

# Financial Stress Among College Students

## 1. Introduction:

### Background:

College students, both part-time and full-time, face many different financial strains and varying levels of financial stress. In this study, we chose to survey students about their financial stress including causes, academic workload, employment, and budgeting decisions.

### Problem:

In this project, we analyze the different factors that cause financial stress in the lives of part-time and full-time college students.

### Discussion:

This problem focuses on a relevant issue facing college students: their finances and the strain it can put on their lives. As college students, we understand the struggle of balancing financial responsibilities and dealing with day-to-day financial stressors.

## 2. Data:

### Description of data:

Our data represents information collected from surveying 75 college students.

### Obtaining the data:

We collected our data by surveying a sample size of 75 college students. We asked them questions regarding their employment status, financial independence, budgeting habits, tuition expenses, and other causes of financial stress.

### Data cleaning:

We cleaned up our collected data to focus on specific parameters and variables with a focus on our response variable; students' levels of financial stress. The other parameters we chose include the student's hours worked per week, level of financial independence, and overspending frequency. We also cleaned up the data to focus on how student's tuition is being paid and what specific variables they feel bring them the most financial stress such as unemployment, loans, etc.

### 3. Analysis:

```
data mydata;
input stress hours independent overspending p_parents p_scholarships p_self p_faia P_other S_tuition s_unemployment s_loans s_living s_other;
datalines;
3 0 5 3 0 1 1 1 1 1 1 0 1 0 1
3 3 3 5 1 1 1 1 0 1 1 1 1 1 1
3 2 3 3 1 0 1 0 0 1 1 1 1 0 1
4 0 4 0 1 1 1 1 0 1 1 1 1 0 1
4 1 2 3 0 0 0 0 0 1 0 1 1 0 1
3 2 2 2 0 1 1 1 1 1 1 1 1 0 1
2 2 3 3 0 1 1 1 1 1 1 1 1 0 1
3 0 5 0 0 0 1 1 0 1 1 0 1 0 1
2 2 5 2 0 1 1 1 1 1 1 0 1 1 1
5 3 3 3 0 1 0 1 1 1 0 1 1 0 1
2 0 5 0 0 0 1 1 0 1 1 1 1 0 1
3 4 1 2 1 1 1 1 1 0 1 1 1 0 1
3 3 3 2 0 1 1 1 1 1 1 1 1 0 1
5 0 5 0 1 1 1 0 0 1 0 0 0 0 1
5 2 3 0 0 0 0 0 0 1 0 1 0 0 1
5 1 3 0 1 1 0 0 0 1 0 0 1 1 1
5 3 3 0 0 1 1 1 1 1 1 1 0 0 0
4 4 4 4 0 1 0 1 1 1 0 1 1 1 0
2 2 3 0 0 1 0 1 0 1 1 1 1 0 0
4 0 2 5 1 1 1 1 1 0 1 0 1 0 1
5 0 5 0 0 0 1 0 0 1 1 1 1 1 0
3 3 4 0 0 1 1 1 1 0 1 0 1 1 0
4 1 5 0 0 1 1 1 1 1 1 1 0 0
```

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```
proc print data=mydata;
run;
```

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```
data mydata_2;
set mydata;
do i=1 to _n_;
stresshours = stress*hours;
stressindependent = stress*independent;
stressoverspending = stress*overspending;
stressp_parents = stress*p_parents;
stressp_scholarships = stress*p_scholarships;
stressp_self = stress*p_self;
stressp_faia = stress*p_faia;
stressp_other = stress*p_other;
stresss_tuition = stress*s_tuition;
stresss_unemployment = stress*s_unemployment;
stresss_loans = stress*s_loans;
stresss_living = stress*s_living;
stresss_other = stress*s_other;
end;
run;
```

---

```
run;
proc reg data=mydata_2;
model stress= hours independent overspending p_parents p_scholarships p_self p_faia P_other S_tuition s_unemployment s_loans s_living s_other;
test1: test stresshours=0 stressindependent=0 stressoverspending=0 stressp_parents=0 stressp_scholarships=0 stressp_self=0 stressp_faia=0 stressp_other=0 stresss_tuition=0 stresss_unemployment=0 stresss_loans=0 stresss_living=0 stresss_other=0;
run;
proc print data=mydata_2;
run;
```

