

GPA versus Computer Usage: Are Students That Use Computers Longer Smarter?

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Study Idea

- Formulate questions regarding GPA and weekly computer usage
- Distribute a questionnaire to students in CCIS labs, after obtaining consent
- Run statistics against results

Motivation for Study

- Attempt to confirm hypothesis; more time spent on the computer the higher the GPA
- Since CCIS depends on computers for homework we focused specifically on CCIS students

Study Design

- Two measures: **Hours Per Week (HPW)** spend on a computer and **GPA**
- Two sessions of distributing questionnaire
- 15 total participants, the lab was desolate

Questionnaire Design

- Not to specifically convey what we were focused on
- Blend GPA into the questions in case the participant was uneasy
- Did not want participant to hang on any one question

Questionnaire Questions

- Lab operating system of choice:
 - Solaris
 - Windows
 - Other
- Lab operating system used most frequently:
 - Solaris
 - Windows
 - Other
- Hours spent on a computer per week.
0-10 11-20 21-30 26-30 31-35 36-40 >40

More Questionnaire Questions

- Hours spent on a computer per week doing work.
0-10 11-20 21-30 26-30 31-35 36-40 >40
- Hours spent on a computer per week doing something other than work.
0-10 11-20 21-30 26-30 31-35 36-40 >40
- How often do you use the lab to do your work on computers as opposed to home?
Never Rarely Sometimes Often Always
- GPA:
<2.0 2.0 – 2.3 2.4 – 2.7 2.8 – 3.0 3.1 – 3.5 3.6 – 4.0
- Demographic included: Gender, Year, and Major

Study Results: Cronbach's Alpha

- .759
- Satisfactory internal consistency

Reliability Statistics

Cronbach's Alpha	N of Items
.759	3

Study Results: Descriptive

- Mean HPW: 30 hours
- Mean GPA : 2.8-3.0
- 12 Male, 3 Female
- Year was well distributed

Descriptive Statistics

	Mean	Std. Deviation	N
HPW	3.6667	1.29099	15
GPA	4.6667	1.17514	15

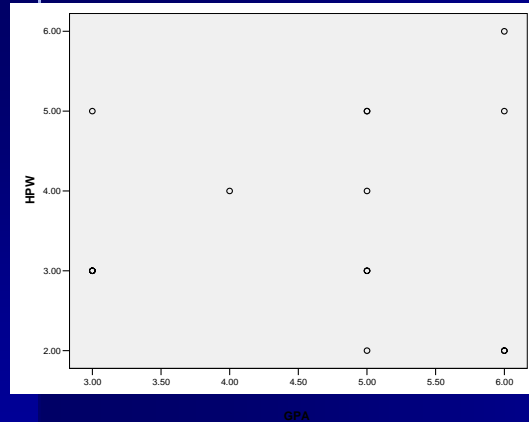
Study Results: Pearson's Correlation

- $p(14) = .063$, n.s.
- Almost no correlation...
- ...and would not be significant either way

Correlations

		HPW	GPA
HPW	Pearson Correlation	1	.063
	Sig. (2-tailed)		.824
	N	15	15
GPA	Pearson Correlation	.063	1
	Sig. (2-tailed)	.824	
	N	15	15

Study Results: Scatter Plot



GPA Legend		HPW Legend	
Value	GPA	Value	HPW
1	< 2.0		0 - 10
2	2.1 - 2.3	2	11 - 20
3	2.4 - 2.7	3	21 - 30
4	2.8 - 3.0	4	31 - 35
5	3.1 - 3.5	5	36 - 40
6	3.6 - 4.0	6	> 40

Conclusions

- No apparent correlation between time spent on computer and GPA
- And even that is not significant
- Cannot reject the null hypothesis