# Pilot Testing (Section 4.1, p. 93)

## 4.1.1 Technical Checks

If applicable, look for the following things to make sure that the study is working properly:

- Are you unable to load a page or submit a form?
- Do you have any problems at a particular screen resolution or on a particular operating system, browser, or at certain connection speeds that make the study render oddly or unable to be completed?
- Are data showing up as something impossible (this is different from improbable, which is covered in Section 4.1.3), e.g., zero seconds for a task time or clickstream data showing one page logged for a multipage process?
- Are correct values being passed from page to page, e.g., passing an ID number that is entered on the first page of the study?
- Are correct values returned to the database? If rating scales are coded to return values of one to seven, there is an error if it's returning a zero or eight. Performing a frequency analysis on all data (counting how many times each value appears) can help check this.
- Even more granular, did what you entered return correctly? If you selected the third radio button while going through the study, did it return the corresponding value to the database? Check each value.
- Are error messages (e.g., for required fields) appearing at the appropriate times and displaying the correct messages?
- Is the study branching off to the appropriate questions based on the appropriate responses?
- Can comments fields handle large amounts of text and different types of characters?
- Does the study work with different operating systems, browsers, and resolutions?

## 4.1.2 Usability Checks

Make sure to check that the following things are intuitive to pilot participants:

- Introduction, including instructions
- Screener and background questions asked
- Questions and tasks
- Web controls and pages participants need to interact with
- Overall flow and time spent on the study
- Their overall satisfaction with the study experience

**Examples:**
- Do participants understand how they need to provide an answer to a task?
- Are the questions asking or measuring what they're supposed to ask or are they being misinterpreted?
- Are they trying to type 300 characters into a comments field when there is a maximum of 255?
- Do they trust the information being asked for in the background/starter questions or within the Web site itself?
- Do they understand that they're working with a prototype or with a live Web site?
- Do a particular group of questions lend themselves to participants just breezing through and mentally cheating on their answers?

**Possible follow-up questions with usability check participants:**
- How clear/unclear were the instructions? Questions? Tasks?
- Was there any point in the study where you might have considered quitting without finishing? Where?
- Did the study feel too long or too short? Were the tim expectations accurate?
- How could the study be improved overall?

# 4.1.3 Full Pilot with Data Checks
Make sure to do a quality and "sanity" data check:

- Look for themes in answers and choices
  - e.g., a vast majority of participants failed a particular task or took an unexpected path to an answer.
- Look for improbabilities
  - e.g., unusually short or long periods of time to complete certain tasks
- Cross-reference data when taking a high-level view of it
  - e.g., Participants who, by majority, got the task wrong and rated the task as very easy
- Look for contradictions between verbatim responses and how easy they rated a task to be
- Look for excessive drop-off rates and themes regarding where participants are dropping off in the study.

**Possible reasons for data issues to investigate:**
- Timing issues: Web site changed, etc.
- Alternative answers/paths you hadn't anticipated
- Technical/data-writing glitch
- Participant misinterpreted question (usability checks)
- Abandonment: Bailing from the task by choosing first answer