



SDG GOAL:4

Quality Education



Approach Towards The DATA

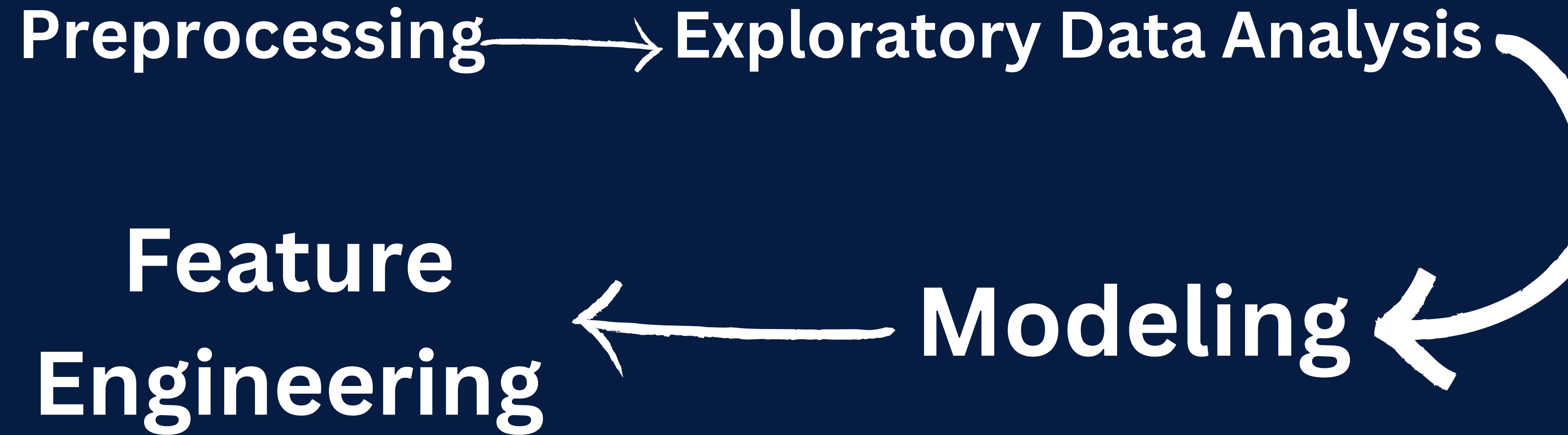
Observing The data

Examining The data

Using ML To Predict

Prescribing The Solution

Our Track



Factors

Do all the
features available
in the dataset
really affect the
Quality of
Education?

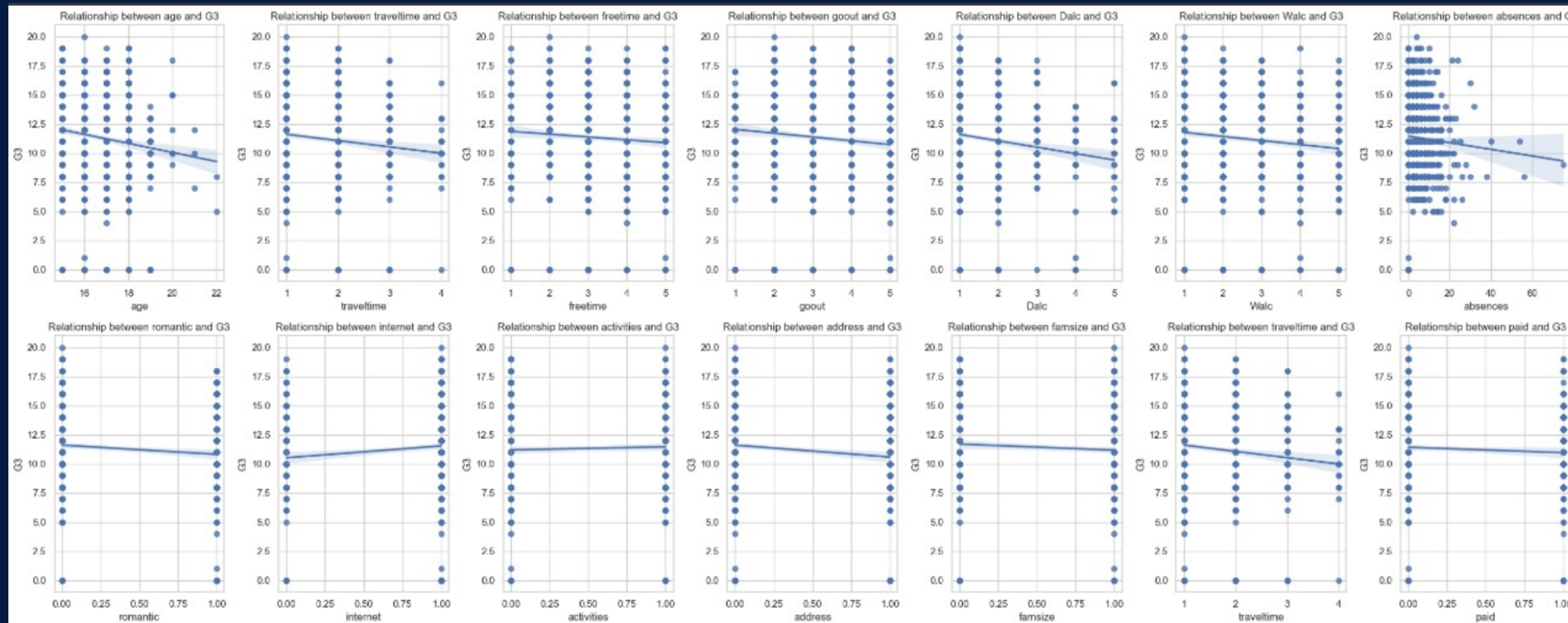
What really
effects the
Quality of
education?

