INTRODUCTION

The Eagleton Center for Public Interest Polling (ECPIP) conducted the Kansas Young Adults Study on behalf of the Kansas Prevention Collaborative (KPC) and The Learning Tree Institute (LTI) at Greenbush. Young adults between the ages of 18 to 25 with cell phone numbers were recruited by text to a web survey from February 28, 2017 to March 6, 2017. Recruitment by cell provided 82.6 percent coverage of the target population as estimated by the National Center for Health Statistics of household telephone status for adults aged 18 and over in 2016 (estimate includes wireless-only/wireless-mostly/dual-use households). Participants were also screened to include only those adults who resided in the state of Kansas.

The survey asked questions about attitudes and behaviors among young adults on public health issues, including the usage of tobacco and consumption of alcohol, prescription and non-prescription drugs, as well as gambling. Demographic questions including age, education, and income level and sources were asked. To help protect the confidentiality of respondents, a Certificate of Confidentiality (CC) from the National Institutes of Health was obtained. Researchers at ECPIP can use this certificate to legally refuse to disclose information that may identify respondents in any federal, state or local civil, criminal, administrative, legislative, or other proceedings such as a subpoena.

INSTRUMENT

The instrument was developed jointly by the KPC and LTI/Greenbush, under the supervision of Sarah Fischer, Director of Prevention and Promotion Services at the Kansas Department for Aging and Disability Services, Behavioral Health Services Commission, the Principal Investigator for the SAMSHA funded grant project, and ECPIP, who received initial Institutional Review Board approval on February 2, 2017 from Rutgers, The State University of New Jersey. Approval to field the study at Rutgers was obtained under the direction of Principal Investigator Dr. Debbie Borie-Holtz, Co-Principal Investigator Dr. Ashley Koning, and Project Manager Joseph Rua.
Subjects were recruited by manually texting a message to their cell phone. Subjects were given the option to opt out in the text message, in compliance with the Telephone Consumer Protection Act (TCPA). Subjects who clicked the link were directed to a landing page that incorporated the logo of the Kansas Prevention Collaborative (without the title) and ECPIP at Rutgers University.

All fieldwork was conducted by trained call center employees housed at ECPIP. ECPIP used an approved third-party vendor software system to send the text messages; the vendor maintains a national database of individuals who have permanently opted out of receiving unsolicited communications by text in compliance with TCPA.

The landing page notification provided online consent to participate in the study. If subjects were eligible to participate based on criteria determined by LTI (by age and county), subjects were asked to consent prior to being directed to the web survey. If subjects did not consent, they did not advance and they were offered another opportunity to opt out. Among those eligible, subjects were informed of a thank-you incentive ($10 Amazon gift card) to be processed after they submitted the survey. All eligible participants (Kansas residents between the ages of 18 to 25 years of age) were directed to a separate link to claim their gift card.

SAMPLE

The Kansas Young Adults Study was designed to recruit subjects between the ages of 18 to 25. All adults aged 18 to 25 living in Kansas were viewed as eligible to participate in the survey, even if the sample parameters were unknown among cell phone users. To validate eligibility, two screener questions were asked including current state of residence and age. Only eligible subjects were directed to the web survey.

ECPIP used two listed cell phone samples to recruit respondents: a listed cell phone sample compiled from cell phone providers and a listed sample of registered voters. Two listed samples were used to improve coverage of the target population. Weighting was used to help ensure respondents had an equal chance of selection.
FIELD PROCESS

Text Invitation

A text invitation was manually sent to N=59,999 subjects believed to be between the ages of 18 to 25 living in Kansas. The invitation included the name of the Sponsor and described the thank-you incentive. An opt-out link was included. If a subject was registered on a DO NOT CALL list, the text was not delivered.

Consent

Online consent was provided on the landing page and again in the web survey among those subjects who were determined to be eligible to participate. Ineligible subjects were directed to a message advising them of their ineligibility.

