Item nonresponse

Welcome to the National Crime Victimization Survey Knowledge Corner. This short video will focus on item nonresponse.

There are three types of nonresponse in the NCVS – household noninterviews, person noninterviews, and item nonresponse. This video provides an explanation of item nonresponse. Household and person noninterviews are explained in a separate NCVS Knowledge Corner video.

Item nonresponse results in data being missing. There are 4 missing data codes used in the NCVS: residue, out of universe, item invalid until, and item invalid after. These will each be discussed in upcoming slides.

Residue can indicate a keying error which resulted in an out-of-range code, an incorrect or unusable answer by the respondent, or no answer for a question that should have been asked. For most variables, any invalid entry is recoded as missing or "residue." For some variables, Census will recode residue to a valid answer. These are referred to as "allocated" variables. An original version of the variable, including missing data, is also included in the dataset.

An **Out of universe** code indicates that the case is outside of the applicable range or universe of questions to be asked. A question does not apply to a respondent, so the interviewer skips it and moves on to the next question. For example, "Were you injured to the extent that you received any medical care, including self-treatment?" is only asked of victims who reported being injured. All other respondents are skipped past this question and coded as out of universe. Out of universe answers are typically coded as a 9 or series of 9s.

Item invalid until indicates a respondent was not asked a question because they were no longer in the sample at the time the question was added. The year and quarter that the question was added is also included. This type of missing data is represented by -1. This code distinguishes it from normal out of universe or residue missing data.

For example, the NCVS added the question "Are you blind or do you have serious difficulty seeing even when wearing glasses?" in 2016 Q3. Respondents who exited the NCVS before 2016 Q3 are coded as -1, item invalid until 2016 Q3.

Item invalid after indicates variables that were dropped from use in the NCVS. Respondents who entered the NCVS after the question was dropped have missing responses and are coded as -2. This code distinguishes it from normal out of universe or residue missing data. For example, the NCVS dropped the question "Did you use a computer in the last six months?" in 2004 Q2. Those who were not in the sample until after 2004 Q2 are coded as -2 on that question.

Refused/don't know. Respondents may also refuse to answer a question or questions or say that they do not know a response. Refusals and "don't know" are considered valid responses, not missing data by the NCVS, and are given their own code.

Similar to other missing data, there are rare cases where an answer is required, such as household income, and in those cases "don't knows" and "refusals" are replaced through hot deck imputation. You may choose to treat "refusals" and "don't know" responses as missing or residue, depending on your research question.

Let's look at an example. Respondents who report a crime incident are asked "Did this happen at school?" This question was added in the first quarter of 1999. Those who exited the survey before the first quarter of 1999 did not get this question. They are coded as -1, item invalid until 1999 Q1. Respondents who reported that the incident did not happen at school are not asked what part of the school building and are skipped past this question. They are coded as 9, out of universe. Valid responses are (1) in the classroom, (2) in the hallway, (3) in the bathroom or locker room, or (4) in another part of the school. Other values are invalid and are coded as 8, residue. You will see three missing data codes in your data: -1, 8, and 9.

For additional information on the NCVS, see the NCVS page on the BJS webpage. You can also see the NCVS technical documentation for more information about the methodology. Please email askbjs@usdoj.gov with any questions and your email will be forwarded to the BJS statisticians with topical experience. Finally, you can access the NCVS public-use data files at the National Archive of Criminal Justice Data.

Thank you.