	coef	std err	t	P> t	[0.025	0.975]
Intercept	11.3475	1.549	7.326	0.000	8.308	14.387
age	-0.0024	0.080	-0.030	0.976	-0.159	0.154
address	-0.3577	0.211	-1.693	0.091	-0.772	0.057
famsize	0.3444	0.191	1.802	0.072	-0.031	0.719
Medu	0.3054	0.087	3.498	0.000	0.134	0.477
Fjob	-0.2446	0.088	-2.789	0.005	-0.417	-0.073
reason	-0.0696	0.093	-0.750	0.454	-0.252	0.113
higher	1.5102	0.338	4.467	0.000	0.847	2.174
failures	-1.4443	0.145	-9.942	0.000	-1.729	-1.159
guardian	0.1735	0.113	1.538	0.124	-0.048	0.395
studytime	0.4273	0.110	3.893	0.000	0.212	0.643
ravelttime	-0.1399	0.130	-1.077	0.282	-0.395	0.115
schoolsup	-1.3439	0.282	-4.773	0.000	-1.896	-0.791
famsup	-0.2372	0.185	-1.283	0.200	-0.600	0.126
paid	-0.7506	0.219	-3.426	0.001	-1.181	-0.321

activities	0.1623	0.175	0.925	0.355	-0.182	0.506
internet	0.4872	0.227	2.148	0.032	0.042	0.932
romantic	-0.4948	0.185	-2.675	0.008	-0.858	-0.132
goout	-0.1993	0.079	-2.534	0.011	-0.354	-0.045
Dalc	-0.1592	0.102	-1.564	0.118	-0.359	0.041
health	-0.1338	0.061	-2.187	0.029	-0.254	-0.014
absences	-0.0145	0.014	-0.999	0.318	-0.043	0.014
Omnibus:	60.764	Durbin-Watson:	1.924			
Prob(Omnibus):	0.000	Jarque-Bera (JB):	79.337			
Skew:	-0.527	Prob(JB):	5.92e-18			
Kurtosis:	3.845	Cond. No.	349.			

