

OFFICE OF INSPECTOR GENERAL
CITY OF NEW ORLEANS



ED QUATREVAUX
INSPECTOR GENERAL

June 24, 2010

Ronal W. Serpas, Superintendent of Police
New Orleans Police Department
715 S. Broad Street
New Orleans, Louisiana 70119

Dear Superintendent Serpas:

This letter is in response to your request for assistance from the Office of Inspector General regarding the design of a Crime Victim Perception Survey to be implemented by the New Orleans Police Department. After meeting with you and your team, our office has gained insight into some of your objectives for the survey and has compiled a list of suggestions for you to consider.

Suggestion #1: USE THE "BASICS OF THE SURVEY RESEARCH PROCESS" (APPENDIX A) AS A GUIDE TO ANSWER THE "RESEARCH DESIGN & IMPLEMENTATION QUESTIONS" (APPENDIX B), WHICH WILL ASSIST IN THE OVERALL DESIGN AND IMPLEMENTATION OF THE SURVEY.

The first step in the development of a statistically valid survey is to conceptualize the objectives of the project and identify the constructs of interest. A series of questions (Appendix B) has been provided to assist you in these endeavors. By taking the time to craft a thoughtful response to each question, you are more likely to develop an assessment tool that adequately measures what you are interested in. Another form (Appendix A) outlines the basics of survey research and is offered to provide you some help in answering most of the questions.

Suggestion #2: ATTEMPT TO CALL A MINIMUM OF 4 VICTIMS OF VIOLENT CRIME PER MONTH AND 25 VICTIMS OF NONVIOLENT CRIME PER MONTH TO MAINTAIN A 1 TO 7 RATIO ACCORDING TO TYPE OF CRIME.

According to NOPD records, the average number of violent crimes reported per year is 2,023 and the average number of nonviolent crimes per year is 14,701; there is, on average, a 1 to 7 ratio of violent to nonviolent crimes reported per year in the City of New Orleans. Using this ratio and your preferred levels of statistical precision, our office calculated the required sample size for your project and determined that the NOPD should survey at least 338 victims per year. For monthly administration, your team of data collectors should call, at a minimum, 4 randomly selected violent crime victims per month and 25 randomly selected nonviolent crime victims per month. However, while there is statistical justification for sampling only 4 violent crime victims per month, this number may appear low to observers. To avoid the perception that not enough violent crime victims were surveyed, you may want to double the number to 8 violent crime victims per month.

Suggestion #3: CONSTRUCT AN ORIGINAL SURVEY USING A LIKERT SCALE BY PILOT TESTING POTENTIAL ITEMS TO PUT ON THE SURVEY AND ANALYZING THEIR INTERNAL CONSISTENCY.

You may use an existing survey for the project; however, the OIG recommends creating an original survey to capture the exact information in which you are interested. While this is a much more time intensive methodology, the process will ensure a valid and reliable survey. The following are general steps you can take to design a survey that is appropriate given your objectives for the project.

1. Develop an exhaustive list of potential items for the survey. Once you have identified your objectives and the constructs you are interested in measuring (Appendix B), you can begin to develop an exhaustive list of items that tap into those constructs. The items should be written as specific, neutral statements with which the respondents can easily agree or disagree on a Likert scale of 1 to 5. For example, if you are interested in assessing the construct of victim perception of police professionalism, you should create as many items as you can that you believe will tap into the construct. Some good examples of Likert-type survey items that tap into crime victim perception of "police professionalism" are:

(For each of the following statements, the respondent should indicate his/her level of agreement by choosing the number that corresponds to one of the following response scale choices.)

1 – STRONGLY DISAGREE	2 – DISAGREE	3 – NO RESPONSE	4 – AGREE	5 – STRONGLY AGREE	
(a.) The attending police officer arrived to the scene in less than 10 minutes.	1	2	3	4	5
(b.) The attending police officer did not look me in the eye.	1	2	3	4	5
(d.) The attending police officer wore his/her badge in plain view.	1	2	3	4	5

The above items are useful because they measure things that are likely to tap into the overall construct of "police professionalism" such as officer (a.) promptness, (b.) conduct, and (c.) appearance. When developing a survey from scratch, you should create as many such items as possible then administer them to a small sample.

