Is there a relationship between a NOHS senior's GPA and the amount of car accidents they get into?

This study was conducted in order to find a relationship between a NOHS senior's gpa and the amount of accidents they've been in. I devised a google form, anonymously asking students for both their gpa and the amount of accidents they have encountered while driving. This survey was sent out randomly, using stratified sampling, to each NOHS senior. I did this by typing each letter of the alphabet into gmail, starting with A and ending with Z, and scrolling through each list and randomly stopping my cursor; I would send the email out to whoever my cursor landed on. By doing this, I was able to receive 32 replies, varying between gpa and number of accidents. The population of interest of the study was NOHS seniors, they were targeted because they provide the most accurate representation of North Olmsted students who drive. They are young enough to be new to driving and they are not too old whereas they are working rather than a student with a gpa. The sample of this study were the seniors who were fortunate enough to have my cursor land on their name while I was sending the email out. 0

GPA	Accidents
4.2	5
3.6	0
3.9	0
3.9	0
4.3	0
3.6	1
4.2	5
1.8	2

4.4	0
4.4	0
4.6	0
4.09	0
3.75	1
3.5	1
4.1	0
3.515	0
3.0	0
2.8	3
3.2	4

2.1	1
4.0	4
3.7	1
4.1	0
3.9	0
3.9	2
3.3	1
3.8	5
4.2	3
2.9	4
2.6	2
2.0	0

Coefficients

Term	Coef	SE Coef	T-Value	P-Value	VIF
Constant	2.31	1.66	1.40	0.174	
GPA	-0.231	0.452	-0.51	0.614	1.00

Model Summary

S	R-sq	R-sq(adj)	R-sq(pred)
1.80890	0.89%	0.00%	0.00%

Analysis of Variance

Source	DF	Adj SS	Adj MS	F-Value	P-Value
Regression	1	0.8500	0.8500	0.26	0.614
GPA	1	0.8500	0.8500	0.26	0.614
Error	29	94.8919	3.2721		
Lack-of-Fit	21	88.7253	4.2250	5.48	0.009
Pure Error	8	6.1667	0.7708		
Total	30	95.7419			

Fits and Diagnostics for Unusual Observations

Obs	Accidents	Fit	Resid	Std Resid	
1	5.000	1.344	3.656	2.08	R
7	5.000	1.344	3.656	2.08	R
8	2.000	1.897	0.103	0.06	X
27	5.000	1.436	3.564	2.01	R

R Large residual
X Unusual X

Regression Equation

Accidents = 2.31 - 0.231 GPA

Statistics

Variable	Accidents	N	N*	Mean	SE Mean	StDev	Minimum	Q1	Median	Q3	Maximum
GPA	0	14	0	3.843	0.180	0.672	2.000	3.579	3.995	4.325	4.600
	1	6	0	3.325	0.254	0.621	2.100	3.000	3.550	3.713	3.750
	2	2	0	2.85	1.05	1.48	1.80	*	2.85	*	3.90
	3	3	0	3.200	0.503	0.872	2.600	2.600	2.800	4.200	4.200
	4	3	0	3.367	0.328	0.569	2.900	2.900	3.200	4.000	4.000
	5	3	0	4.067	0.133	0.231	3.800	3.800	4.200	4.200	4.200