

TITLE OF INFORMATION COLLECTION

Warning Label Safety Symbol Research

CPSC Contract No: 61320620P0038

Contractor: Kalsher & Associates, LLC

PURPOSE

This research is designed to assess how well a set of 10 newly developed safety symbols/pictograms (“graphical symbols”) communicate hazards posed by some consumer products. This research will follow the open comprehension testing procedures articulated in ANSI Z535.3, the American National Standard Criteria for Safety Symbols. ANSI Z535 is the primary U.S. voluntary standard for guiding the design of signs, colors, and symbols intended to identify and warn against specific hazards and for other accident-prevention purposes. Kalsher & Associates, LLC (“the project team”), is collecting the information. U.S. Consumer Product Safety Commission (CPSC) staff will guide and support the project, as needed. The CPSC is authorized under section 5(a) of the CPSA, 15 U.S.C. 2054(a), to conduct research relating to the causes and prevention of injuries or deaths associated with consumer products. Due to the COVID pandemic, and current IRB restrictions concerning face-to-face data collection, the procedures outlined in the sections that follow will be carried out online.

DESCRIPTION OF RESPONDENTS

The project team will recruit a total of 80 participants to participate in individual cognitive interviews designed to assess their comprehension of the 10 graphical symbols. A subset of 40 of these individuals will be asked to participate in a follow-up focus group aimed at achieving a deeper understanding of the characteristics of the graphical symbols that contribute to, or detract from, their effectiveness in communicating their respective intended messages.

The project team will recruit participants via a variety of means, including emails, social media postings, and word-of-mouth contact. Research participants will receive \$45 for each activity they complete. Participants who choose to leave before completing either (or both) of the tasks will be compensated on a pro-rata basis for the work they have completed up to that point.

Cognitive Interviews. Eighty community volunteers will evaluate the 10 graphical symbols, using the ANSI Z535.3 *Open Comprehension Testing* procedure (see Annex B). This task should take no more than 1 hour to complete. Participants will complete this task in one of two ways. We anticipate that most of the participants will do so online. Here, a member of the project team will host virtual sessions (*e.g.*, via Webex, Zoom, or similar), in which a member of the project team will explain the comprehension task to participants, instruct them on how to access the online “test booklet” (*i.e.*, via a web-link), answer any questions they may express, and explain the (IRB) consent process. Alternatively, the project team may also use a paper-and-pencil format (*i.e.*, test booklets will be sent to participants and returned to the project team via

USPS or a similar method). The availability of this option will be important to the small percentage of (prospective) participants who do not have online access. The use of the two symbol testing formats might provide insight into whether respondents, matched on relevant characteristics, perform differently using the different test administration formats. Only members of the project team will have access to the comprehension testing data.

Focus Groups. Members of the project team will conduct approximately 4-6 online focus groups (*i.e.*, via Webex, Zoom, or similar) with a subset of 40 of the 80 participants who completed a cognitive interview. Each focus group will include no more than 10 participants and will last about 1 hour. As noted, the purpose of the focus group discussions is to help the research team gain a deeper understanding of the characteristics of the graphical symbols that contribute to, or detract from, their effectiveness in communicating their respective intended messages. As with the comprehension-testing procedures, a member of the research team will describe the purpose of the focus group session to participants, answer any of their questions, and obtain formal consent (per the IRB requirements) before the sessions begin. The virtual focus group sessions will be recorded to facilitate subsequent efforts to modify/improve graphical symbols that perform poorly. The project team will gather permission to record these sessions as part of the IRB-approved consent procedure. Only members of the project team will have access to the recorded sessions.

GIFTS OR PAYMENTS

Is an incentive (*e.g.*, money or reimbursement of expenses, token of appreciation) provided to participants? Yes, [\$90 for both activities, or \$45 for one activity] the incentive will help rectify non-response bias.

BURDEN HOURS

Category of Respondent	No. of Respondents	Participation Time	Burden
Cognitive Interview Only	40	1 hour	40 hours
Cognitive Interview plus Focus Group	40	2 hours	80 hours
Totals	80		120 hours

FEDERAL COST: The estimated annual cost to the federal government is \$54,540.

Total estimated cost to the government for conducting the data collection is as follows:

Number of Participants	80
Total estimated cost of conducting the evaluation sessions	\$54,540
Average cost per completed Participant, including \$45 or \$90 stipend	\$681.75

The estimate is based on the total cost of the awarded research contract, divided by the specified number of completed participants.

LIST OF APPENDICES

Appendix A: Cognitive interview instructions/booklets

Appendix B: Graphical symbols to be tested

Appendix C: Focus group protocol

Appendix D: Email invitation to participate in research

Appendix E: Screener survey

Appendix F: Research session confirmation email

Appendix G: IRB consent–cognitive interview

Appendix H: IRB consent–focus group

Appendix I: IRB approval notice