UNIVERSITY HEALTH CENTER SURVEY
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METHODOLOGY AND RESULTS

SURVEY METHODOLOGY
SURVEY INSTRUMENT DEVELOPMENT
SAMPLE
DATA COLLECTION

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INTRODUCTION

As part of a larger effort to better serve the needs of the University of Oregon community, the University Health Center (UHC) contracted with the University of Oregon Survey Research Laboratory (OSRL) to conduct its eighth annual survey. Working closely with UHC representatives, particularly Gerald Fleischli and Anne Mattson, OSRL planned, pre-tested and implemented a telephone survey of 40x randomly selected UO students. This report summarizes the survey methodology.

BACKGROUND

The annual Health Center Surveys are intended to assess UHC services and track health-related trends in student attitudes, knowledge, and behavior. They include three types of questions:

- core questions asked annually,
- periodic questions asked in either odd or even years, and
- topical once-only questions, intended to tap issues of the moment.

SURVEY METHODOLOGY

This section describes OSRL's procedures for developing and implementing the telephone survey instrument and sample to conduct this representative study.

SURVEY INSTRUMENT

In meetings and discussions, UHC staff, OSRL staff, and university community members work together closely each year to collaboratively identify the periodic questions to be included in the instrument, to ascertain and rectify problems with any core or periodic questions, and to distinguish key concepts for topical questions. The team endeavors to operationalize survey questions that are appropriate to the University's needs, the Health Center's needs, comparable to other major Oregon and national surveys, and as valid and reliable as possible.

The Health Center Survey 2001 included the following topics:

1. **Physical and mental health and wellness**, including overall assessments, pain, illness, height, weight, suicide thoughts and attempts, stress, experience of discrimination, and ADHD;
2. **Health maintenance** activities, including pap smear checks, exercise, and athletic participation;
3. **Tobacco, alcohol, and drug use**, with special attention to marijuana, as well as herbal remedies;
4. **Safety behaviors**, including drunk driving, sex under the influence of alcohol or drugs, car safety belt use, motorcycle and bicycle helmet use, and carrying weapons;
5. **Vegetarianism**, and concerns about eating meat;
6. **Sexual activity**, including use of contraception, condom use, pregnancy, rape, sexual orientation, and sexually transmitted diseases;
7. **Health Center use and knowledge**, specifically student satisfaction, reasons for non-use, suggestions for improving services, and cost comparisons;
8. **Health insurance** coverage, who pays for it, medical expenses, insurance opinions, and;
9. **Opinions** on the expansion of Health Center services and fee increases;
10. **Basic background and demographic characteristics**, such as age, sex, race/ethnicity, residence, GPA, marital status, and parental status.

SAMPLING

OSRL selected a random sample of 701 currently enrolled University of Oregon graduate and undergraduate students from the Registrar's records. Continuing Education students were excluded from the sample.

After selecting the sample and a few days before data collection began, OSRL mailed all those at risk to being interviewed a pre-contact letter, because of the survey's sensitive nature. The letter introduced the goals and purpose of the study, explained how respondents were chosen, assured confidentiality, and provided contact names and telephone numbers for questions they might have.

Altogether, 4,590 telephone calls were made to complete 405 interviews. Among the original 701 telephone numbers, 44 were unusable because the number was wrong, disconnected, a non-working telephone number, or a fax/modem number. An additional 11 students were gone for the study dates, too ill, or for some other reason could not be interviewed. The overall survey response rate was 63%, and the refusal rate was 3%[1].

Sampling error for a study of this size is moderate to small. Survey sampling errors assist data users in assessing how much confidence to place in a particular survey result. Moderately large random samples, as in this study, reduce sampling error. Survey results with low variability also have less sampling error; e.g., a variable with a 5/95 proportional split has narrower confidence intervals than a variable with a 50/50 proportional split. For

[1] Response rate was calculated in following manner. Completed interview / (Eligible sample + ((Eligible sample / (Eligible sample + Ineligible sample)) * Sample with unknown status))

this study, the confidence interval is ±4.8 percentage points on variables with a 50/50 proportional split (at the 95% confidence level). This means analysts can be 95% sure that the true population figure is between 46.2% and 54.8% (i.e., 50% ±4.8 percentage points). For variables with a 5/95 proportional split, the confidence interval is ±2.1, which means analysts can be 95% sure that the true population figure is between 92.9% and 97.1% (i.e., 95% ±2.1 percentage points). For detail, see OSRL's "Sampler" at http://darkwing.uoregon.edu/~osrl/miscpapers/sampler.html.

Data Collection, Processing, and Coding

The survey was timed to fall more than a month after the end of Spring Break (since behavior during Spring Break could artificially inflate reports of certain types of behavior, such as alcohol consumption). Calls were made at all times of the day and all days of the week, with the exception of Sunday morning.

Interviewer training was conducted on Wednesday, April 25th, 2001; see Section 3 for interviewer instructions. Interviewing began on Saturday, April 28th. Interviewing continued until Thursday, May 10th when the target sample size was achieved, n=405. On average, over 11.3 telephone dial attempts were required for each completed interview, but up to 20 were made. The interviews averaged just over 13.5 minutes. All were conducted in English. Only experienced interviewers were employed for this study.

The survey was conducted using OSRL's CATI system, in which sampling, interviewing, and data entry is accomplished interactively and seamlessly. The programmed survey instrument contains all survey questions, interviewer probes for consistency, and pre-coded answer categories. Skip logic is programmed into the system, preventing inappropriate or incorrect questions from being asked.

In administering the survey, trained interviewers use telephone headsets in sound-reduced carrels at computer workstations connected by an NT network. Randomly distributed telephone numbers appear automatically at each workstation and are mated to the pre-programmed survey instrument. Telephone calls are placed with a computer keystroke, preventing dialing errors. As respondents answer questions, interviewers enter the data into the CATI data file. Telephone numbers and names are automatically stripped from the interview data to ensure confidentiality. The CATI system eliminates out-of-range responses and wild codes by validating each response interactively and not allowing inappropriate responses to be entered. Thus, the CATI system eliminates many routine and error-prone coding and data entry tasks and enables OSRL to maintain the highest standards of quality control.

Several survey questions are open-ended. Open-ended responses were recorded by the interviewer exactly as spoken by the respondents, word for word. These responses were coded after the end of the data collection to aid survey analysis. OSRL's highly trained open-end coders used the codes developed in past years to code this year's responses to maximize compatibility between the results from different years. In one case, a new code category was created to better accommodate this year's results.