2. Pilot test your potential survey items on a small sample. Once you have created an exhaustive list of items to capture all of your constructs of interest, you should administer all of the potential items to a small pool of respondents, approximately 12 to 24 individuals.

3. Correlate the scores for each item with the total scores. The answers given by these respondents should then be analyzed to determine the internal consistency of the tested items. This analysis is done by correlating the scores for each item with the overall score. The higher the correlation is for an item, the more it is assumed the item measures the same construct as the items on the test. (Refer to #5 in Appendix A for a more in-depth guide to pilot testing and item analysis).

4. Eliminate unnecessary items and create a final survey instrument. The item analysis will help you identify the items that are not highly correlated or are negatively correlated with the overall score. These items should be thrown out and the remaining items should comprise the final survey. While the final survey will be much shorter in length, the items that remain will be ones that best assess your construct of interest.

Suggestion #4: DEVELOP A COMPREHENSIVE PROTOCOL FOR ADMINISTRATION OF THE SURVEY, INCLUDING A WORD-FOR-WORD TELEPHONE SCRIPT, AND TRAIN THE PERSONNEL COLLECTING THE SURVEY DATA TO FOLLOW THE PROTOCOL EXACTLY AS WRITTEN.

The principal researcher should develop a step-by-step protocol for the administration of the survey, including all materials to be used, such as telephone scripts and computers. All of the individuals responsible for conducting the survey should be trained to follow the protocol exactly as written. Data collectors should be observed conducting the survey and provided immediate feedback until the principal researcher and caller are both comfortable with his/her ability to correctly administer the survey.

Suggestion #5: THE TELEPHONE SCRIPT SHOULD BE ADHERED TO AS CLOSELY AS POSSIBLE AND SHOULD INCLUDE ALL RELEVANT INFORMATION.

A word-for-word telephone script should be provided to data collectors, who should be trained to adhere to the script as closely as possible. The introduction to the script should include the identity of the caller and the organization conducting the research, the purpose and importance of the survey, the survey length (or how long the respondent can expect to be on the phone), confidentiality disclosure (in this case, that the phone call may be recorded for quality assurance), the voluntary nature of the response (or that the respondent can end the survey at any time), and relevant ethics clearance.¹

Suggestion #6: IN ADDITION TO COLLECTING RESPONSES TO SURVEY ITEMS, COLLECT DEMOGRAPHIC INFORMATION (I.E. RESPONDENT GENDER, RACE, AGE AND DISTRICT IN WHICH CRIME OCCURRED).

To determine whether your sample is representative of the general population of interest (i.e. all victims of crime in New Orleans) you should collect demographic information, such as gender, race, and age. This information will allow you to determine the overall demographics of your study sample to compare to the population.

1. Our office has reviewed your telephone script and made several changes. The updated telephone script is attached as Appendix C.

Suggestion #7. AT THE END OF THE SURVEY, ALLOW THE RESPONDENT AN OPPORTUNITY TO PROVIDE FEEDBACK.

Because the survey requires the victims to respond with predetermined ratings, they should also be given a chance to provide unrestricted feedback regarding their experience with the police department. This will encourage dialogue between citizens and the police department and may enhance the public's trust in the NOPD. Further, useful feedback can expose unknown issues, whether good or bad, which can be used by the police department to improve its interactions with victims following a crime. However, there will inevitably be respondents who will try to discuss irrelevant topics or ask questions to which the caller does not know the answers. The research designers should be prepared for such deviations and develop a standard response for data collectors to give to respondents should they encounter such a problem.

