Tracking substance users in a low income population: What does it take to achieve high response rates?

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Are Respondents with Substance Use Problems Harder to Locate for Follow-up in Survey Research?

Are they harder to reach for reinterview than other respondents?

Are they more likely to be lost to followup, even using extended tracking efforts?

Data Source: Welfare Client Longitudinal Study (WCLS)

Survey of 688 cash aid recipients in a Northern California county

- TANF (adults raising children), GA (childless adults)
- 1st i.v. at aid application, sampled upon aid receipt
- Oversample of heavy drinkers/drug users
- Extensive follow-up procedures used to track respondents over 5+ years

Respondents who were located but refused to be interviewed (n=6) were considered "found" in this study. Respondents who died in the interim (n=5) were dropped from the analysis.

Extensive Follow-up Efforts

- Fieldwork agency, WCLS scientific staff, including a special tracker/private investigator
 - File-sharing among interviewers and staff
 - No predetermined limit on contact attempts
 - Flexible tracking protocols
 - Up to 12 letters, 57 calls, 28 field visits
 - Cash incentives of \$40-50 for continuing respondents

Methods

- Compare response rates in full sample and in sub-groups of substance users, with and without extended follow-up
- Review contact information provided by the full sample and sub-groups
- Examine procedures used by researchers to search for respondents
- Determine numbers of contact attempts were needed to successfully locate respondents

Measures

- Psychiatric Distress: Global Severity Index, previous week (Derogotis, 1992), from Brief Symptom Inventory questions embedded in survey (n=256)
- Substance Dependence: Survey questions operationalize DSM-IV definition, i.e., 3 of 9 dependence criteria (127)
- Problem Drinking: 2 of 3: consumption frequency, amount; consequences; alcohol dependence Sx. (144)
- Weekly+ Drug Use: Stimulants, opiates, depressants, unprescribed Rx, cannabis (183)
- Substance Abuse: Problem drinking or weekly+ drug use (260)

All substance use is self-reported for the pre-baseline year

Identifying Hard-to-Reach (HTR) Respondents

- Examine and code trackers' field note files
- HTR: Required extended effort to find
 - >14calls, >5 letters, >3 residential visits, 1 or more nonresidential visits, >60 search days
 - fieldwork agency returned file to WCLS
- "Extended effort" criteria from
 - survey research and public health literature
 - survey researcher interviews to define "extended tracking effort."

Comparison of Response Rates at 12 months, with and without Hard-to-Reach Respondents

| | Achieved RR | RR Excluding HTR |
|-------------------------------|-----------------------|------------------|
| Full sample (n=683) | 89 | 71 |
| Psychiatric Distress (256) | 90 | 73 |
| Substance Dependence (127) | 80 | 55 |
| w/co-occurring psych distress | (70) <mark>73</mark> | 53 |
| Substance abuse (260) | 86 | 66 |
| w/co-occurring psych distress | (123) <mark>81</mark> | 63 |
| Problem Drinking (144) | 81 | 63 |
| Weekly+ Drug Use (183) | 87 | 66 |

Subgroup significantly different from all others (p<.05)

Prevalence of HTR among substance-use subgroups

| Full Sample | 18% |
|----------------------------------|------|
| Psychiatric Distress | 17% |
| Substance Dependence (all) | 25% |
| Sub. Dependence w/psych distress | 19% |
| Substance Abuse | 19% |
| | 19% |
| Substance Abuse w/psych distress | 1/70 |
| Problem Drinking | 18% |
| Weekly+ drug use | 21% |
| | |

no significant differences

Contact Info at Baseline

- SD/SA somewhat less likely to provide own phone number (75-78% vs. 85% in full sample).
 - w/co-occurring psych distress less likely to provide own phone number (71% vs. 85% in full sample)
- All groups equally likely to provide phone number for one contact person (92-94%)
- SD/SA w/co-occurring psych distress possibly more likely to provide phone number for 2 or more contacts (68% and 63% vs. 54% in full sample)
- Very few respondents (n=16) did not provide contact information

Subgroup significantly different from all others (p<.05)

Selected Tracking Details

- All groups were equally likely to have been contacted for check-in 6 months post-baseline (72-75%)
- Substance dependent group was more likely to receive at least one residential/nonresidential visit than other respondents (44% / 17% vs. 31% / 8%, p<.05)
- At the 12-month follow-up, the substance dependent group was more likely than other respondents to be interviewed in the field (18% vs. 11%, p<.10)</p>

What did it take to find R?

| Contact Method | Median | Mean | Range |
|----------------------|--------|------|-------|
| Phone calls/all | 3 | 5 | 0-57 |
| Phone calls/SD, SA | 2 | 4 | 0-30 |
| | | | |
| Visits/all | 0 | 1 | 0-27 |
| Visits/SD, SA | 0 | 1 | 0-13 |
| | | | |
| Nonres visits/all | 0 | .1 | 0-11 |
| Nonres visits/SD, SA | 0 | .1 | 0-6 |

Discussion

Substance dependent respondents were less likely to provide their own telephone number, more likely to receive in-person visits, and more likely to be interviewed in the field

- Factors related to disadvantage/lack of stability
- Data collected in 2001, when mobile phones were uncommon and required good credit/large deposit
- Including HTR respondents substantially increased RRs (17-25% difference)
 - Possibly reduces attrition bias (Odierna & Schmidt, in review)

Conclusions

- Most differences found in substance dependent subgroup
- In-person interviews were most common among substance dependent respondents, but most studies do not do community tracking and may risk higher attrition rates
- Extended effort increased RRs and was worth the added time and money

Strengths and Limitations

Sample/Study population

- Sample contained large numbers of respondents who are considered to be hard to reach
- Data from aid recipients in one CA county: Caution in applying results to other low-income populations
- Future research: other populations, general population studies
- Co-occurring substance use and mental health problems
 - One-week measure of psych. distress at time of aid application combined with one-year measure of problematic substance use
- Baseline substance use, participation status at 12-month follow-up
 - Allowed inclusion of lost respondents, but use status may change over time
 - Allow us to examine at baseline who might be hard to find at follow-up

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