

Appendix C: Instrumentation

Description of Instruments and Methods:

The combination of survey and focus group research instruments methods were chosen for their record of being able to help researchers learn about human resources and performance improvement through a direct line of questioning while also giving the ability for the researchers to understand past experiences, motivations, and ideas for improvements.

Survey Questionnaire:

The survey tool used in this study was a self-administered, which is considered a statistical survey since the goal is to provide statistical analyses through descriptive and inferential tests. Based on the survey questions and the goals of the survey, the majority of the analysis were descriptive with a few questions testing for group bias such as differences observed based on age, race/ethnicity, property of residence, or familiarity with the police department contract. The use of the word “significant” was used in the report only if an inferential test of chi-square had occurred and there the alpha coefficient was less than .05. The chi-square was chosen as the test of preference for this study due to the nature of the requests by FH staff to test differences across the abovementioned groups. The chi-square tests whether the questions are different enough to be thought of as two different variables and whether the groupings by which each answer category happened were those expected based on distribution of the categories or if they are more likely to be true to the observation in a population that is different enough from an expected distribution.

Internal Validity:

Each person on the research team staff helping administer the survey was part of meetings where the survey goals and questions were reviewed. The research team staff had the opportunity to ask questions and seek clarity about how participants should infer term definitions and directions as to how to answer the questions. Since there were a variety of types of questions used (ranking, multiple selection, single selection, Likert scales), the survey tool gave us an opportunity to get at concerns and ideas for improvement through different ways of asking the questions. One weakness to this tool is that it was not adapted for youth, so there was more assistance needed for those under 18 to fill out the survey than the rest of the respondents required. There were many duplicate entries of the survey and data analysts chose the first response as the response that would be recorded for the analysis. The only exception to this was if the second survey had been completed at the same time as the first and the first entry was clearly incomplete where it was apparent there had been user error in filling the survey out on a first attempt. In that case the second entry was used. This was only the case

with one of the survey responses, all others followed the first rule for which response to record as the final entry for that participant. Coding of the qualitative answers to the data happened in two phases to ensure internal validity. First, each coder saw only one question to focus on and identify codes. The second phase was to meet as a group and identify codes across the questions to come up with cohesive themes across each question where there were similarities as to how people had answered. For example, if someone said the best way to achieve safety was to increase security guards, and also ranked security guards as their first priority for budgeting in a later question, the code was changed to look similar so that all security guard related themes were clear. This was true even if security was combined with other codes related to patrolling and presence of someone surveilling the properties. In addition, the principal investigator of the project looked at the codes during phase one and phase two of coding and each coder had the same method for checking with the PI about whether or not a code was right or if they needed further guidance as to how to code a certain response.

Focus Group Guide:

The focus group guide was co-developed by the research team and staff. The focus group guide sought to go more in depth to some of the questions asked about satisfaction and previous experience with the Fresno Police Department and the supplemental contract, as well as to gain more information about the definitions for participant ideas of safety investments. Both research and FH staff checked questions to avoid any leading phrases within the entire guide. In addition, the focus group guide allowed participants to give more ideas and rationale behind methods for future effective community engagement. The focus groups happened through a zoom environment where there was a facilitator and a note-taker present to take in the data.

Internal Validity: All facilitators met prior to the first focus group to ensure uniform interpretation of each of the questions and use of follow up questions within the guide. In addition, all note takers with the exception of the Hmong Focus Group note-taker went through the same training with the same trainer on note-taking during focus groups. However, the person who took notes is familiar with CVHPI focus group methods and had been a past participant in several CVHPI focus groups and individual evaluation interviews for the past six years. The research team met after the first focus group and once everyone had facilitated at least one focus group to recalibrate how questions were worded and add further instructions to the interview guide for ease of facilitation. None of the fundamental research questions were changed, rather, order changed for some questions and optional re-phrasing was given in updated guides. In addition, coding of the themes was done in similar fashion to the survey questionnaire qualitative answers, where each coder worked independently on one interview and then gathered codes with one supervising researcher reviewing codes and answering questions about the codes and themes.

External Validity for Survey and Focus Groups:

Survey responses were checked against focus group responses to similar queries to check for external validity. This was especially used for answers given by youth given that they needed more assistance filling the survey out than other populations. The answers were similar enough to give the researchers confidence that youth were still able to have their own voice in the survey. However, survey responses of question 12: "If you were to propose a budget to invest in safety in your neighborhood, how would you like the money spent? Name 3 things you would include:" looked most like adult responses and focus group data was more heavily relied upon for answers to how youth perceive solutions to safety in the community should be prioritized. Another check for validity occurred through periodic check-ins with Fresno Housing staff, some who had been part of previous study data collection on the same topic and others who had previous conversations with residents about the topics of the survey and focus group questions. As CVHPI research staff shared preliminary results staff gave feedback if they thought this was something that they had heard before from residents. In addition, since FH staff also helped collect the data in some cases where they assisted residents in filling out the surveys, the research team/FH meetings were used to answer questions about how to best help respondents answer certain questions and further clarify instructions. In addition, there was also a joint meeting to discuss focus group themes and how those resonated with previous anecdotal feedback staff had received on the topics raised by focus group attendees.

Grounded Theory Analysis:

The survey qualitative and focus group responses were analyzed using grounded theory. This method takes induction, deduction, and verification into account at all points of the research process. This method has data collection and analysis occurring simultaneously, resulting in a different research process altogether. First, a research problem is proposed, but there are no hypotheses at first, only questions about a phenomenon. Next, "provisional distinctions" emerge by coding the data. The researcher must then return to the field (collecting surveys or focus groups, or talking with other researchers) to verify the codes through gathering more data, which leads him/her to code again. However, throughout the whole process, the researcher must keep making sure that the codes are directly tied to the real world that the data represents. A purging process must happen where the importance of each code is assessed, and the codes that appear most often must be kept and tested for parsimony. Modern grounded theory always contextualizes the codes to be based in the real-world experiences of the respondents. This is important when checking for external validity between the two instruments used in this study, but also why the FH staff meetings were essential to the analysis phase. Themes were included in the report if they ranked highest, but also if they were parsimonious to what a certain population was saying within the focus groups, such as the codes relating to staff, youth, Spanish-Speaking, and the Hmong populations.