



FEEDBACK

Survey Design Student Guide

Guidance from the Academy's Council on Research (COR) Survey Review Subcommittee

Background

Student members of the Academy of Nutrition and Dietetics who are interested in conducting survey research can apply to disseminate their survey to registered dietetic practitioners following review by the Council on Research (COR) Survey Review Subcommittee. Further details are provided on the [student survey review application](#). This guide was developed to complement direction from your [Institutional Review Board](#) and provide guidance to students or others in the process of designing surveys and related materials.

Survey Objectives/Aims

Identifying the question(s) you seek to answer through your research is typically the first step in survey development. Research objectives/aims are “specific statements indicating the key issues to be focused on in a research project” (Thomas & Hodges, 2010). A research project may have several specific research objectives/aims that need to be clearly stated. Research objectives/aims should be critically evaluated for clarity, relevance, logical consistency, and practicality. When developing research objectives/aims, consider the following recommendations from Thomas & Hodges:

- Identify the research gap and relative importance of your survey objectives.
- Specific research objectives/aims are clearly distinguished.
- Research objectives/aims/research questions are presented in separate sentences or paragraphs and not combined.
- The objectives/aims are phrased to minimize the likelihood of misunderstanding or misinterpretation by readers.

- The research objectives/aims are presented in a logical sequence.
- The research objectives/aims are realistic (i.e., can be achieved within the expected timeframe with the available resources).
- The objectives/aims use action verbs that are specific enough to be evaluated or measured within the given time frame (e.g., assess, determine, compare, verify, calculate, describe).

Components of a Survey

There are five common elements that are typically included in surveys that are conducted online.

1. **Survey Title:** The title should be precise and descriptive.
2. **Introduction:** The introduction explains the purpose of the survey, who is sending it, and what will happen with survey responses. Although your IRBs may provide templates with required components, below are some components that form an integral part of the survey introduction:
 - Name of the organization and the individual(s) conducting the survey.
 - Contact information of investigators and appropriate IRB contact to reach with any questions/concerns about the survey or personal rights as a survey participant.
 - Mode of administration (e.g., self-administered online questionnaire, face-to-face interview, telephone call, combination of multiple modes) so that respondents know what to expect.
 - Survey Duration: Reliable time commitment to take the survey should be provided, and consider the survey's length and time burden for respondents. An estimate may be provided by the survey platform being used (e.g., Qualtrics, SurveyMonkey).
 - Goal/Objectives: List the reasons for the survey.
 - Demographic: Briefly describe who is being surveyed
 - Incentives: Information regarding incentive(s), if any, for taking the survey must be included. For anonymous surveys, any identifying information for the purpose of providing an incentive should be collected in a separate survey. Clearly specify if all the participants will be eligible for the incentive or those that meet certain criteria.
 - Privacy of participants and confidentiality of data: Briefly explain if survey will be anonymous or confidential and how any sensitive or personal identifying information obtained will be safeguarded.

- Use of data: Define how the findings of the survey will be used, stored and managed, and who will have access to such information.
- Includes the approved IRB number from the institution.

3. Informed Consent: Standardized consent text should be used to provide potential participants with the information they need to decide whether to participate in a research study. Defer to requirements of your institution's IRB. The informed consent text should be written in plain language at a reading level appropriate to the participant population. Generally, the key elements to include in the consent document are:

- A statement that the project qualifies as research and participation is voluntary.
- A summary of the research, including purpose, duration, and list of procedures.
- Reasonable, foreseeable risks or discomforts.
- Reasonable, expected benefits.
- Alternatives to participation.
- Clearly defined eligibility criteria. Be aware that in some cases, being too explicit about inclusion/exclusion criteria may sway participant responses.

4. Instructions: A clear and detailed set of instructions on how to answer the survey questions should be included. Instructions should be written for the overall survey, with additional instructions for subsections or specific questions if the survey structure changes at any point.

5. Survey Questions: Effective survey questions help to obtain accurate and meaningful data. Below are some points to keep in mind while drafting survey questions:

- Consider whether you could use questions from previously validated survey instruments.
- Minimize jargon and define acronyms.
- Ensure that question wording doesn't allow for different interpretations of meaning.
- Avoid leading questions and questions that probe two topics, but only allow a single response (double-barreled questions).
- Demographic questions should be grouped either at beginning or end of survey (there are risks and rewards to each method)
 - a. Researchers should only ask demographic questions that are relevant to the research objectives/aims.
 - b. Use diverse and culturally sensitive terms suited to your population.
 - c. Include "prefer not to answer" options.
 - d. You are encouraged to use the demographic characteristics listed in the Academy/ Commission on Dietetic Registration Needs Satisfaction and Compensation and Benefits Survey. (Please see reference section below.)
- Determine whether the survey's answers will be numerical rating, numerical ranking, yes/no, multiple choice or open-ended, or a mixture. Consider the benefits of close-ended versus open-ended questions.
- For multiple choice questions, allow "N/A", "other", or similar options.

- If possible, be consistent with response scales (e.g., 5-point Likert scale).
- Use skip logic for questions that don't pertain to all participants to reduce respondent burden. Ensure that ineligible respondents are redirected to end of the survey.
- Consider the comparative value of each question on your survey, weighing the potential costs (increased respondent burden, study drop-out, missing data, etc) and the potential benefits (additional data)

Testing Your Survey

This important step can detect potential issues with a survey before dissemination so that modifications can be made and data collection can be optimized. Pretesting should:

- Identify and resolve any grammatical or spelling errors.
- Assess if estimated time to complete survey is accurate.
- Determine which questions were confusing and/or interpreted differently than intended.
- Include both adapted survey instruments and non-validated survey questions.

Below are some considerations when testing survey questions:

- What is your sample size for testing? Will this form part of the actual sample?
- Who should participate?
- May be beneficial to provide an open-ended question(s) to share feedback.
- Consider whether focus group discussions could inform further.

Recruitment

Recruitment messages are intended to solicit responses to your survey. Your institution's IRB may have specific requirements pertaining to recruitment messaging. Consider including the following elements:

- A brief explanation of the purpose of the survey
- The amount of time it will take to complete the survey
- How will the survey be administered
- Population of interest
- Sample size to be recruited, if applicable

References and Further Reading

- [Academy/Commission on Dietetic Registration Demographics](#)
- Dillman's Tailored Design Method
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2328022/>
- <https://ria.princeton.edu/research-data-security>
- Abusabha R. Interviewing clients and patients: improving the skill of asking open-ended questions. J Acad Nutr Diet. 2013 May;113(5):624-33. doi: 10.1016/j.jand.2013.01.002. Epub 2013 Feb 9. PMID: 23402958.
<https://www.sciencedirect.com/science/article/pii/S2212267213000038?via%3Dihub>

- How to Pretest a Survey Questionnaire: https://ctsi.ucla.edu/patients-community/files/view/docs/Howto_pretest_survey_questionnaire.pdf
- The Informed Consent Process. ACEND Fact Sheet. Dietetics Practice Based Research Network.
- <https://jamanetwork.com/journals/jama/article-abstract/199510>