**Working Group 9: Polling Methods and Tools**

More than 30 analytic professionals convened in Working Group 9 to understand various aspects of eliciting public perceptions in support of assessing contingency and named operations. The working group had four programmed speakers that focused on four facets of public perceptions to include:

* Motivation and major components of survey design
* Sampling design and weighting to achieve desired effects
* Eliciting perceptions using qualitative means
* Eliciting perceptions using latent sources of data.

**Background:**

The US has nearly 200,000 troops deployed to more than 170 nations. Operational efforts are at least tangentially measured by public perceptions. This working group examined how these data are being collected, analyzed, reported, and ultimately used by decision makers. The working group (as well as the special session participants during outbrief) unanimously saw public perception data as a likely component of any assessment of contingency or named operations for the foreseeable future. With this in mind, any public perception data that is used should be of well designed, defensible, and informative to the assessment. Under this charge, the working group developed four distinct considerations to enhance the reliability and validity of perception data.

1. Survey Design Considerations:
   * To understand public perceptions, mixed methods are preferred. In the words of one participant, “You can’t build a house with just one tool – nor should you attempt to measure perceptions with one method.” The guiding principle here is to engage a combination of both quantitative and qualitative methods.
   * Surveys must be analytically well-designed. Specific considerations include appropriate sampling, weighting, decision maker desires, as well as questionnaire design. Efforts to create well-designed instruments will pay dividends only when results reveal something surprising or unexpected.
   * Any survey must leave room for open-ended responses during fieldwork. While a well-crafted design seeks to consider all facets of the public perception related to operations, there are often considerations that are omitted or simply not known until fieldwork begins. Allowing for this possibility provides an outlet for these perceptions to be revealed.
   * Wording of the instrument matters. A well designed survey should remove as much bias as possible, be clearly understood in the context desired, and be adequately translated to ease confusion.
2. Survey execution considerations:

Nearly all surveys (quantitative and qualitative) are facilitated by a company outside of the sponsoring organization. Well-designed survey contracts:

* + are built to have intermediate deliverables. The goal should be for a contractor to receive feedback on all phases of contract execution before final delivery of products are made. The goal is to allow for interaction between deliverables
  + completely document the methodology. Working group members lamented the terabytes of perception data that are now catalogued without proper documentation such as sampling and weighting protocols.
  + supervise all phases of survey execution. This may include viewing training of fieldwork, but must ensure that supervisory presence doesn’t affect effective data collection.
  + ensure contractual obligations are fulfilled. Contracts should have quality control mechanisms such as backchecks and metadata analysis to ensure quality analysis.

1. Delivery of analytical products:

Results of perception data should be tailored to the audience, with the following characteristics:

* + Analysis is customized to the decision maker and socialized with key staff elements. Appropriate delivery for the decision maker’s style and preferences should be accounted for.
  + Analysis is delivered in numerous smaller products – instead of a single overburdening briefing or report. The working group referred to this as “morselizing” the analysis. Often perception data can be used to augment other staff products – the analyst should consider where these perceptions could help to inform operations and plans. These “morsels” should be weaved into daily briefings and other published documents.
  + Analysis should consider follow-on questions of the audience. This might include breaking down responses by gender, ethnic group, geography, or other demographic considerations. With the proliferation of interactive applications such as Shiny Apps, analysts should consider how to leverage these to make the most of the survey.
  + When presenting results, quality control measures should be provided to the audience in layman’s terms. While the analyst should be able to provide details on all facets of quality control measures employed, a full methodological brief should not be the focus of a results oriented briefing.
  + Shortcomings of the product should not be hidden. The working group referred to these as the “warts” of the analysis. Senior leaders understand that no source of data is perfect, so efforts to properly caveat and show transparency of limitations builds confidence in analytical products.
  + Analysis should tell a cogent story, not simply summarize question responses. The working group recalled various experiences where a survey was presented as an unceasing barrage of summary statistics for each question of the survey instrument. This type of presentation is not appropriate when presented an opportunity to influence a decision.
  + Any quantitative findings should be anchored with qualitative anecdotes that reinforce points whenever possible. Staff principles and decision makers rarely remember a specific statistic – but they may remember a well-crafted and salient narrative that summarizes the content of a statistic. Narratives are powerful.

1. Social Media, Blogs, Forums, “Google” news, and other latent data sources can provide a public perception perspective on the OE.
   * These data sources provide immediate, raw, unfiltered perceptions at a great price (free).
   * The working group acknowledged the potential for significant bias by individuals who would use these forums to voice their opinions. Additionally, the effects of automated or perceptions generated by outside actors (bots) must be considered.
   * Methods under-developed (but getting better)

Finally, the working group proposed the following “quick start” to any analyst tasked with initiating or supervising surveys under various time restrictions:

**What to do if you have two hours to understand a bit about Survey Research:**

YouTube Video sequence

Sampling: <http://www.pewresearch.org/2017/05/12/video-explainer-understanding-random-sampling-for-public-opinion-surveys/>

Weighting: <https://www.youtube.com/watch?v=KkqXbw43yxc>

Error Analysis:

* + - * Measurement: <https://www.youtube.com/watch?v=zF37RvnNHnk>
      * Sampling: <https://www.youtube.com/watch?v=XE7QDfdaQ68>
      * Coverage: <https://www.youtube.com/watch?v=kaRQsW4nOcY>
      * NonResponse: <https://www.youtube.com/watch?v=3xY8QUklllo>

Read: Chapter 5: Deployed Analyst Handbook <http://www.caa.army.mil/>

**What to do if you have two days to understand a bit more about Survey Research:**

## Contact organizations that have experience in commissioning survey research for commands. One such organization is the Center for Army Analysis in Fort Belvoir, VA. For many years, this organization has served as a clearing house for connecting people to effectively improve operations. Their span of collaboration includes civilian / military contacts, international, intergovernmental, fully funded research and development, federally funded research and development centers, staff elements of the DoD, as well as key players in industry.

Purchase and read a book on survey research. We recommend: XXXXXX

**What to do if you have two weeks to understand even a bit more about Survey Research:**

Take an open source course on survey design and implementation. Depending on the time you have to commit to the coursework, we recommend a course similar to the web-based Corsera Survey Data Collection and Analytics Specialization. Any coursework should include lessons on designing questionnaires, sampling, weighting and dealing with missing data, as well as subsequent analysis of complex data. The goal of any course work should be to familiarize the user with major components of perception research.