

Challenges of Small Samples

PG<2%: A CCGR Workshop

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Theoretical Challenges

- Purposes of surveys have evolved & become more complex
 - Prevalence surveys (1980s – 2000s)
 - # of PGs in population
 - Demographics of PGs
 - Planning for PG services
 - Risk & protective factors
 - Barriers to treatment seeking
 - Effectiveness of services
 - Impact studies
 - Positive & negative impacts of gambling

Methodological Challenges

- Population surveys are always constrained by available resources
 - Researchers must balance conflicting demands
 - Achieving an adequate sample size
 - Achieving adequate coverage of subgroups in population
 - Obtaining reliable answers from respondents
 - Attaining acceptable response rates
 - Costs & sources of error are related

Methodological Challenges

- Sampling frames
 - Probability vs. non-probability methods
 - Matching sampling approach to study goals
 - Convenience sampling
 - Quota sampling
 - Random sampling
 - Stratified sampling
 - Calibration / weighting

Methodological Challenges

- Sampling modalities
 - Area probability sampling
 - Randomly selected residences
 - Face-to-face interviews
 - Telephone sampling
 - Can achieve probability samples of HHs w/phones
 - Coverage low for rural HHs, large HHs, unemployed, low income
 - Phone number portability & cell phone only HHs compromise coverage
 - Address Based Sampling (ABS)
 - Randomly selected residences
 - Permits multiple modes of data collection

Methodological Challenges

- Interview modality
 - Self Administered Questionnaire (SAQ)
 - Computer Aided Telephone Interview (CATI)
 - Computer Aided Personal Interview (CAPI)
 - Computer Aided Web Interview (CAWI)
- Seeking most honest/valid reports of behavior
 - Self administered modes better than interviews?
- Reported behavior also affected by questionnaire & response rates

Methodological Challenges

- Response rates
 - Rapid declines, esp. for telephone surveys
 - Generally assumed that PGs more likely to refuse
 - BUT, those with little involvement/interest in gambling may also refuse
 - Do they balance each other out?
- Calculating response rates has become more complicated as sampling modalities proliferate
 - Resolution rate
 - Screener completion rate
 - Interview completion rate

Methodological Challenges

- Weighting survey samples
 - Used to account for differential probabilities associated with selection & population coverage
 - Non-coverage of some kinds of HHs
 - Under-reporting of eligible population in large HHs
 - Additional adjustments for
 - Non-resolution of addresses/telephone numbers
 - Screener non-response
 - Within-HH selection probability
 - Interview non-response

Example: US Impact Survey

- Study purpose
 - Primarily to investigate impacts of gambling
 - Secondarily to estimate PG prevalence
- Dual-frame sampling
 - Used to efficiently capture large numbers of frequent gamblers
 - Used 2 sampling frames & 2 interview modalities
 - National random sample of adults interviewed by telephone (2417)
 - Random stratified sample of gambling venue patrons interviewed in person (530)
- Statistical procedure that took account of differential opportunities for inclusion used to combine the samples & re-weight the data

Example: SWELOGS

- Epidemiological track focuses on measuring PG prevalence & incidence
- In-depth track focuses on assessing risk & protective factors
 - Telephone interviews & postal questionnaires
 - National registers used to obtain population coverage
 - Sample stratified by age, gender & risk for PG
 - Male, low income, unemployed, received social benefit
 - Calibration weights used to align achieved sample with population

Example: MAGIC

- Study focus is on incidence & etiology
 - Incidence requires representative sample of population
 - Etiology requires enriched sample of high risk people
- Stratified sampling plan using SEIGMA baseline survey
 - Include all High Risk respondents
 - PGs, At Risk, Spending \$1200+ annually, Gamble weekly, Served 9/11 or later
 - Random sample of Low Risk respondents
- Strata used to estimate population incidence

Audience Experiences

DISCUSSION

Summary of Discussion

- First Nations communities – research is challenging
 - Extremely remote
 - Low telephone ownership
 - Urban populations very transient
- Obtaining valid/reliable responses
 - Experience in LLLP suggests that interviews are somewhat better than self-administration b/c of established relationships
 - Need to understand people's initial assumptions, attitudes, willingness to disclose

Summary of Discussion

- Changes in PG status over time
 - How much change is REAL?
 - Need to understand changes qualitatively?
 - Corroboration from others needed?
- New technologies & new gamblers
 - Online environment especially challenging
 - Are traditional survey research techniques obsolete?
 - What can we learn from new generations, how they communicate?

Summary of Discussion

- Recommendations for explaining survey research challenges
 - What are the research questions?
 - What are the available resources?
 - What are the trade-offs in answering the priority questions?
- Financial & other incentives
 - Small incentives can be powerful
 - But may not work with some communities & cultures
 - Must use incentives that have synergy & value to community members
 - Need to experiment with incentive schemes to find most successful approaches