

The Relationship between Gender & General Happiness in 2014

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We are using SPSS software to analyze our data. Our dataset comes from GSS (General Social Survey) which is a project of NORC at the University of Chicago that helps researchers like ourselves to understand behavioral and demographical trends. We limited our dataset to only the year 2014. Our research explores two qualitative variables: gender and general happiness. We worked with 2540 observations and 2 qualitative variables.

Our objective is to understand whether there exists a relationship between gender and general happiness. Since we will perform a Chi-Square test, our hypotheses are as follows:

H_0 : Gender and general happiness are statistically independent.

H_A : Gender and general happiness are statistically dependent.

The following are the outputs from our SPSS file. Underneath each figure lies an explanation of it.

Frequencies

[DataSet1]

		Statistics	
		Sex	General_Happiness
N	Valid	2540	2540
	Missing	0	0

This frequency table confirms that there are 2540 observations and 2 variables (Sex and General_Happiness).

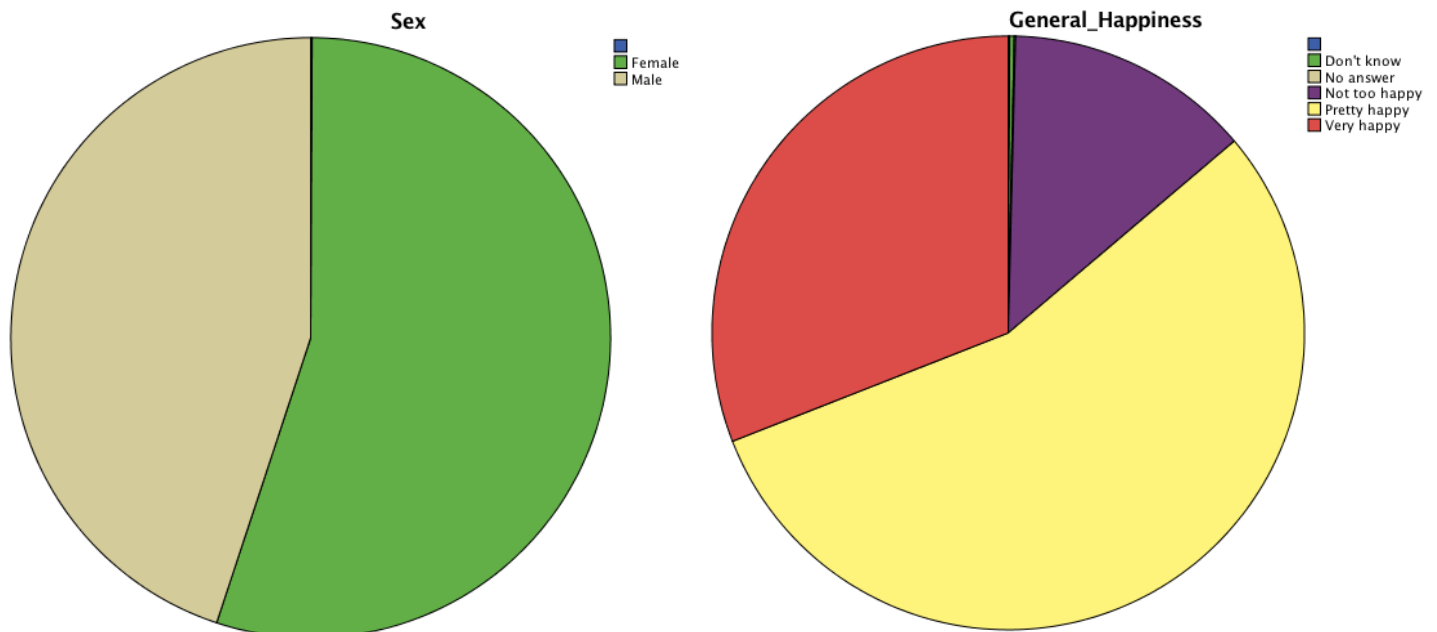
Frequency Table

		Sex		
		Frequency	Percent	Cumulative Percent
Valid		2	.1	.1
	Female	1397	55.0	55.1
	Male	1141	44.9	100.0
	Total	2540	100.0	100.0

		General_Happiness		
		Frequency	Percent	Cumulative Percent
Valid		2	.1	.1
	Don't know	6	.2	.3
	No answer	2	.1	.4
	Not too happy	341	13.4	13.8
	Pretty happy	1403	55.2	69.1
	Very happy	786	30.9	100.0
	Total	2540	100.0	100.0

Here we can see the distribution of each value within each variable in a frequency table. Because both variables are categorical, there are no summary statistics associated with them.

