UNITED STATES CONFERENCE ON TEACHING STATISTICS (USCOTS 2005)

PEDAGOGY SPOTLIGHT SESSION

ROSSI A. HASSAD¹

LISTENING TO OUR STUDENTS

USING REAL, RELEVANT, AND INTERESTING DATA TO TEACH STATISTICAL CONCEPTS

This information is based on feedback² from 45 (forty-five) students who took an introductory statistics course for psychology and behavioral sciences majors (four-year college).

Of the 45 students, 43 (96%) indicated that they prefer the use of <u>**REAL**</u> (rather than <u>**made up**</u>) data for class exercises. Their reasons (verbatim) encompassed the following:

 B
 e

 9
 2
 5

 10
 2
 5

 10
 2
 6

 10
 1
 0

 10
 3
 0

² Routine information for course update and development



¹ Mercy College (Social & Behavioral Sciences) & Hunter College (Psychology)

WHY DO STUDENTS PREFER DATA ON SEX? VERBATIM REPSONSES AND COMMON THEMES:

- ✓ "Sex is a subject that interests college students and allows them to want to learn more about it"
- ✓ "It is interesting, and applies to a lot of people"
- ✓ "It is something that is all around us and we deal with everyday"
- ✓ "[It is] more interesting and motivating. It helps us put ourselves into the real world"
- ✓ "It is very relevant to psychology as well as to young adults"
- ✓ "This [is] a very important topic that affects young people and also easier to relate to"
- ✓ "Because with the increase in AIDS and STDs it is something that affects all of us"
- ✓ "We have to deal with [sex] daily"
- ✓ 'It is always interesting to hear or talk about what is going on with sex"
- ✓ "Why men think more about sex than women"
- ✓ "I am always curious about it"

DATA ON SEXUAL BEHAVOR DOES APPEAR TO MAKE A DIFFERENCE

A group of nine students taking a course in research methods for the behavioral sciences was given two graphs³ (almost similar distributions) at different times (same session), and asked to provide a brief description. The first graph represented a distribution of examination scores, and the second, a distribution of reported number of sex partners. Earlier in the semester, a presentation was given on basic statistics (primarily descriptive, with emphasis on center, spread, and shape of distributions).

In general, almost all students gave more scientific, meaningful and appropriate descriptions for the distribution of number of sex partners. In particular, most students who did not seem to understand what the labeled axes represented for the distribution of examination scores (1st graph), demonstrated correct understanding (reasoning) of these for the distribution of number of sex partners (2nd graph).

ROSSI HASSAD - PEDAGOGY SPOTLIGHT SESSION



he data were NOT obtained from these students.