Protocol: Attachment G

Radiation Concepts/Comparison Message Testing

CDC Radiation Studies Branch Contract 200-2015-88267
April 2017

Background:

Centers for Disease Control and Prevention (CDC) Radiation Studies Branch (RSB), often uses analogies to explain technical radiation concepts to their target audiences. For example, on the RSB website the following analogy is used to explain external contamination, "Radioactive material can settle on your clothing and your body, like dust or mud." CDC health communication experts are interested in testing communication messages that assess public understanding of radiation concepts, particularly public understanding of radiation principles illustrated through comparison analogies.

Oak Ridge Associated Universities (ORAU) is to provide assistance to RSB to test these concept/comparison messages.

The protocol describes:

- Goal and Objectives
- Target Audience
- Methodology
- Participant Information/Informed Consent
- Handling of Data Records
- Screening Instruments
- Interviewer's Guide
- Information Sheet for Participants

Goal:
Explore the effectiveness of the radiation concepts/comparison messages among the public.

Objectives:

- Evaluate the extent to which the messages effectively communicate radiation concepts during an emergency.
- Evaluate the extent to which the messages are relevant, comprehensible, credible, appealing and motivate desired action.

Target Audience:
The target audience for this research is the public. All participants will:

- Be at least 18 years of age
- Be comfortable conversing in English

The following criteria will be used to select public participants:

- Have at least some high school education
- Have not participated in a focus group/interview in the last 6 months

- Does not work in any of the following fields:
    - For a market research company
    - For an advertising agency or public relations firm
    - In the media (TV/radio/newspapers/magazines)
    - As a healthcare professional (doctor, nurse, pharmacist, dietician, etc.)
    - Is not an employee for any of the following:
        - U.S. Department of Health and Human Services
        - State or local health department
        - Department of Homeland Security
        - State or local emergency management agency
        - Nuclear power plant, radiation safety officer, health physicist or other radiation-related occupation

Interviews

Additional criteria for interviews include participants must have an interest in English word usage (e.g., retired newspaper editors, voracious readers, people who write and publish articles as part of their work duties, and others with demonstrated interest in editing documents and analyzing subtle differences in language).

The respondents will provide approximate representation reflective of the community in terms of:

- Gender
- Age
- Education
- Race/ethnicity

It is understood that with the small number of respondents for the interviews and groups, it will not be possible to have respondents representing all combinations of characteristics in the interviews and groups.

IRB/OMB Approval:

This audience assessment has been approved by Oak Ridge Site-Wide IRB with an exemption status. This audience assessment will submit a package to the Health Message Testing System (HMTS), OMB # 0920-0572; expiration 3/31/2018.

Methods of Data Collection

Recruitment

The commercial market research facility in Charlotte, NC, and Philadelphia, PA, will utilize their existing database to retrieve names of potential public participants for the focus groups and interviews. Participants will be screened using the screening questionnaire to ensure they meet the screening criteria (See Attachment A and Attachment B for Screeners). Participation will be strictly voluntary.

Determining Tokens of Appreciation to Participants: The commercial market research facility will offer gift cards to the participants as a token of appreciation for participants' willingness to engage in the project.

The token of appreciation offered, $40 per interview participant and $75 per focus group participant, is impacted by a number of variables for this project, including the following:

- Total participation time of 60 minutes: length of the interview; 2 hours: length of the focus group
- Specifications that each participant has to meet to participate in the study
- Recommendations from the market research facilities

Gift cards are neutral (not connected with a company, service or product) and have universal utility. It is usually more cost-effective and efficient to offer a token of appreciation, attractive to the participant, to mitigate the cost of the recruitment. The amount needs to be high enough that participants feel like it is worth their time to participate and cannot be so low that participants perceive their time and candid responses are under-valued. Likewise, incentives cannot be so high that participants become skeptical as to the intention of the interview.

In our experience, it is most cost effective to offer the recruiter-recommended amount, which results in a better show rate and lower recruiting fees. Recruiters from the market research facilities know from experience what various market segments expect to receive. Recruiters will be paid solely for the length of time required to recruit participants.

