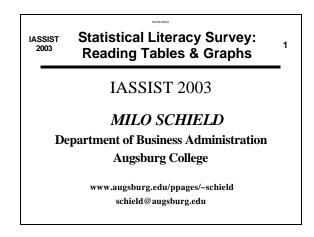
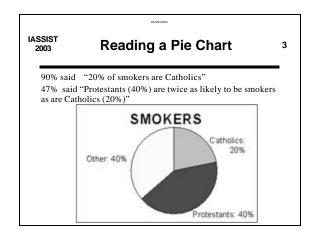
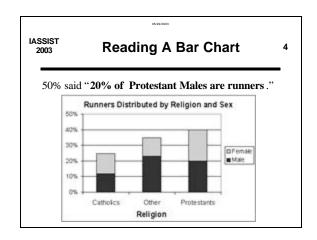
2003 IASSIST May 2003

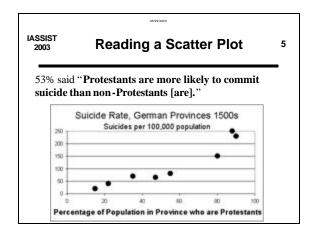


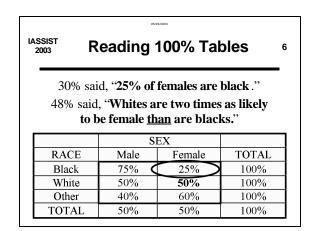
Convenience survey of 191 subjects:

Q1. 36% have discomfort with formal statistics
Q3. 95% have quantitative occupations/majors.
Q4. 41% college students (20% are college teachers)
Q6. 29% were not native speakers of English.
Q7: 39% had taken at least 2 courses in statistics
46% had not taken any course in statistics.
A unique sample!









Milo Schield 1

2003 IASSIST May 2003

Reading Percentages in a Two-Way Half Table

39% said "**20% of runners are female smokers**." 39% said "**20% of females are runners who smoke**"

PERCENTAGE WHO ARE RUNNERS						
	Non-smoker	Smoker	Total			
Female	50%	20%	40%			
Male	25%	10%	20%			
Total	37%	15%	30%			

Reading Multiple Half-Tables of Percentages

54% said 10% of women having HIV test are 40-44. 59% said "20% is two times more than 10%."

Percent of Women, 15 to 44, Who Received Selected Medical Services					
Age At Interview	HIV Test	Pregnancy Test	Pap Smear		
15-19 years old	14.6	16.1	33.5		
20-24 years old	20.0	> 27.4	68.7		
25-29 years old	25.6	25.3	70.9		
30-34 years old	18.5	17.4	69.5		
35-39 years old	14.2	8.1	62.9		
40-44 years old	10.0	> 4.3	62.7		
Total	17.3	16.0	61.9		

Statistical Literacy Survey: Reading Tables of Rates

42% said, "In 1995 for Alaskans who were in motor vehicle accidents, the death rate was 16.1 per 100,000"

STATE 1995	Total	Heart disease	i	dis- eases	and adverse effects	Wotor wehicle acci- dents	Chronic obstructive pulmonary diseases		HIV	Suicide	Homicide
United States	880.0	280.7	204.9	60.1	35.5	16.5	39.2	22.6	(NA)	11.9	8.7
D.C.	1,244.2	302.4	267.2	66.8	34.8	12.3	24.2	39.5	117.8	7.0	56.8
West Virginia Florida Arkansas Pennsylvania Missouri	1,107.0 1,081.3 1,075.1 1,059.2 1,021.9	351.6 339.8 359.7	259.4 263.5 244.7 250.7 230.7	67.9 69.9 91.5 68.6 72.9	40.4 38.1 48.8 35.3 43.5	21.2 19.8 26.3 13.1 20.6	60.0 52.9 45.0 43.9 46.1	32.8 26.0 22.4 28.2 23.4	0.0 30.8 6.8 11.5 8.8	15.1 15.3 14.5 12.1 13.5	5.5 8.6 11.6 6.5 8.9
California Colorado Hawaii Utah Alaska	709.8 667.6 643.1 560.6 423.0	172.1 196.0 148.1	162.8 145.9 156.4 108.6 95.1	51.4 42.7 51.5 39.9 24.0	29.3 39.8 27.6 32.4 56.2	14.1 18.6 12.0 17.2	34.2 42.3 20.4 24.1 17.7	16.2 14.3 14.2 21.3 9.3	20.4 10.9 10.4 4.8 5.0	11.7 17.5 12.0 14.8 17.1	11.6 5.7 4.9 3.5 8.5

1ASSIST 2003 Respondents' Evaluations

78% said tasks harder than expected. Q64

90% said "These tables and graphs are the kind I need and/or want to be able to read or understand." Q68

93% said "College students should be able to read these kinds of tables and graphs." Q69

IASSIST Action:
2003 Give Institutional Support

ort

12

10

Institutional support is needed on:

- 1. Teaching using empirical data as evidence
- 2. Using summary data (versus micro-data)
- 3. Using observational data with confounding
- 4. Reading tables of rates and percentages
- 5. Describing/comparing rates and percentages
- 6. Distinguishing association and causation
- 7. Taking associated factors into account

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