## Minutes for Meeting of WERA-1010

February 21-22, 2019

## Best Western Tucson Inn Suites

- Committee Business
- Steve Swinford is the in-coming chair
- We will be collecting about $\$ 10$ from everyone to help pay for the conference room
- Lou Swanson is in Hawaii and can't be here. This is his last year as Administrative Advisor.
- Don Dillman - Towards survey response theories that no longer pass like strangers in the night
- Current theories are not extremely helpful re: data collection
- These theories tend not to interact/reference each other
- How to bring them together?
- 7 category table of factors that influence survey response rates
- Theory will need to address all of these
- Response mode - multi-mode improves response rate. Mix your modes!
- Breaks down into contact mode and response mode
- Contact mode is particularly important
- Sponsorship
- Want known sponsor - increase trust of how survey data will be used
- Response task
- Short interesting topic with easy to answer questions is best
- Incentives
- Structure of requests to respond
- Number of contacts, multiple modes of contact, timing, specialized
- Communication content
- Written becoming much more common than verbal
- Multi-step multiple modes may be important, but little researched
- Attributes of potential respondents
- Demographics, attitudes, etc.
- Pre-suasion Theory needs more empirical testing
- Conclusions
- All theories may be relevant, but most are unconnected to specifics of survey design
- Should find common ground and interact with each other
- Need a clear theoretical purpose
- Need to deal with 21 st century influences - especially the internet!
- Develop a comprehensive design and then take things away to see the affect
- Ginny Lesser - Comparison of Online Opt-in Panels with Address-based Sample Surveys
- Reporting on 2 experiments and 2 research areas she has been working on
- 1 - probability based sample versus panel sample purchased from Qualtrics
- Also smaller experiment on impact of postcard (replaced postcard with an additional copy of the questionnaire)
- Same sample size - half get all mail, half get web/mail approach
- Postcard experiment
- 2016 - mail got better response rate than web-mail with postcard
- 2018 - mail better than web-mail with postcard, web-mail without postcard best (this was also least expensive - about $94 \%$ of the cost of just mail)
- Probability/Non-probability experiment
- Non-probability - used in 2016 and 2018, all Oregon residents 18+
- 2016 - used Qualtrics, sample size about 7,500
- $57 \%$ of panel estimates were outside confidence limits of the probability sample
- 2018 - used SSI, sample size about 65,000
- $44 \%$ of panel estimates were outside the confidence limits of the probability sample
- In general, panel estimate tends to choose the first option, skewing the data somewhat
- The probability-based sample had more questions where they did not give a response (makes sense cause the panel is being paid to answer it, the probability sample is not)
- Within the probability sample, respondents who used the web mode tended to have higher income than other modes
- Panel had a higher percentage of unemployed respondents
- Conclusion - people in panels are just different than people in probability based samples
- 2 - are people who respond in different waves statistically different?
- 2016 had three mailings with questionnaires ( 5 contacts total)
- 37 questions
- Three questions were significantly different at $\mathrm{p}<0.05$, two at $\mathrm{p}<0.001$
- 2018 had two mailings with questionnaires (4 contacts total)
- 43 questions
- Two questions were significantly different at $\mathrm{p}<0.05$
- Analysis of response rates for Spanish speaking respondents
- Mode experiment - all mail vs. web+mail
- Language experiment -
- Original way - English names get English only, Spanish names get separate English and Spanish
- New way - a double-sided letter in English and Spanish to everyone
- Combined method slightly more expensive
- No difference in number of Spanish returns across groups
- No negative public reaction to new combined method
- General population survey vs. specific populations and their behaviors on web versus mail responses (in progress)
- General population was adults in Oregon
- Specific population was owners of registered Oregon marine boats
- Within this population, significant differences in boat ownership, boat use, and fuel questions between mail and web respondents. Fuel question particularly important! Determines where Oregon money goes.
- Zhengyuan Zhu - Machine Learning Methods and Remote Sensing Data
- Desire for smaller, quicker, cheaper surveys for ag and natural resources
- National Resource Inventory Survey
- Assessing land cover and agro-environmental conditions
- Serves as the sampling frame for many other land surveys
- Aerial photographs are taken and interpreted (1mile by 1 mile squares)
- Taken year after year so changes can be interpreted as well
- There will be gaps between years - some areas will not have images for each year, or not equivalently quality images.
- Potential to combine NRI survey data with other administrative data such as FSA, state DNR, other imagery sources, etc to fill gaps
- Have developed a statistical package to help impute missing images/images contaminated by cloud cover
- GIS imaging to map and determine land type, changes in land use
- Particularly good at looking at water
- Todd Rockwood and Melissa Constantine - Bladder Health Study
- Nation wide general population study of English speaking women
- Will randomly assign participants to one of two groups
- Paper and pencil OR
- Push-to-web
- Group discussion about pre-notice: should we send a small cash incentive?
- Group Discussion: In the web primary iteration, send a couple email invites, then send a paper survey, and then another one or two email reminders.
- Katie Dentzman - Asking Questions about Sensitive and Illegal Behaviors
- Biodegradable mulch films and horse carcass disposal
- What to do when we ask these things
- With poaching, use indirect measures and avoid wording that is accusatory
- RRT - randomized response technique...seeking feedback on use of technique. Hard to explain to people and hard to analyze the data.
- Nominative technique - report on friend's behavior
- Bean method
- Biodegradable Plastic Mulch Films - disposal
- Herbicide Resistant Weeds - didn't ask about illegal spraying.
- Have them admit to talking to their neighbors first and then asking more specific items.
- Horse carcass composting - limited number of legal ways to kill and dispose of horse. Very specific laws around this. Animal abuse is an issue closely related to this.
- Ashley Yopp - Resurrecting Researcher Engagement
- Create gamification of students going to the fair and doing research
- Data collection as a zombie apocalypse
- Zombies - people wearing cowboy hats, etc.
- Survival determined by how many contacts made and/or surveys completed prior to 'rescue'
- Ground Zero - barns, places you don't want to go
- Safe Zones - more general public areas since this is their population of interest
- Report zombie infected friends

