# THURSDAY PROGRAM

## Thursday, November 10

## 9:00 a.m.-10:00 a.m.

### GS1: Welcome and Keynote Address

REGENCY BALLROOM-MONROE

Organizer(s): *Amanda Wilmot, Westat*

**Questionnaire Design, Development, Evaluation, and Testing: Where in the World Are We?**
*Gordon Willis, National Institutes of Health\**

## 10:00 a.m.-10:40 a.m.

### PS1: Thursday Poster Session, Part 1

PROMENADE UPPER

### 1 Survey Quality Predictor

*Diana Zavala-Rojas, European Social Survey, Universitat Pompeu Fabra\**

This poster presents the program Survey Quality Predictor (SQP) 2.1, an online program to get predictions of the quality of survey questions available for free at *sqp.upf.edu*.

SQP 2.1 consists on a large database of survey questions with quality estimates and predictions. Quality estimates are obtained from Multitrait-Multimethod (MTMM) analyses, while quality predictions are obtained from SQP 2.1. This large database includes all survey questions from the European Social Survey (ESS) Rounds 1 to 6 and survey questions from a large variety of research fields, in many different countries and about many different topics.

Using this program, the users can obtain a prediction of the quality of new or currently available survey questions including reliability, validity and quality coefficients with confidence intervals and standard errors, and suggestions for improving them, in many different languages and for more than 20 countries. The only effort needed is to introduce the survey question and code its formal characteristics. The coding process in SQP 2.1 consists of 30 to 60 formal characteristics of the survey question, depending on its complexity. Examples of such characteristics are: the domain, the concept, the social desirability, the number of points in the answer scale, the presence of instructions for respondents or interviewers, etc.

Thus, SQP 2.1 is a powerful tool both at the stage of questionnaire design, before data collection, in order to improve the survey questions forms, and at the stage of data analysis, after data collection, in order to correct for measurement errors.

The poster explains what is behind SQP 2.1, a meta-analysis of thousands of reliability and validity estimates obtained through MTMM experiments. Furthermore, it explains what you can do using this program, and how to proceed to do it.

### 2 Effects of Grouping Alternatives on Eliciting More Responses to Check-All-That-Apply Questions

*Takahiro Tsuchiya, The Institute of Statistical Mathematics\*; Naoki Tomita, Tohoku University*

Questionnaires often include check-all-that-apply questions because they place lesser burden on respondents than that placed by forced-choice questions that require respondents to select either applies or does not apply for each item. However, it is known that the check-all-that-apply format usually yields a smaller number of applicable items compared with that yielded by forced-choice format. This presentation shows our attempt to elicit more affirmative responses in the check-all-that-apply format. We first present that the number of applicable items in the check-all-that-apply format is certainly smaller than that in the forced-choice format using some experimental web survey results. Further, we illustrate that more affirmative responses are obtained when the number of alternatives offered in the check-all-that-apply format is small. Therefore, we propose to divide all the alternatives into several groups so that respondents can perceive that the list lengths of each alternative group are shorter than the original full lengths of the alternatives. Experimental web surveys reveal that the method of grouping alternatives elicits more "apply" responses than the method in which the alternatives are not grouped. However, even when the grouping method was employed, the number of applicable items in the check-all-that-apply format was smaller than that in the forced choice format.

### 3 Stress and Stressors Testing: A Developmental Perspective

*Olga Strizhitskaya, Saint Petersburg State University\*; Marina Petrash, Saint Petersburg State University; Larisa Golovey, Saint Petersburg State University*

Modern reality with its fast growing speed of life, increase in ambiguity of developmental situation, including family, professional and social spheres, and demands a lot of coping resources. Daily life and daily stressors in Russia are extremely understudied. There is also a limitation in the instruments developed in Russia for such studies.

In some of our previous research, we showed that stressors and coping resources are to a great extent determined by the developmental stage and the specifics of the developmental problems. This leads us to a need in complex studies, approaching daily stressors and their role in different periods of adulthood as well as need in development of diagnostic instruments to measure subjective importance of different daily stressors.

In the present study, we did the pretesting procedures to assess the relevance of the methods to evaluate daily stress controlling for developmental stage and culture specifics. We aimed to develop an instrument that would have a good validity for different age group and would cover a wide range of daily stressors.

In the pilot study, we asked 123 participants aged 18–65 to describe the situations in the past 30 days and past 1 day, that made feel them uncomfortable or confused or feel

*\* Presenter*

other negative emotion. During the pilot study, participants were divided into focus groups (15–25 people).

One of the main results of this pilot study was that before approaching the study of the stressors we need a specific "training class" on how to identify the stressor. We found out that for some people it was extremely difficult to name the situations that had relatively small negative impact. The stress literature suggests that lightly negative situations and episodes are accumulated and have a prolonged negative effect on one's health and thus it would be one of the main goals for future research to find the way to control for this "light stress episodes." Supported by Russian Science Foundation, project 16-18-10088.