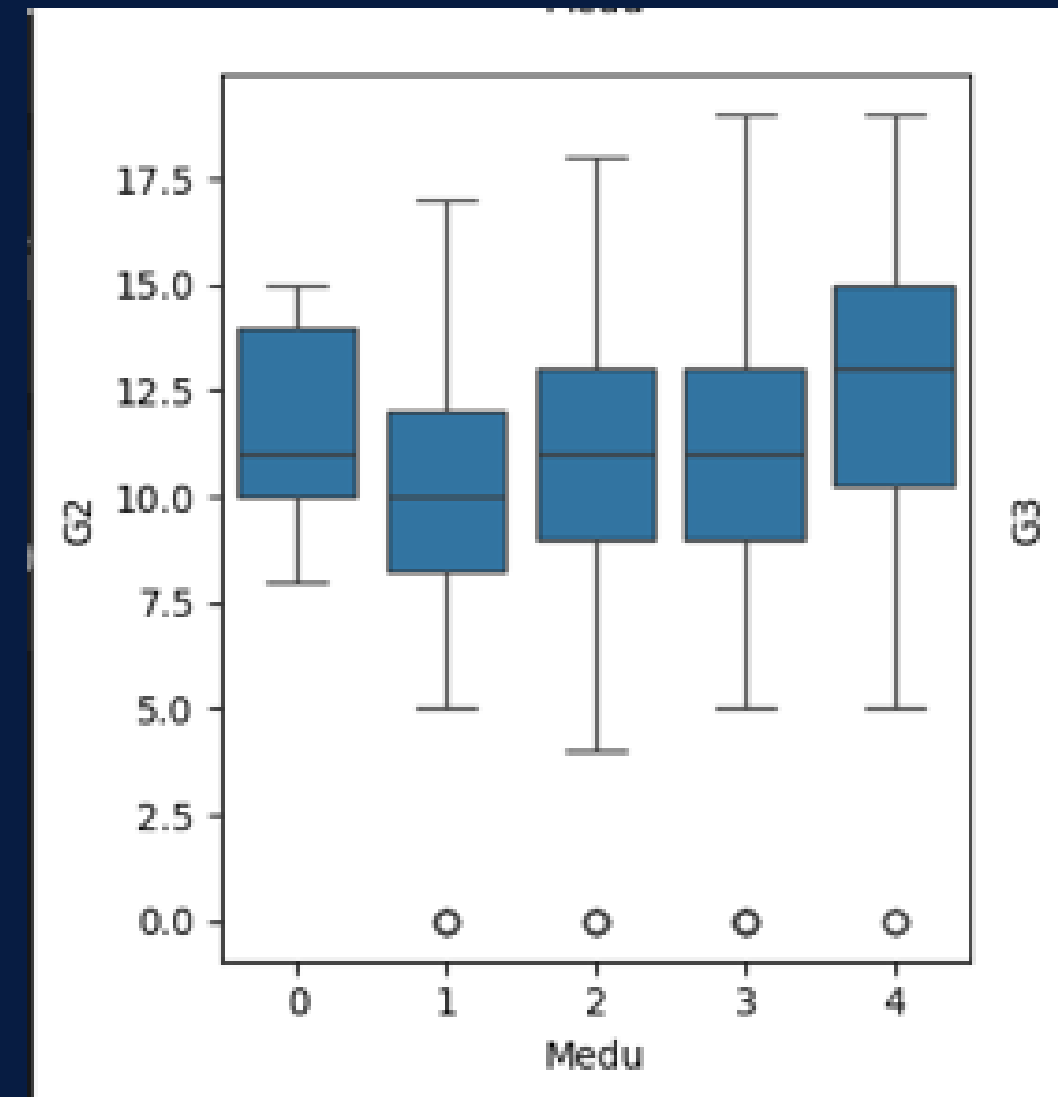
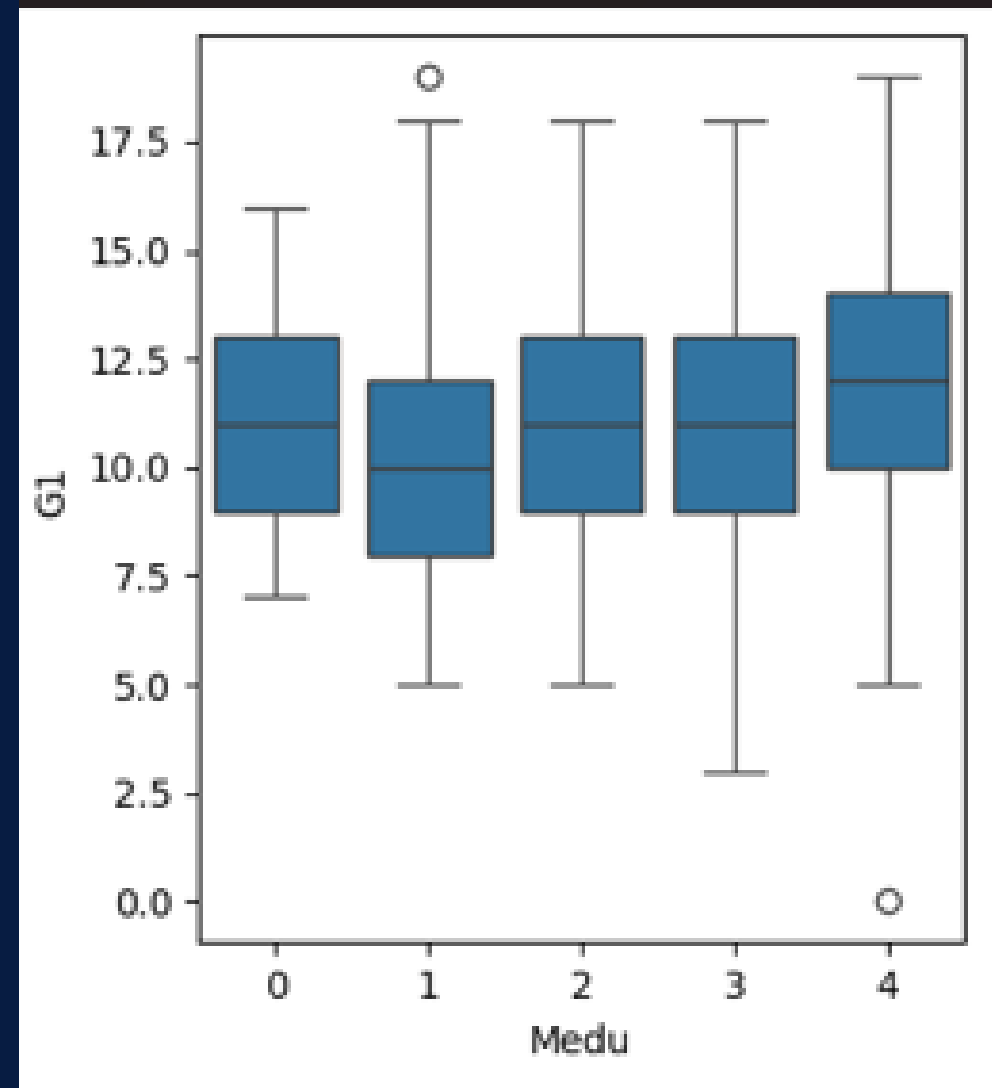
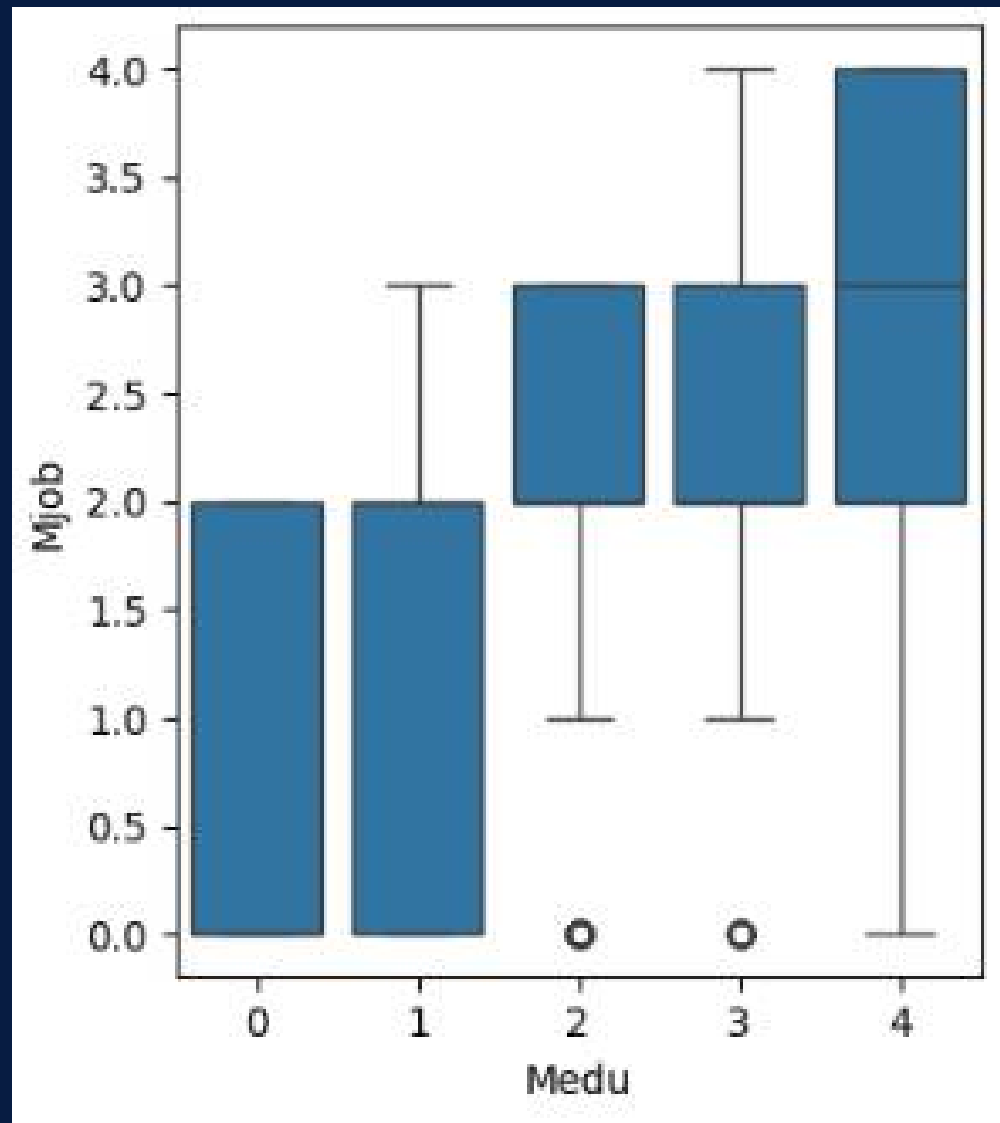
OLS Regression Results			
Dep. Variable:	grade_overall	R-squared:	0.272
Model:	OLS	Adj. R-squared:	0.257
Method:	Least Squares	F-statistic:	18.16
Date:	Sun, 03 Dec 2023	Prob (F-statistic):	1.01e-56
Time:	07:11:18	Log-Likelihood:	-2535.8
No. Observations:	1044	AIC:	5116.
Df Residuals:	1022	BIC:	5225.
Df Model:	21		
Covariance Type:	nonrobust		