Friday, February 22nd

- Glenn Israel - Instruction Influence on Response to Numerical Open-ended Questions in Self-Administered Surveys
- Customer satisfaction survey
- Asking about using extension services
- Non-response around 10-15\%
- 2015 - Add instructions to indicate format for responding
- Worked a bit
- (Additional instructions are in italics and parentheses after the question, suggest a numeric response)
- 2016-Tried something else
- Referenced name of the workshop
- Worked less (instructions were wordier - was this maybe a cause?)
- Overall item response smaller than 2015 or 2016
- One item had significant increase in item response when instructions were included
- Went back to trying the first way again
- LOTS of lit on visual design's impact on item response, but not that much on the impact of verbal design
- 2018 Survey
- Email and mail, mail only, and email only
- $32.1 \%$ responded from a mobile device - increasing
- Same additional instructions as the 2015 survey, slightly reformatted the layout of questions
- Break-off and uncoded responses were both very low (for 2018 and 2015)
- Item non-response was relatively low - lower than in the 2015 survey
- Including instructions increased item response significantly for several variables in both the 2015 and 2018 versions
- By mode
- For mail questionnaire
- Mixed - sometimes instructions made a significant difference and sometimes did not
- For Web and Mobile
- Verbal instructions always had significant impact on item nonresponse
- Confounding issue - slightly different format/boxes for writing in answers than was in the paper survey
- Conclusions
- Verbal instructions indicating desired format does prompt more people to respond to the question.
- They don't have to think about what the answer format needs to be easier to answer
- Seems to help more on mobile
- Comparing an Online Opt-in Panel and a Mail Address-based Sample
- Probability Survey - mail and web/mail mixed mode
- Took several months ( $17 \%$ response rate)
- High item response rate (95\%)
- Nonresponse to open-ended question was higher, BUT longer and more substantively relevant comments
- Got a higher percentage of true/false questions correct
- Different relationship between climate change knowledge and concern compared to Qualtrics sample
- Additional differences in other variable relationships, too
- Non-probability Survey - through Qualtrics
- Took about a week ( $6 \%$ response rate)
- Very high item response rate (99\%)
- Likely due to panel incentives
- Higher response to open-ended question, BUT much shorter and less relevant comments
- Had a bias towards more positive responses
- Cheap and quick, but sizeable limitations
- Evident that respondents were taking the survey very quickly
- Different conclusions were obtained with different data sets
- Don suggests that Glenn and Ginny collaborate on an article - they have similar experiments comparing probability and non-probability samples. Could do a comparison of Ginny's results in Oregon and Glenn's results in Florida.
- Steve Swinford - Improvements During MSU Football Games - Substance Abuse Study
- Montana State University
- Review of tailgate policies at MSU and peer schools
- Policies vary - no cross-school consensus
- Observations at 2016 home football games
- Mostly safe event
- Interviews
- Certain stakeholders support more alcohol sales at a variety of events
- Facilities directors would like to offer more variety, etc.
- Surveys (design based on group)
- Students (only group with incentives offered - possibility to win gift card), alumni, season ticket holders, and rodeo boosters (web only, emailed)
- Community members (paper only, mailed)
- Findings
- Most people at tailgates drink alcohol, about half drink at other events too (i.e. concerts)
- Most people have seen someone drunk and unruly, but tend not to say it's a big problem
- People who don't go to events overestimate alcohol consumption/problems
- People said they will go to an event regardless of alcohol availability
- People generally were unaware of alcohol policies on campus
- Most people except students disapproved of underage drinking
- Majority of underage students said they did drink at tailgates
- Bunny Willits and Kenny Wallen - Effects of Follow-Up Contacts on Sample Characteristics and Substantive Research Findings in Surveys: An Exploratory Analysis
- Three surveys - 2 mail, 1 online
- 1 in Pennsylvania (mail), 2 in Texas (1 mail, 1 online)
- RQ 1 - what are the effects of follow-up contacts on the numbers of survey responses received?
- Follow-ups help!
- Mode of data collection makes a difference - get more return on multiple contacts when the survey is online
- RQ2 - how socio-demographics are different between different waves?
- PA Study
- No significant differences in gender, age, marital status, years lived in area, income, and political beliefs
- Years lived in the area, gender, and political beliefs were nearing significance at the $p<0.1$ level
- Significant differences (at $\mathrm{p}<0.1$ ) include education and employment status, but for such a large sample this might mean it doesn't matter
- Education level is lower in subsequent waves (0.07)
- Percentage employed is higher in subsequent waves (0.09)
- Doesn't seem like we're getting very different people to reply in subsequent waves
- Not getting different people - just getting more of the same
- Texas Community Survey