The suggestions presented in this letter should not be viewed as an exhaustive set of steps for the design and implementation of an assessment tool such as the NOPD Crime Victim Perception Survey. Rather, the OIG stands by these suggestions as necessary minimal considerations for designing a statistically valid and reliable survey. While the NOPD has ultimate authority in choosing the methodologies of its survey, our office hopes that you find these suggestions to be helpful given your objectives. Should you have any questions about the information provided, or require further assistance in the future, please contact Sarah Fontenelle, Inspections and Evaluations Division, at 504-681-3213 or sfontenelle@nolaoig.org.

Sincerely,



Ed Quatrevaux
Inspector General

cc Major John P. Bryson, Compliance
Susan Hutson, Independent Police Monitor

APPENDIX A

Basics of the Survey Research Process

1.) Brainstorm objectives of the survey – What are you hoping to accomplish by conducting the survey? What are the constructs of interest? For each construct, write multiple items to “tap” into it.

For example, a researcher interested in whether or not citizens in New Orleans feel safe (research objective) may conduct a survey that taps into crime victims’ perception of service quality of the NOPD (variable to be assessed) according to type of crime committed. The researcher must then identify any relevant constructs that relate to the variable of interest, which is, in this case, victim perception of NOPD service quality. Examples of specific constructs may include things such as victim perception of police availability in response to crime, victim perception of police officer appearance, victim perception of environment in which the crime occurred, etc. These are the specific things that will drive the development of survey items.

2.) Population to be sampled – What is the population you are interested in? What is the rationale for this population selection? Be able to explain why you chose this group to study.

3.) Data to be collected – How will you quantify the data collected?

The researcher must determine how to measure the construct of interest. For the example above, the construct of interest is victims’ perception of service quality of the NOPD according to type of crime committed. How do you assess perception? The researcher will likely develop an attitude survey, made up of a series of questions that are believed to accurately (validly) and consistently (reliability) measure victim perception of the NOPD.

Likert Scale. A researcher interested in attitudes is likely to use a Likert Scale, which produces metric data that can be described and quantified. For example, the victim’s response to each survey item will correspond to one of the following numbers:

1 – Strongly Agree 2 – Agree 3 – No Response 4 – Disagree 5 – Strongly Disagree

4.) Degree of precision required – What size alpha, confidence level, power, and sample size should you work with?

The precision of the survey will depend on the research question and the construct of interest. The researcher must make a best guess as to what he expects the answer to his research question to be, as well as determine how confident he wants to be that the survey results will agree with his best guess about the “real world”. Based on this information, he may then choose a sample size that will be large enough to tap into that expected reality, should it be true. The alpha is a probability of error, or the probability of mistakenly concluding that the real

world is as the researcher expects when it actually is not, and is typically set at .05. The confidence level is the probability of correctly concluding that the real world is not as the researcher expects. Power is the probability of correctly concluding that the real world is as the researcher expects.

5. Methods of measurement and instrument design – What items are included? Did you pilot test? How will survey be conducted?

Items. The researcher must create as many specific items as possible to “tap” into each of the constructs. For example, for victim perception of police officer appearance, the researcher may create an item such as “the attending police officer was neatly groomed,” and another such as “the attending police officer was knowledgeable,” and a reverse-worded item such as “the attending police officer was not wearing his/her badge in plain view,” etc.

The survey items should be simple with jargon-free wording. Avoid special terms and acronyms. Check to ensure that none of the items lead or bias the subject’s response. Check to make sure there are not multiple ways of interpreting the question. Avoid double-barreled questions. Include BOTH positively and negatively worded items (you will need to reverse code before data analysis). Be as clear and concise as possible. Include items for background variables at the end of the survey.

Pilot Test & Item Analysis. The researcher should try out his survey questions on a small sample of the population (approximately 12-24) and then conduct analyses to determine the validity and reliability of the items and the survey based on the expectations of the study. *Be sure to convert the scores for the negatively worded items so that they are in agreement with the scores from the positively worded items before analysis.* Once scores have been adjusted accordingly, you can measure the strength of each person’s attitude by adding the rating which they have given to each item. For example, the maximum achievable score on a 40 item scale, indicating strong agreement with all favorable items and strong disagreement with all unfavorable items, would be $40 \times 5 = 200$.