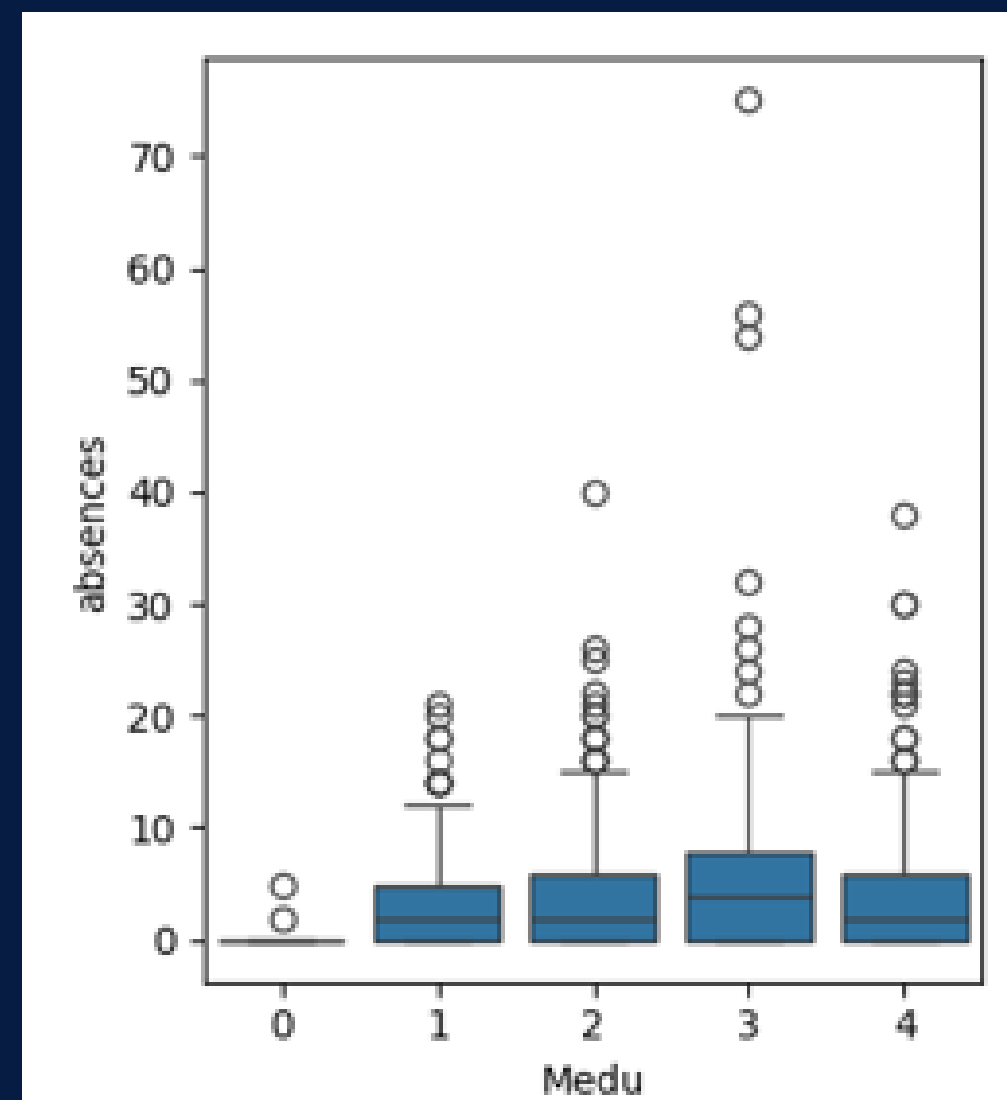
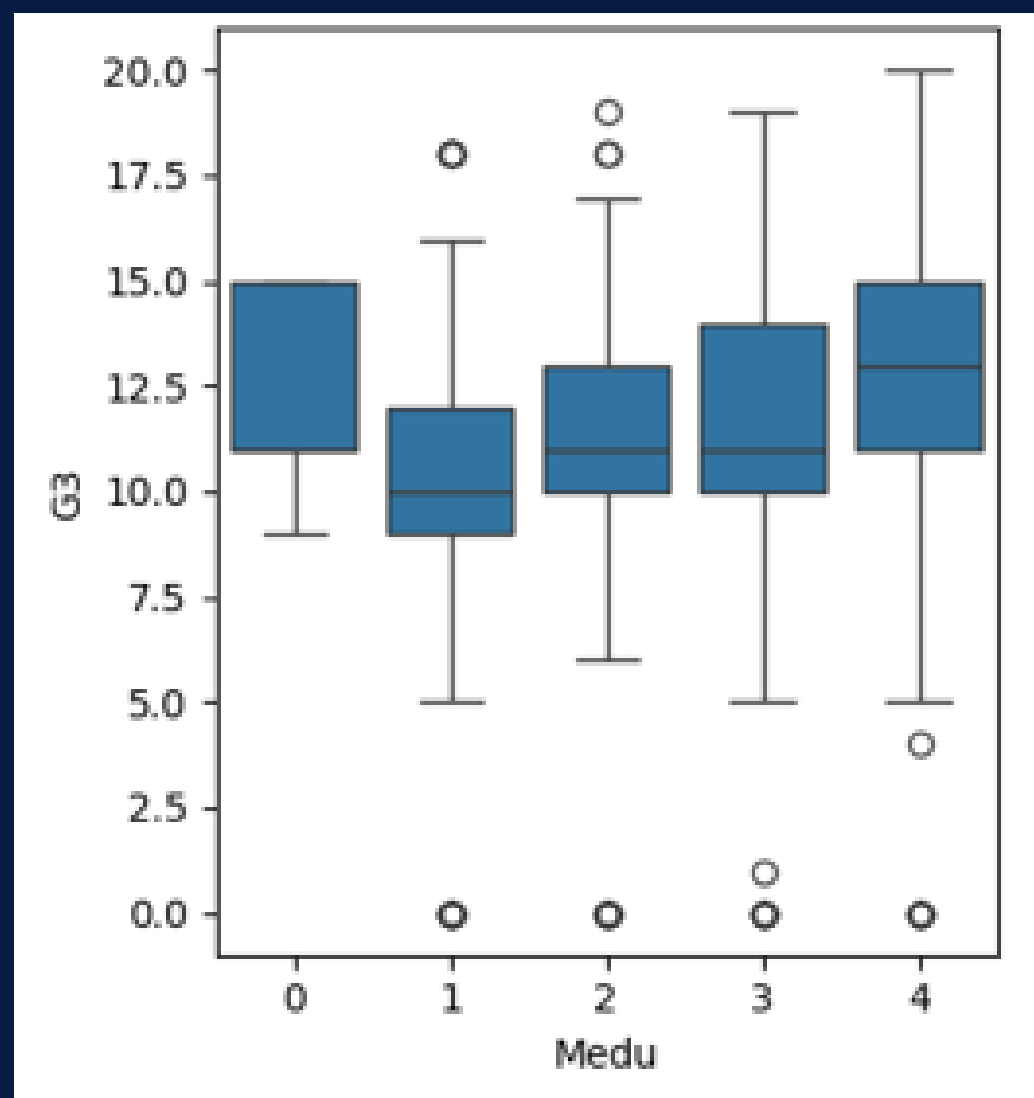
Social affects the quality of education?