Listed Samples

Subjects were recruited from two randomly drawn listed samples among subjects believed to meet the target parameters based on residence and age. The address-based sample of cell phone users were recruited first and yielded N=224 completed. The registered voter sample, limited to cell phone users, were recruited during the second wave and yielded N=772 completed observations. Participants recruited from the registered voter list were weighted in proportion to the state parameter of registered voters.

The total N targeted was 700 cases. The total N collected was 996. No partially completed surveys were included in the final data set.

AAPOR Rates

Utilizing APPOR Standard Definition and Rate Calculator, the following rates were calculated for the study and are displayed in Table 2 (Citation: The American Association for Public Opinion Research. 2016. Survey Outcome Rate Calculator 4.0).
Table 2: Response, Cooperation, Refusal & Contact Rates

<table>
<thead>
<tr>
<th></th>
<th>Listed Address-based Sample</th>
<th>Listed Registered Voter Sample</th>
<th>Total Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Response Rate (RR3)*</td>
<td>0.135</td>
<td>0.016</td>
<td>0.085</td>
</tr>
<tr>
<td>Cooperation Rate (COOP3)**</td>
<td>0.795</td>
<td>0.732</td>
<td>0.780</td>
</tr>
<tr>
<td>Refusal Rate (RefR2)**</td>
<td>0.019</td>
<td>0.004</td>
<td>0.014</td>
</tr>
<tr>
<td>Contact Rate (CR1)**</td>
<td>0.032</td>
<td>0.012</td>
<td>0.023</td>
</tr>
</tbody>
</table>

* Response Rate 3 (RR3) includes an estimate of what proportion of cases of unknown eligibility are actually eligible.
** Cooperation Rate 3 (COOP3) defines those unable to do an interview as also incapable of cooperating.
*** Refusal Rate 2 (RefR2) includes estimated eligible cases among the unknown cases similar to Response Rates 3 and 4.
**** Contact Rate 1 (CR1) assumes that all cases of indeterminate eligibility are actually eligible.

WEIGHTING

The data were weighted to be representative of adults ages 18 to 25 in Kansas. Weighting was done in two stages. The first stage of weighting corrected for the oversampling of registered voters from the registered voter frame and the second stage balanced sample demographics to match population parameters.

Two sample frames were used – an address based cell phone frame and a registered voter cell phone frame. The first-stage weight adjusted the sample so that the proportion of registered voters in the combined sample matched the proportion of registered voters in the address-based frame. The second stage of weighting balanced sample demographics to population parameters. The sample is balanced to match parameters for sex, age, education, race and Hispanic origin.

Weighting was accomplished using SPSSINC RAKE, an SPSS extension module that simultaneously balances the distributions of all variables using the GENLOG procedure. Weights were trimmed to prevent individual interviews from having too much influence on the final results. The use of these weights in statistical analysis ensures that the demographic characteristics of the sample closely approximate the demographic characteristics of the target population. Three weight variables are included in the dataset: UTWEIGHT (untruncated); WEIGHT3 (truncated at 3rd and 97th percentile) and WEIGHT5 (truncated at 5th and 95th percentiles). The two trimmed final weights are included so as to not accord too much weight to any one case or subset of cases.
**SAMPLING ERROR**

All surveys are subject to sampling error, which is the expected probable difference between interviewing everyone in a population versus a scientific sampling drawn from that population. Sampling error should be adjusted to recognize the effect of weighting the data to better match the population. In this poll, the simple sampling error for the weighted sample of N=996 Kansas young adults is +/-3.1 percentage points at a 95 percent confidence interval. The sample weighting design effect is 1.8, making the adjusted margin of error +/-4.2 percentage points for the adult sample.

Thus, if 50 percent of Kansas young adults in the statewide sample area favor a particular position, we would be 95 percent sure that the true figure is between 45.8 and 54.2 percent (50 +/-4.2) if all Kansas young adults had been interviewed, rather than just a sample. Sampling error increases as the sample size decreases, so statements based on various population subgroups are subject to more error than are statements based on the total sample. Sampling error does not take into account other sources of variation inherent in public opinion studies, such as non-response, question wording or context effect.