The researcher must then determine the internal consistency of the items by correlating (comparing) the scores for each scale item with the overall scores (See Figure 1). The higher the correlation (the more the scores vary together) the more likely the item is to measure what the other items are measuring. Remove any items that do not show high, positive correlation with the overall scores. You should now have the final set of statements to be used for the survey.

Figure 1

	Scale Items					
Pilot Sample	1	2	3	→	40	Overall Score
Person 1						
Person 2						
Person 3						
Person 4						
Person 5						
....						

Methodology. The researcher should determine step-by-step exactly how the survey will be administered. Individuals responsible for conducting the surveys should be properly trained on all procedures. The procedures should include an explicit description of the materials to be used (i.e. survey form, telephone, scripts, etc.), and a comprehensive description of the step-by-step process each survey administrator must go through from start to finish for each subject.

6. Selection of the sample – How will you randomize your selection?

There are multiple ways of selecting a sample. Random sampling is the “gold standard” in obtaining a sample representative to the population. However, if the researcher is interested in certain groups within the populations, he may select the sample via stratified random sampling. Stratified random sampling allows the researcher to get as close to representative of a heterogeneous group as possible via random sampling within the stratified levels of interest.

There are computer programs that will produce a list of random numbers that can be used to select the individuals for participation. Also, after determining the requisite sample size, be sure to consider the non-response rate.

7. Organization of the field work – Have you developed a final survey procedure and trained the individuals responsible for collecting data?

8. Data Analysis & Interpretation – Have you appropriately described the results? Have the appropriate statistical tests been used to make inferences? Have you accounted for non-response?

Data Analysis. Once the data has been collected, the next task is to draw some conclusions and provide an answer to the research question. The most basic approach is to draw up a tally of all the different categories of response. This provides the material for the basic descriptive analysis of the survey. First, check the surveys to ensure all items are answered and eliminate any that are incomplete. Then calculate the response rate, which is the number of fully completed surveys divided by the total number of surveys originally attempted, x 100. Next, to analyze the data of a Likert Scale, convert scores on negatively-worded items to correspond with the scores on positively-worded items. Sum the revised scores on each scale to obtain a total score for each individual in the sample. The scores are now ready to be examined descriptively.

9. Ethical Considerations – Have you considered how the design of the survey may negatively influence the subject? Have you received the appropriate approval to conduct the survey?

APPENDIX B

Research Design & Implementation Questions

(In red = OIG thoughts/suggestions; not exhaustive)

1. What are the objectives of the study? What is your research question? What is your expectation?

Examples of objectives:

- A. To confirm with crime victims' the accuracy of the attending officer's written report of the crime
- B. To assess crime victims' perception of the quality of service of the police department following the report of a crime

2. What are your variables of interest? What variables do you want to measure? What variables do you think will influence the ones you want to measure?

Examples of variables to measure:

For A: Victim opinion as to whether written report matches his/her memory of what he/she reported

For B: Victim perception of quality of police service

Examples of variables that influence those you are measuring:

For A: The word-for-word crime report of the victim written by the attending police officer

For B: The professionalism of the 911 dispatch operator and the attending officer

3. What are some specific constructs that may influence your variables of interest?

For B: Police officer "professionalism" may be characterized by his/her Promptness, Appearance, Conduct, Knowledge, Compassion, Helpfulness, etc.

4. What are some things that may “tap” into your constructs? Make a list of as many items as you can for each construct of interest (when considered together, each of these constructs should give you an overall measure of your variable of interest, in this case, victim perception of quality of police service following a crime).

Examples:

Officer Conduct: Did the officer behave appropriately given the standard of policy? This could be characterized by many things. For example, police officers are not supposed to drink or smoke on the job. So, if the attending officer smelled of smoke and cigarettes, the victim may perceive the officer’s conduct as inappropriate. Therefore, an item that measures such may be useful on the survey. The survey may ask the victim to indicate his/her level of agreement with the following statement: “The attending officer smelled of alcohol.” This would be one item in your list to measure officer conduct.