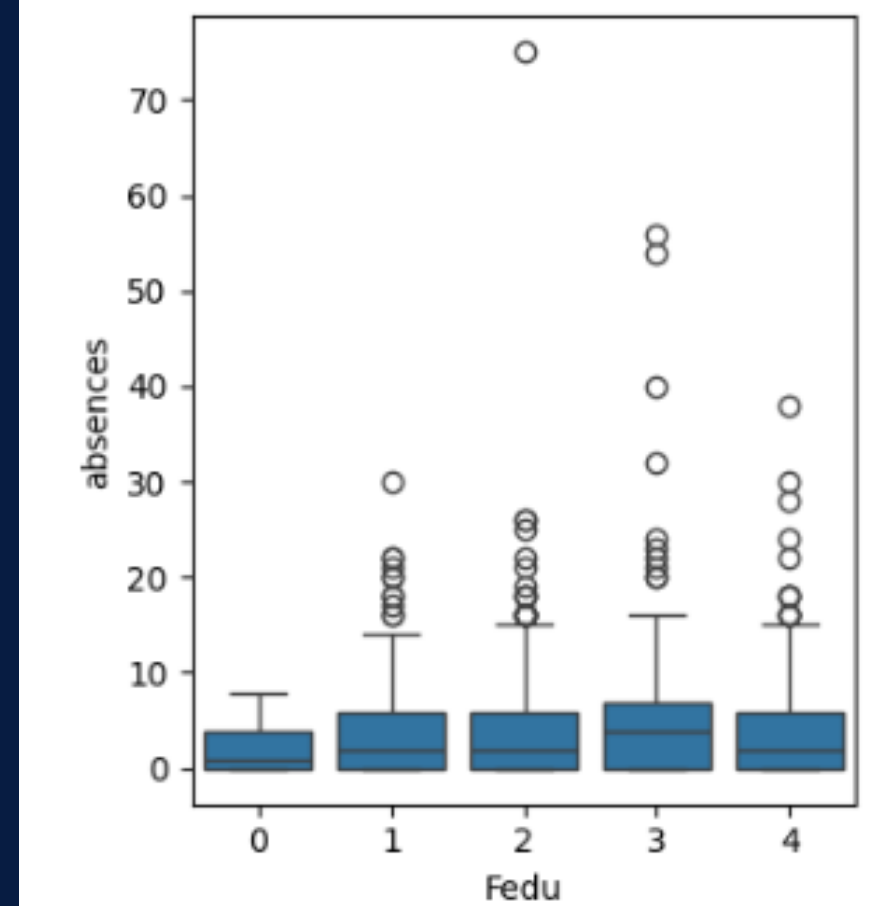
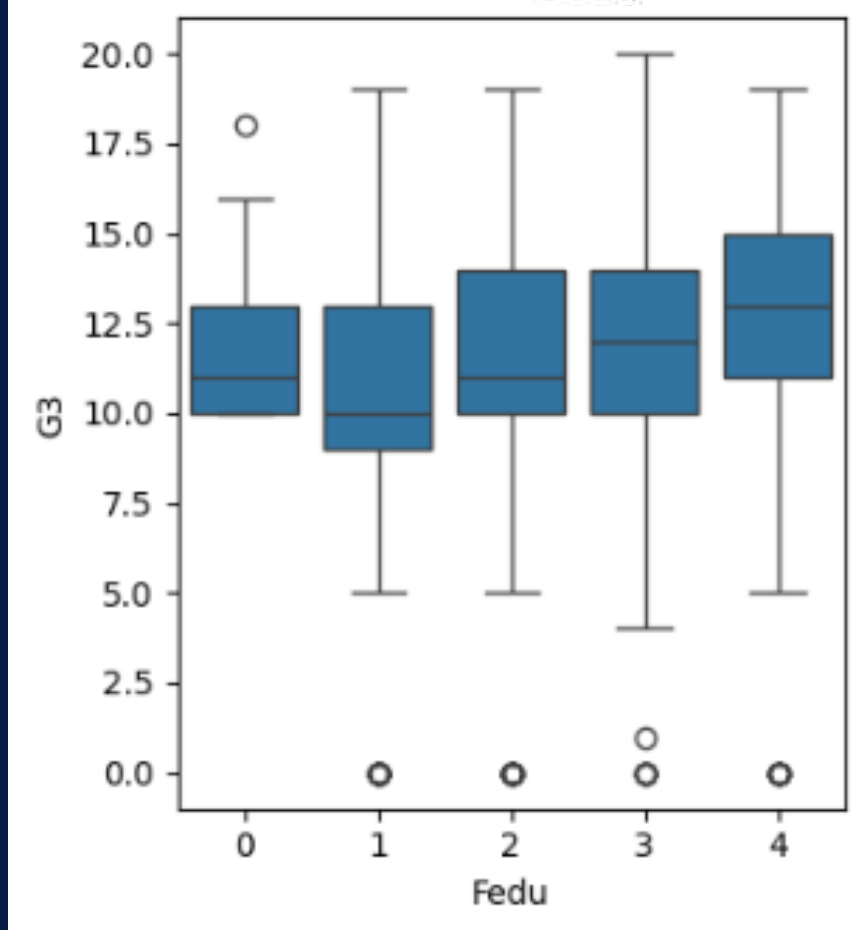
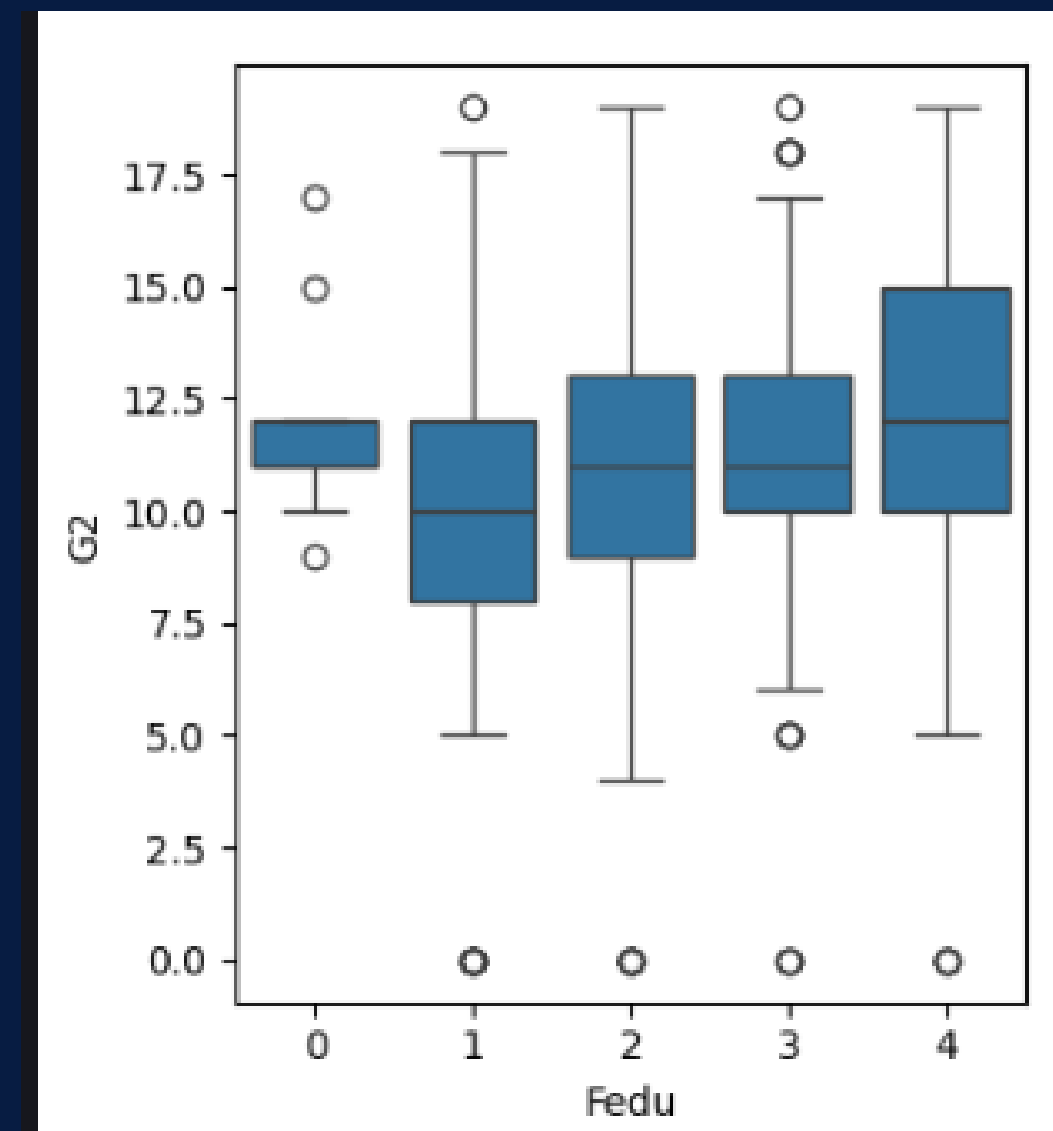
