the project team did not anticipate all of these cultural challenges, the interviewers’ awareness and adaptability resulted in responses and practices that eased the recruiting process.

4.3 Interviewing non-U.S. populations

We did not know how respondents would react to being surveyed immediately as they crossed the borders or arrived in the U.S. We anticipated that for many visitors, especially those arriving at airports, that this would be their first visit to the U.S. We had concerns about how visitors would respond to being surveyed. We also did not know the experience visitors had with surveys, or even if they had completed surveys in the past. Additional concerns about obtaining cooperation existed because of the constant threat of

terrorism and the increased security at ports of entry. We also anticipated there would be other cultural challenges, especially at airports, that we did not know about entering the data collection period.

Given these concerns, we focused on two key techniques/procedures to address interviewing non-U.S. populations: 1) nonverbal communication; 2) recruitment approach.

Nonverbal communication. For the Welcome Survey, nonverbal communication was exceptionally important given that the target population was in-transit and thus highly mobile; the survey included some potentially forward (or sensitive) questions about their reasons for visiting the U.S.; and the target population was multi-cultural (thus reducing the opportunity for elaborate verbal communication). Nonverbal cues can largely affect a respondent's willingness to participate in intercept surveys. Because our target population was in-transit, the interviewers had even less time to make a good impression and obtain cooperation. From the moment the interviewer approached the potential respondent, her eye contact, poise, and confidence all were determining factors of the recruiting outcome. The interviewers were trained to convey professionalism, confidence, and politeness. This was largely accomplished by having interviewers role play scenarios in which respondents, or the trainers, were skeptical and inquisitive.

It was also important that the interviewers be perceived as trustworthy and credible since they would be asking questions about frequency of travel into the U.S and reasons for visiting the U.S. – questions that would sound similar to those asked by CBP officers and Border Patrol agents. We wanted to avoid refusals or unfinished surveys due to nervousness or lack of trust on the part of the respondent. To that end, the interviewers were also instructed to wear uniformed polo shirts and khaki pants to further emphasize credibility and professionalism. They also displayed picture identification badges on the outside of their shirts. The overall goal was to send the message to the respondents that this survey was important and that this was a safe way to provide valuable feedback. We believe these tactics helped us achieve that and directly contributed to our exceptionally high response rate.

Recruitment approach. Another area in which we believe our specialized strategies directly contributed to a higher response rate is our recruitment approach. As mentioned earlier, the plan was for the interviewers to stand just beyond the primary checkpoints at airports and just beyond either the pedestrian or auto primary checkpoints at land ports, depending on traffic flow. As airline passengers passed through the checkpoints, the interviewers were to approach them and deliver the introductory pitch for screening.

The interviewers adapted their introductory approach and greetings according to the traffic flow and operations of each POE. Also, the interviewers adjusted their recruitment approach if they anticipated any cultural concerns. For example, if a Middle Eastern woman was selected, in many instances her husband would interrupt the interviewer and begin to question her. The interviewer would then need to tailor her approach from the

woman selected to the woman's husband, explaining briefly the purpose of the interview and why she was interviewing the woman and not the husband. In these instances, it was also important for the interviewer to utilize key nonverbal communication techniques to gain the trust of the respondents, especially if they had difficulty understanding English or Spanish. In some instances at the recruitment stage, the interviewer would provide examples of questions to be administered. They also personalized their explanation of the survey to assist respondents in gaining trust in the survey and feeling like as a visitor to the U.S., their opinions and experience would assist in improving procedures.

5. Conclusion

Given the increase in foreign-born residents of the United States and the increase in the Hispanic population, survey researchers should begin to recognize the impact these population changes have on survey administration. As demonstrated by our experience with the Welcome Survey, numerous challenges can be presented while interviewing these populations. In general, these include linguistic challenges, cultural challenges, and respondent reactions to the survey process. In this paper we have presented ideas of procedures we followed on the Welcome Survey that assisted in obtaining high response rates and high quality data.

Increased research in translation methods will continue to shape the industry as we attempt to ensure all participants understand equally our questionnaires. We suggest that before translating the questionnaire research about the population group and its culture be completed to assist the translators in understanding potential pitfalls with the questionnaire.

In addressing cultural challenges, a researcher should understand that traditional approaches and survey procedures may be offensive to some non-U.S. populations. Again research about the targeted populations may assist in addressing these potential concerns. Specific cultural training to the interviewers may also help them understand these cultural differences and assist in the development of specific procedures to address cultural differences.

Lastly, it's important to remember that non-U.S. populations may not have the same experience with surveys as U.S. populations. They may be fearful to participate, or they may not understand how to answer survey questions. Anticipation of this challenge serves also as a resolution. By anticipating this challenge, specific training can be administered to interviewers about how they communicate with respondents. Also, specialized introductions and recruiting procedures can be used to assist respondents in feeling comfortable participating in the survey.

The population of the U.S. will continue to change as more foreign-born residents come to the U.S. This change in the population will affect how we conduct surveys as they will become and increasingly important part of our survey populations. By understanding potential challenges faced in interviewing these populations, we can overcome these challenges and collect high quality data.

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