



**2019 KANSAS YOUNG ADULT SURVEY  
METHODOLOGY  
WEB SURVEY RECRUITED BY TEXT INVITATION**

**INTRODUCTION**

The Kansas Young Adult Survey was conducted on behalf of the Kansas Prevention Collaborative (KPC) and The Learning Tree Institute (LTI) at Greenbush through collaboration with the Eagleton Center for Public Interest Polling (ECPIP). Young adults between the ages of 18 to 25 with cell numbers were recruited by text to a web survey from April 29, 2019 to July 21, 2019. 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. A panel of respondents from the T1 study fielded in 2017 were also recruited by email if respondents consented to be re-contacted for a future study.

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) was obtained from the National Institutes of Health. 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. If needed, researchers will use the CC to resist any demands for information that would identify respondents, unless volunteered by a respondent.

**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 April 9, 2019 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, and Co-Principal Investigator Dr. Ashley Koning. The instrument was fielded in English only.

New participants 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. Panel 1 participants were recruited by email and text if they consented to be contacted in that mode.

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 submit the survey (see Appendix D). 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.

Respondents who participated in the 2017 Kansas Young Adult Survey were recruited during the first wave and provided a \$10 Amazon gift card. A second wave was conducted for the 2017 participants to increase response rate and were offered a \$20 gift card. Among those recruited from the 2017 panel, a reliable match of 117 respondents was found. A cross-walked file provides the linkage between 2017 and 2019 participants for further analysis.

## **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=49,282 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.

### *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 total N targeted was 684 cases. Among the completers, a significant portion of participants (N=518) agreed to be consented for a future study. Contact information for these participants were uploaded to a secure Box.com account.

### *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). <b>Table 2: Response, Cooperation, Refusal &amp; Contact Rates</b>			
	<b>Panel 1 Participants</b>	<b>Listed Address- based Sample</b>	<b>Total Sample</b>
Response Rate (RR3)*	0.386	0.096	0.101
Cooperation Rate (COOP3)**	0.833	0.778	0.789
Refusal Rate (RefR2)***	0.077	0.027	0.027
Contact Rate (CR1)****	0.340	0.016	0.020

\* 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 & SAMPLING ERROR**

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.

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 panel sample. The second stage of weighting balanced sample demographics to target population parameters. The sample is balanced to match parameters for sex, age, education, race, Hispanic origin and region. Population parameters for sex, age, education, race, Hispanic origin were derived from 2016 American Community Survey data. The region benchmark was derived from Census Bureau estimates of the resident population.

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.

Post-data collection statistical adjustments require analysis procedures that reflect departures from simple random sampling. SSRS calculates the effects of these design features so that an appropriate adjustment can be incorporated into tests of statistical significance when using these data. The so-called "design effect" or deff represents the loss in statistical efficiency that results from a disproportionate sample design and systematic non-response.

The composite design effect for a sample of size  $n$ , with each case having a weight,  $ww$  can be estimated as:

$$\text{deff} = \frac{n \sum ww^2}{(\sum ww)^2}$$

The design effect for this sample is 1.44. The survey's margin of error is the largest 95% confidence interval for any estimated proportion based on the total sample—one around 50%. For example, the margin of error for the total sample is  $\pm 4.5$  percentage points. This means that in 95 out every 100 samples using the same methodology, estimated proportions based on the

entire sample will be no more than 4.5 percentage points away from their true values in the population. It is important to remember that sampling fluctuations are only one possible source of error in a survey estimate. Other sources, such as measurement error, may contribute additional error of greater or lesser magnitude.