Interviews

Data will be collected using up to 16 in-depth, in-person interviews with the public who have an interest in English word usage (e.g., retired newspaper editors, voracious readers, people who write and publish articles as part of their work duties, and others with demonstrated interest in editing documents and analyzing subtle differences in language). Each interview will last one hour. A professional interviewer will conduct the interviews using Attachment E.

Focus Groups

In addition, a total of 8 focus groups (4 in each city) with members of the public will also be conducted. Each focus group will have up to 8 participants and is expected to last about two hours. A professional moderator will guide the discussion of the focus groups. The focus groups will be audio-recorded and transcripts will be prepared from these recordings.

During the beginning of the interviews and focus groups, the moderator will provide an overview of the study and ask the participant(s) to introduce themselves using only their first name. Next, the moderator will show a video to introduce the topic to the participants. The video will also show the messages to the participants. After the messages are shown (Attachment C), the moderator will ask questions to the participants about the content of the messages such as if the messages effectively communicate the radiation concepts. Also, feedback from participants will be used to determine if the messages are relevant, comprehensible, credible, appealing and motivate desired actions. The interviews and focus groups will conclude with questions to participants about information sources, such as spokespersons and communication channels. The moderator's guide is included as Attachment D.

The possibility exists that some participants will find contemplation of such subject matter upsetting. Therefore, participants will receive contact information for CDC INFO (Attachment F) and the RSB website at the end of the study.

Data Analysis:
ORAU staff will conduct a debriefing with the subcontracted moderator to identify overall impressions, observations, and themes from the data collection effort. Focus groups and interviews will be transcribed by a transcription firm. Using the moderator's guide, researchers' notes, and transcripts, ORAU staff will examine responses to identify emerging themes. The qualitative responses will be entered into qualitative analysis software, QSR International's NVivo 10.0 and ORAU staff will code the transcripts. Upon completion of the analysis, a report will be produced for the RSB team.

Participant Information Sheet/Informed Consent
All participants who agree to participate in the interview will be given a copy of the participant sheet (Attachment F) to retain for their records. The public will receive their participant sheet at the facility when they check in for the focus group or interview. The participant sheet will include the following information about the study: sponsorship, their rights as participants, risks and benefits in participating, and contacts for more information. Because this study presents no more than minimal risk, signatures for informed consent will not be required. The information sheet is included in Attachment F.

Handling of Data and Records

The commercial market research facility will recruit the participants and the facility will not provide personal identifiers (e.g., last names, address, phone numbers) to ORAU or CDC. ORAU will only receive screening qualification criteria (first name, gender, race/ethnicity, etc.).

For the interviews and focus groups, no personal identifiers (e.g., last name, last initial, address, completed screening instruments) are to be provided to ORAU or CDC.

Additionally, ORAU will:

- Retain the audio recordings, and at least one copy of any report it produces;
- Deliver the report to CDC;
- Not deliver to CDC or others any personal identifiers of participants;
- Retain records and audio recordings for up to three years, then burn, shred, or otherwise destroy them.

The staff from the commercial market facility hired by ORAU will audio-record and transcribe the interviews and focus groups. No individually identifiable information is being collected during the interviews or focus groups. The proposed data collection will have little or no effect on the participants' privacy. Only comments, quotes, and responses from participants will be noted and used as feedback to inform revisions to the messages. ORAU and CDC staff may observe the interviews and focus groups on site in an observation room and/or by live-video streaming. Facilities will provide ORAU two copies of audio recordings of each session. No videotaping is to be conducted. CDC will receive a final report generated by ORAU.

Report:
A final Word document will include study purpose, methodology, participant selection criteria, key findings, representative quotes, study limitations, recommendations, and conclusions, including graphic presentation of data where appropriate.

BURDEN HOURS

Category of Respondent	No. of Respondents	Participation Time	Burden
Interview Screener	32	10/60	5
Interview	16	1 hr.	16
Focus Group Screener	128	10/60	21
Focus Group	64	2 hrs.	128
Totals	240 (only 80 people will participate in interviews and focus group)	33.3 hrs.	170