## 4 Leaving the Lab: Lessons Learned in Cognitive Testing of Tobacco Use Questions in a Clinical Trials Setting

*Jennifer Crafts, Westat\*; Stephanie Land, National Cancer Institute; Room: Jasmine Folz, Westat; Gordon Willis, National Cancer Institute; Veronica Chollette, National Cancer Institute; Graham Warren, Medical University of South Carolina; Dorothy Hatsukami, Masonic Cancer Center-University of Minnesota; Jamie Ostroff, Memorial Sloan Kettering Cancer Center; Benjamin Toll, Yale School of Medicine; Thomas Brandon, H. Lee Moffitt Cancer Center; Sonia Duffy, The Ohio State University*

To investigate the relationship between tobacco use and the effectiveness of a broad variety of cancer treatments and therapies, cancer researchers have been in need of a set of standard longitudinal measures of tobacco use. The objective of this study was to test a set of questions designed specifically for use with cancer patients and survivors. Several prior studies have used cognitive testing techniques to develop survey questions for patient populations. However, these studies did not investigate unique methodological circumstances associated with recruiting clinical trials patients as interview participants, identifying potential interview candidates through accessing medical record data, or conducting cognitive interviews with cancer patients and survivors in a clinical setting.

The questions were initially designed through an extensive literature review and an expert review by cancer researchers and survey methodologists. Three rounds of 10 interviews each were conducted at NIH's Center for Cancer Research with patients enrolled in clinical trials. This poster will provide lessons learned in preparing for and conducting the cognitive interviews within a clinical setting—a realistic context for administration of the finalized set of questions. We will identify similarities and differences between testing in a clinical setting vs. a more typical cognitive lab setting. We will compare and contrast these two settings on factors including (1) protocol planning and development steps, (2) formal approval processes, (3) participant sources, (4) recruiting techniques, (5) consent procedures, (6) confidentiality requirements, (7) interview session procedures, (8) data analysis approach, and (9) generalizability of findings.

## 5 Best Practices for Teaching Graduate Students How to Conduct Survey Research

*Jennifer Morrow, University of Tennessee\**

Survey researchers can be found in a wide variety of work settings such as large companies, government organizations, educational settings, or anywhere where research is conducted. While many employees will receive on the job training in survey methodology in these settings it is imperative that during ones' graduate education that students are exposed to the best practices in this field and that they also gain practical experience developing, conducting, and analyzing data from survey research. As research methodology faculty it is our job to train our students to be competent survey researchers. What are the most important skill sets to teach our students? How should one organize their course? What activities are helpful in getting students to understand the material? These questions will be addressed during the presentation.

While the literature is saturated with articles on survey research methodology and issues in survey research there is minimal literature on what are the best practices for teaching survey research to novice researchers. Pulling from research on teaching research methodology, my own experience as a faculty member who has taught a graduate-level survey research course for the past 10 years, and recent literature on best practices in survey research, the goal of this presentation is to suggest some best practices in teaching survey research to novice researchers.

During the presentation, I will review the fundamentals that should be in a basic survey research course, suggestions for experiential learning activities to use within a course, and a summary of resources (e.g., syllabi, websites, textbooks) that one can use to develop their own survey research course. A detailed handout (provided electronically using a QR code) will be available to audience members to use as a resource.

## 6 Evaluating Paradata Variables as Measures of Survey Quality

*Renee Ellis, U.S. Census Bureau\*; Thomas Welton, U.S. Census Bureau*

The purpose of this paper is to evaluate the usefulness of paradata items collected in the Survey of Income and Program Participation (SIPP) to evaluate the quality of survey responses. Researchers study paradata, or information collected during a survey that does not include answers to questions, in order to improve the quality of the collection and design of survey instruments. Paradata has the potential to help us understand data quality. However, evaluating paradata items in regards to how well they relate to the quality of information collected can be challenging because we often lack "ground truth" to use in comparison. Without ground truth, research has found other elements such as time spent on questions, don't knows/refuses, or missing/incomplete data impact data quality. SIPP is a longitudinal, nationally representative survey that collects information about program participation, jobs, and income. In wave 1 of the 2014 SIPP, a flag based on administrative records was created to adjust for errors in a question about the receipt of Social Security Insurance (SSI). This gives us a measure of truth for those who answered it. We use this flag in addition to total time spent on the survey and missing/incomplete data as quality measures. We then compare additional paradata measures using bivariate comparisons and regression modeling in order to evaluate their utility in determining quality. The potential paradata measures include: timing of individual sections of the survey, interviewer access of definitions/help files, presence of survey administration errors, receipt of permission by the interviewer to record the interview, respondent use of records in answering asset

\* *Presenter*