

Review2

Measures of Association

Using the SPSS results below, complete the following: (Source: GSS93 subset)

Political Outlook * Age Categories Crosstabulation

		Age Categories				Total
		18-29	30-39	40-49	50+	
Political Outlook	Liberal	40 14.4%	42 12.2%	51 17.3%	60 11.4%	193 13.4%
	Tend Lib	46 16.6%	58 16.9%	37 12.5%	52 9.8%	193 13.4%
	Moderate	103 37.2%	130 37.9%	112 38.0%	182 34.5%	527 36.5%
	Tend Cons	49 17.7%	66 19.2%	49 16.6%	84 15.9%	248 17.2%
	Conservative	39 14.1%	47 13.7%	46 15.6%	150 28.4%	282 19.5%
	Total	277 100.0%	343 100.0%	295 100.0%	528 100.0%	1443 100.0%

Directional Measures

			Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Nominal	Lambda	Symmetric	.003	.006	.572	.567
		Political Outlook Dependent	.000	.000	.	.
		Age Categories Dependent	.007	.011	.572	.567
	Goodman and Kruskal tau	Political Outlook Dependent	.008	.003		.000 ^d
		Age Categories Dependent	.015	.004		.000 ^d

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

c. Cannot be computed because the asymptotic standard error equals zero.

d. Based on chi-square approximation

Directional Measures

			Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Ordinal by Ordinal	Somers' d	Symmetric	.105	.022	4.836	.000
		Political Outlook Dependent	.108	.022	4.836	.000
		Age Categories Dependent	.103	.021	4.836	.000

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

1. Formulate a hypothesis with direction.

2. Formulate a null hypothesis.

3. What is the significance level?

4. What is the confidence level?

5. Do you reject the null hypothesis? Why?
6. Which measure of association is the most appropriate to measure the strength of association? What is the correct value?
7. What is the direction?
8. Give a substantive interpretation.
9. Overall do the results support the hypothesis with direction?
Why?