---

## The SAS System

The REG Procedure  
Model: MODEL1  
Dependent Variable: stress

Number of Observations Read	75
Number of Observations Used	75

Analysis of Variance					
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	13	52.35989	4.02768	3.97	0.0001
Error	61	61.82678	1.01355		
Corrected Total	74	114.18667			

Root MSE	1.00675	R-Square	0.4585
Dependent Mean	3.25333	Adj R-Sq	0.3432
Coeff Var	30.94531		

Parameter Estimates					
Variable	DF	Parameter Estimate	Standard Error	t Value	Pr >  t
Intercept	1	5.42010	0.94011	5.77	<.0001
hours	1	0.03217	0.11427	0.28	0.7793
Independent	1	-0.01999	0.12045	-0.17	0.8688
overspending	1	-0.12747	0.08892	-1.43	0.1568
p_parents	1	-0.33696	0.31415	-1.07	0.2877
p_scholarships	1	0.75501	0.27110	2.78	0.0071
p_self	1	0.49177	0.28768	1.71	0.0924
p_faia	1	-0.09018	0.34800	-0.26	0.7964
P_other	1	-0.69357	0.30317	-2.29	0.0256
S_tuition	1	-0.84192	0.60703	-1.39	0.1705
s_unemployment	1	-1.15011	0.29574	-3.89	0.0003
s_loans	1	-0.14740	0.35306	-0.42	0.6778
s_living	1	-0.72869	0.36736	-1.98	0.0518
s_other	1	-0.32294	0.26635	-1.21	0.2300

Variables with p-values less than 0.05: unemployment, p\_scholarships, p\_other, hours