- Age (0.07) more younger people in subsequent waves
- Gender (0.1) more women in subsequent waves
- Education (0.016) Education level lower in subsequent waves
- None of this is highly significant
- Texas Boating Survey
- Gender (0.06) more women in subsequent waves
- Boat usage past year ( 0.03 ) more people who used their boat less in subsequent waves
- RQ3 - do relationships between characteristics and reported knowledge differ between different waves?
- PA Study
- Bivariate correlations - knowledge of gas drilling and support for gas drilling with sociodemographic characteristics
- Best predictors of gas drilling knowledge were gender, education, and income
- In all three waves these were the strongest predictors
- Each wave is picking up the same pattern of relationships
- Each wave does increase our confidence at least...but is that worth it?
- But...should we just put more money into a larger initial sample with no follow-up contacts?
- Melissa Constantine - Bladder Health Study Part 2
- Community based recruitment at 7 sites with eligibility screening
- Complex, multi-method sampling and enrollment process
- They will be committing to the full study
- Need to decide on mailing all materials at once or one at a time
- General consensus is to send it all in one box
- We are going through this process and we're sending you everything you need.
- Because this is so important we are giving you this \$ incentive
- Zhengyuan Zhu - 'Science Under President Trump' and 'Pet Ownership and Survey Demographics'
- Pet Ownership Survey - Number of pets and how much you spend on them
- National Panel Survey
- Estimates of pet ownership much higher than previous estimates
- Questions of accuracy - are panel respondents over reporting?
- To try and weed these out, looked at accuracy of spending estimates. If you do own a dog, you should know about how much their food costs
- Looked at how quickly each question was answered
- Google one question survey to calibrate
- Just asks about whether you have a pet
- Likely to be unbiased compared to other questions
- Based on this percentage removed suspicious cases from panel study
- Weighted important variables
- Horse ownership was much much lower than previous estimates
- Might be because they were measuring pet horse ownership, not other types of horse ownership
- Sent the next survey to new respondents and to previous respondents
- About half of previous respondents responded again to the new survey
- Those who responded twice answered the same way - reliable
- In the new survey they also asked about rural/urban to help address the horse ownership issue
- Science Under President Trump
- Survey of federal scientists across 16 federal agencies
- This survey has been happening for years, not just because of Trump. But in 2018 they did up the number of agencies.
- Union of Concerned Scientists website has the report available
- Very low response rate was an issue
- Questionnaire
- Very similar to what was used in previous years
- About 50 questions total
- Only 2 questions required answers
- Tried to send survey to employees directly involved in science
- Might not have been super accurate - contributing to low response rate
- Want to have people self-identified as scientists
- Multi-mode approach
- Web, paper downloadable pdf, or phone interview
- Most used web version
- Used an informational website to add greater credibility
- Included detailed FAQ about the survey
- Could not use a government computer to answer the survey
- But the survey request was sent to a government email
- 5 times contacted
- Hua Qin - Survey Methods Review in Ag and Enviro Social Sciences
- Agricultural social science, Environment and natural resource social science, and community-based studies
- Bibliometric analysis of...
- Published studies found using search terms:
- Survey/questionnaire AND response rate AND agriculture/environment/community
- Search terms were actually more detailed than this but you get the idea
- Also searched journals of particular interest
- Analysis
- Descriptive and bibliometric/network
- So far has found 120 articles - about half way through collection process
- Many have had medicine as a main category
- Social science second most frequent category
- A limited number of institutions and countries represented all authors
- Three main clustering areas of journal coupling networks that all overlap and cite each other
- Medical
- Interdisciplinary
- Ag Econ
- Lots of really interesting networks of coauthorship, keyword occurrence, etc.
- Ashley Yopp - SOGI Question Inclusion and the Impact on Survey Responses
- Sexual orientation and gender identity were removed from national aging survey
- They did a randomized survey blocks in two surveys (one about beef, one about public media consumption)
- One with two gender options
- One with multiple gender options that expanded into more options
- The public media one had even more gender options
- Got the categories from the Human Rights Campaign
- Prelim results
- 13 people took advantage of the expanded gender item out of 882 respondents
- $1.5 \%$ - about $6 \%$ of U.S. population id as transgender, non-binary, etc.
- 3 people put stupid stuff in for 'other'
- But it was also an intercept survey where the surveyor was present
- Interested in looking at difference between rural and urban respondents in the beef survey
- We should consider adding these options to our surveys so we have more data that we can compare