Pie Chart



These pie charts show a visual of the distribution of the values from the frequency table. There is approximately an equal proportion of both genders, while the proportion for the values within general_happiness varies.

Crosstabs

Case Processing Summary

	Valid		Cases Missing		Total	
	N	Percent	N	Percent	N	Percent
Sex * General_Happiness	2540	100.0%	0	0.0%	2540	100.0%

Sex * General_Happiness Crosstabulation

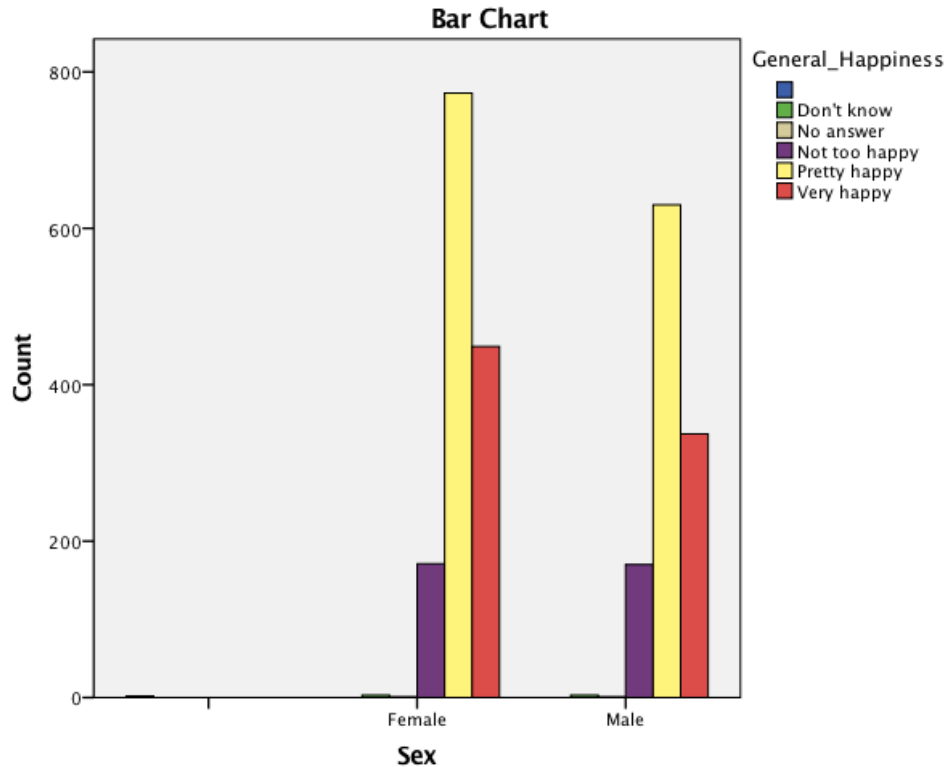
		General_Happiness						Total
			Don't know	No answer	Not too happy	Pretty happy	Very happy	
Sex	Count	2	0	0	0	0	0	2
	% within General_Happiness	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%
	Female	Count	0	3	1	171	773	1397
		% within General_Happiness	0.0%	50.0%	50.0%	50.1%	55.1%	55.0%
	Male	Count	0	3	1	170	630	1141
		% within General_Happiness	0.0%	50.0%	50.0%	49.9%	44.9%	44.9%
Total	Count	2	6	2	341	1403	786	2540
	% within General_Happiness	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	2544.768 ^a	10	.000
Likelihood Ratio	37.337	10	.000
N of Valid Cases	2540		

a. 12 cells (66.7%) have expected count less than 5. The minimum expected count is .00.

Now we see the results from the Chi-Square test in a tabular form that shows the counts of each response of general_happiness within each gender as well as the output from the Chi-Square test. Here we see that the Chi-square statistic is 2544.769 and the p-value is 0.000. We will analyze these numbers later.



The bar graph visually displays the distribution of each response within each gender.

From the Chi-Square test output, we see that the p-value is 0.000. Since the p-value is less than 0.05, at the 5% significance level, we reject the null hypothesis. We thus conclude that gender and general happiness are statistically dependent.

Our findings lead to a startling conclusion: that gender and general happiness were associated in 2014. This means that there was an inequality in happiness between the two genders. Perhaps doing a regression analysis would allow us to understand which gender was generally “happier” than the other. Until then, we must accept that happiness may depend on your gender.