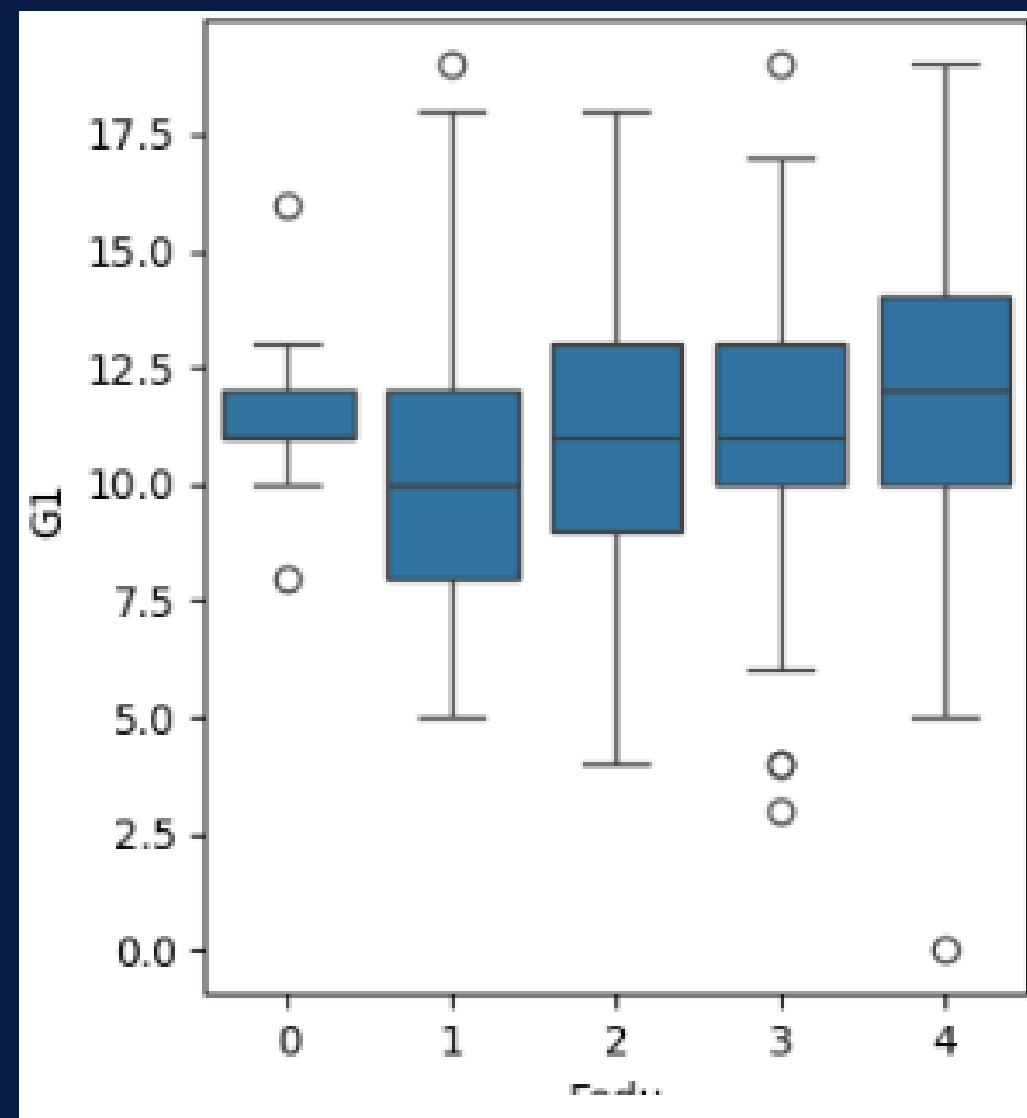
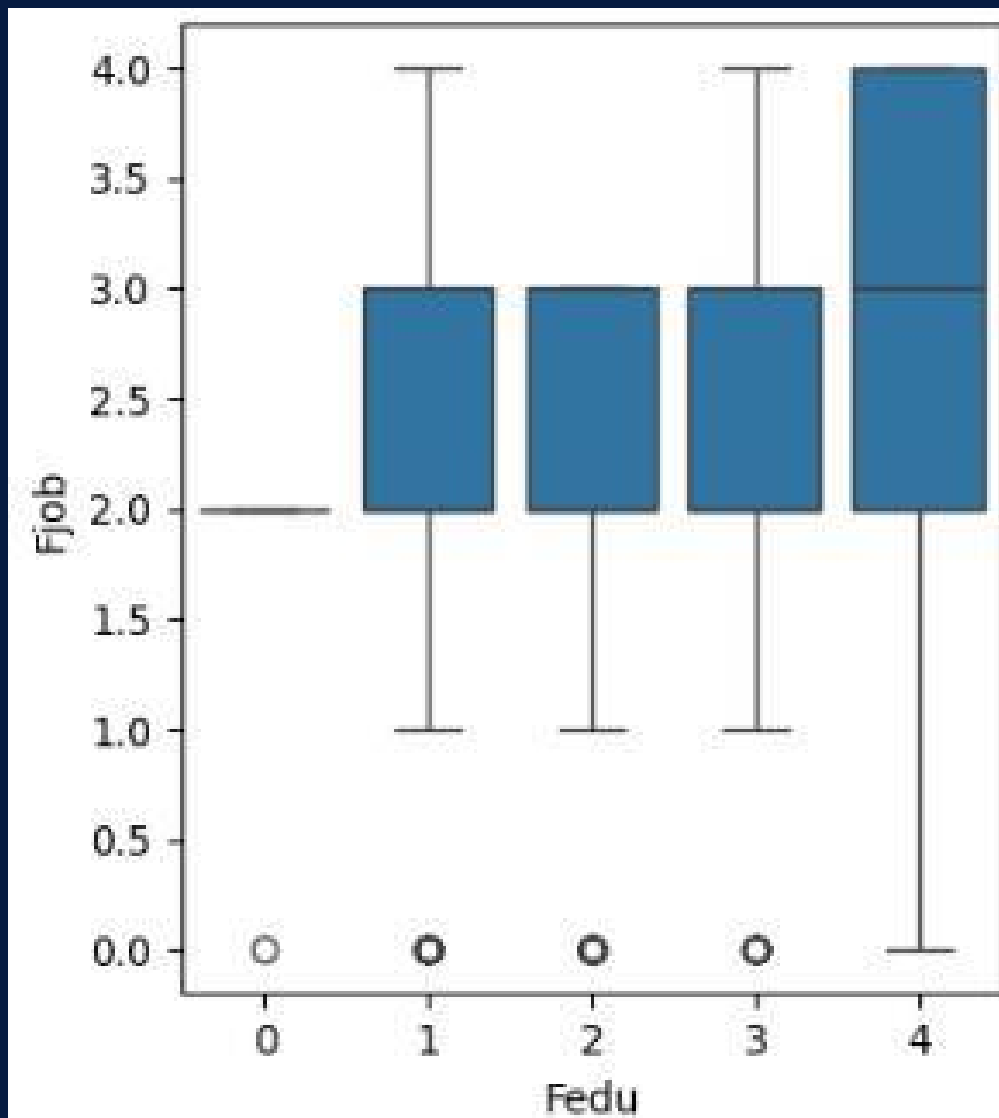