Police Promptness: Was the police department alerted to the crime in a timely manner? This may be measured by many things as well, one of which could be the promptness of the 911 operator to answer the victim’s phone call, or another could be how quickly the police arrived on the scene. An item that taps into the former may be written as: “When I called 911, the operator put me on hold.” An item that taps into the latter may be written as: “The police arrived within 5 minutes of my 911 call.” These are just two examples of items that tap into the construct of police promptness. You should come up with as many as you can.

5. What is your population of interest? Why?

Crime victims according to whether crime was violent or nonviolent.

6. How will you assess your population on the constructs of interest? What type of measurement tool will you use?

Telephone survey

7. What is your degree of precision? (alpha, confidence level, power, and sample size)

alpha = .01

confidence = 99%

sample size = 388 victims per year

8. What is your methodology? What materials are used? What are your procedures? Have tool administrators been adequately trained?

After Pilot Test:

9. What is the validity of your tool? How well does your tool assess what it purposes to assess?

10. What is the reliability of your tool? How consistent are the assessments made by the tool?

11. What are the limitations to the tool and the methodology?

12. Are administrators of the assessment tool adequately trained on the final procedure?

APPENDIX C

City of New Orleans Police Department
Victim Survey Script (Updated: 6/24/10)

Greeting: *“Good Morning (Afternoon or Evening).....May I please speak to (name of victim)?”*

“This is (state rank, name) and I am an employee of the New Orleans Police Department. I am calling on behalf of Superintendent Ronal W. Serpas. Do you have _____ minutes to answer some questions regarding a crime report you filed on (date)?”

If no: *“May we contact you at a later time to complete the survey?”*

If no: *“Thank you for your time.”*

If yes: *“When is the best day/time to contact you?”*

If yes: *“Great! Before we begin, I would like to inform you that this call may be recorded for quality assurance. I’d also like to assure you that the answers you share with us today are strictly confidential. Your answers will be added to a database with none of your identifying information attached. Access to the information you provide will be limited to only those involved in the analysis of the survey data. Your participation is voluntary, and you may end this phone call at any time. Do you understand?”*

If no: (Try your best to explain the victims’ rights)

If yes: (Continue with the script)

“The purpose of this survey is twofold: First, I’d like to confirm that you were the victim of a crime and, that being the case, would like to have you rate the quality of service provided by the New Orleans Police Department after the incident took place. Second, I would like to give you an opportunity to provide any feedback you may have regarding your experience with the police department.”

“Did you file a police report or interact with a police officer regarding an incident on (date)?”

If no, you may end the call, because the survey will not apply: *“Okay, thank you. Do you have any feedback for the New Orleans Police Department?”*

If yes: *“I am now going to review your incident report from (date). When I am finished, I would like you to indicate the accuracy of the report by responding YES or NO.”*

Read the incident report, then say: *“Do you agree with the information as read to you just now?”*

If no: *“Can you tell me what is wrong with the report as I read it to you?”* (Record response)

If yes: *“Okay. I will now read to you, one at a time, ___ statements regarding your interaction with the police department following the incident. After each statement, I would like you to indicate your level of agreement on a scale of 1 to 5, 1 meaning you strongly disagree with the statement, 2 meaning you somewhat disagree with the statement, 3 meaning you do not agree or disagree with the statement, 4 meaning you somewhat agree with the statement, and 5 meaning you strongly agree with the statement. Do you have any questions?”*
(Ensure the respondent understands the rating scale)

Read each statement one at a time and record the victim’s response.

When finished with the survey items: *“Okay, thank you. Do you have any feedback for the New Orleans Police Department?”*

End Call: *“On behalf of Superintendent Ronal W. Serpas and members of the New Orleans Police Department, I thank you for assisting us today. If we can be of service to you in the future, please contact us at 504-658-5240, Superintendent’s office of Compliance. My name is (State Rank and Name). Again, thank you and goodbye.”*