The SAS System																												
Obs	stress	hours	independent	overexpending	p_parents	p_scholarships	p_sell	p_faith	P_other	S_tuition	s_unemployment	s_loans	s_living	s_other	i	stresshours	stressindependent	stressoverexpending	stressp_parents	stressp_scholarships	stressp_sell	stressp_faith	stressp_other	stress_tuition	stress_unemployment	stress_loans	stress_living	stress_other
1	3	0	5	3	0	1	1	1	1	1	1	0	1	0	2	0	15	9	0	3	3	3	3	3	3	0	3	0
2	3	3	3	5	1	1	1	1	0	1	1	1	1	1	3	9	9	15	3	3	3	0	3	3	3	3	3	3
3	3	2	3	3	1	1	0	0	1	1	1	1	1	0	4	6	9	9	3	0	3	0	0	3	3	3	3	0
4	4	0	4	0	1	1	1	1	0	1	1	1	1	0	5	0	16	0	4	4	4	4	0	4	4	4	4	0
5	4	1	2	3	0	0	0	0	1	0	1	0	1	0	6	4	8	12	0	0	0	0	0	4	0	4	4	0
6	3	2	2	2	0	1	1	1	1	1	1	1	1	0	7	6	6	6	0	3	3	3	3	3	3	3	3	0
7	2	2	3	3	0	1	1	1	1	1	1	1	1	0	8	4	6	6	0	2	2	2	2	2	2	2	2	0
8	3	0	5	0	0	0	1	1	0	0	1	0	1	0	9	0	15	0	0	0	0	0	0	5	0	0	0	0
9	2	2	5	2	0	1	1	1	1	1	0	1	1	1	10	4	10	4	0	2	2	2	2	2	2	2	0	2
10	5	3	3	3	0	1	0	1	1	1	0	1	1	0	11	15	15	15	0	5	0	5	5	5	0	5	5	0
11	2	0	5	0	0	0	1	1	0	1	1	1	1	0	12	0	10	0	0	0	2	2	0	2	2	2	2	0
12	3	4	1	2	1	1	1	1	1	0	1	1	1	0	13	12	3	6	3	3	3	3	3	3	3	3	3	0
13	3	3	3	2	0	1	1	1	1	1	1	1	1	0	14	9	9	6	0	3	3	3	3	3	3	3	3	0
14	5	0	5	0	1	1	1	0	0	0	1	0	0	0	15	0	25	0	5	5	5	0	0	5	0	0	0	0
15	5	2	3	0	0	0	0	0	1	0	1	0	1	0	16	10	15	0	0	0	0	0	0	5	0	0	0	0
16	5	1	3	0	1	0	0	0	1	0	1	0	1	1	17	5	15	0	5	5	0	0	0	5	0	0	5	5
17	5	3	3	0	0	1	1	1	1	1	1	1	0	0	18	15	15	0	0	5	5	5	5	5	5	5	0	0
18	4	4	4	4	0	1	0	1	1	1	0	1	1	1	19	16	16	16	0	4	0	4	4	4	4	4	4	4
19	2	2	3	0	0	1	0	1	0	1	1	1	1	0	20	4	6	0	0	2	0	2	0	2	2	2	2	0
20	4	0	2	5	1	1	1	1	1	0	1	0	1	0	21	0	8	20	4	4	4	4	4	4	0	4	0	4
21	5	0	5	0	0	0	1	0	0	1	1	1	1	1	22	0	25	0	0	0	5	0	0	5	5	5	5	5
22	3	3	4	0	0	1	1	1	1	0	1	1	0	1	23	9	12	0	0	3	3	3	3	3	0	3	3	3
23	4	1	5	0	0	1	1	1	1	1	1	1	1	0	24	4	20	0	0	4	4	4	4	4	4	4	4	0
24	2	0	5	3	1	0	0	1	1	0	1	0	1	0	25	0	10	6	2	0	0	2	2	0	2	0	2	0
25	2	2	1	0	1	0	0	1	1	1	1	1	1	0	26	4	2	0	2	0	0	2	2	2	2	2	2	0
26	2	2	4	0	0	1	1	1	1	1	1	1	1	0	27	4	8	0	0	2	2	2	2	2	2	2	2	0
27	2	2	3	3	1	1	1	1	0	1	1	1	1	0	28	4	6	6	2	2	2	2	0	2	2	2	2	0
28	4	1	5	1	1	1	0	1	0	1	0	0	1	0	29	4	20	4	4	4	0	4	0	4	0	4	0	4
29	3	3	2	0	1	1	0	1	1	1	1	1	1	0	30	9	6	0	3	3	0	3	3	3	3	3	3	0
30	1	2	4	0	1	0	0	0	1	1	1	1	1	0	31	2	4	0	0	1	1	1	1	1	1	1	1	0
31	3	0	3	0	0	1	0	0	1	1	1	0	1	1	32	0	9	0	0	3	3	3	3	3	3	0	3	3
32	2	2	2	2	1	1	0	0	0	1	1	1	1	0	33	4	4	4	2	2	2	0	0	2	2	2	2	0
33	5	2	5	0	0	1	0	0	1	1	0	1	0	1	34	10	25	0	0	5	0	0	5	5	0	5	0	5
34	4	5	1	3	1	1	0	1	0	1	0	1	0	0	35	20	4	12	4	4	0	4	0	4	0	4	0	0
35	1	5	1	1	1	1	0	1	1	1	1	1	1	1	36	5	1	1	1	1	1	1	1	1	1	1	1	1
36	5	0	5	1	0	1	1	1	1	1	0	0	0	0	37	0	25	5	0	5	5	5	5	5	0	0	0	0
37	1	0	5	3	0	1	1	1	1	0	1	1	1	1	38	0	5	3	0	1	1	1	1	0	1	1	1	1
38	4	2	3	2	1	0	1	1	0	1	0	1	1	1	39	0	12	0	4	4	4	4	0	4	0	4	4	4

## 4. Conclusion:

In this study, we analyzed the correlation with financial stress among students. We studied factors that contribute to their stress, such as their student and employment status, budgeting habits, financial independence, and tuition expenses.

We built models to help understand the correlation between financial stress among students and which factor(s) played the biggest role in causing the financial strain. The models told us that unemployment was the only factor that showed proof of increasing stress levels.

We decided to keep the predictor values: unemployment status, scholarships, hours worked, and tuition paid by other means including spouses, veteran G.I. bills, and prepaid plans.