We can see that all the factors which are in accordance with the social life of a student, leads into poor performance of the student in the final test.

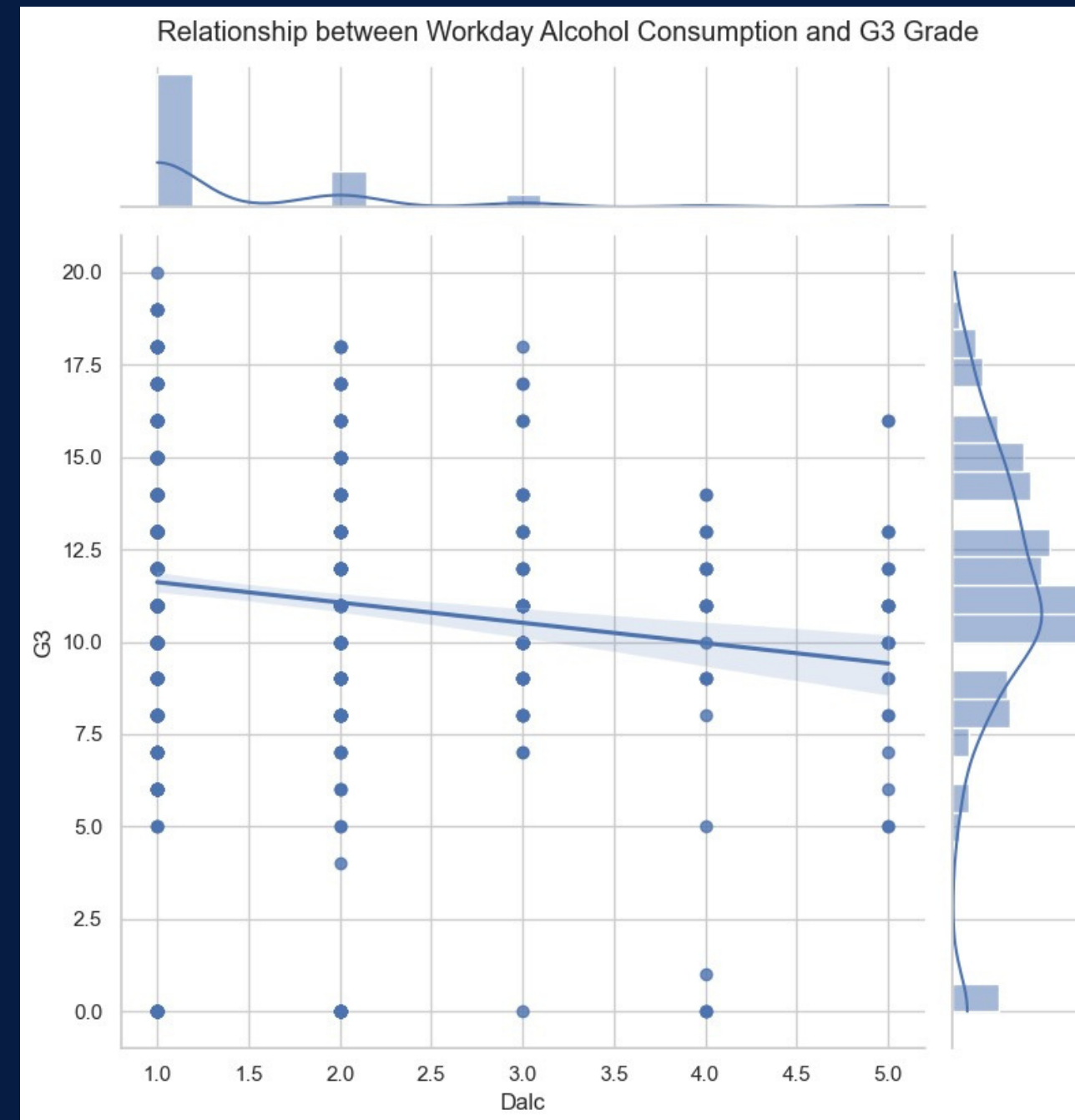
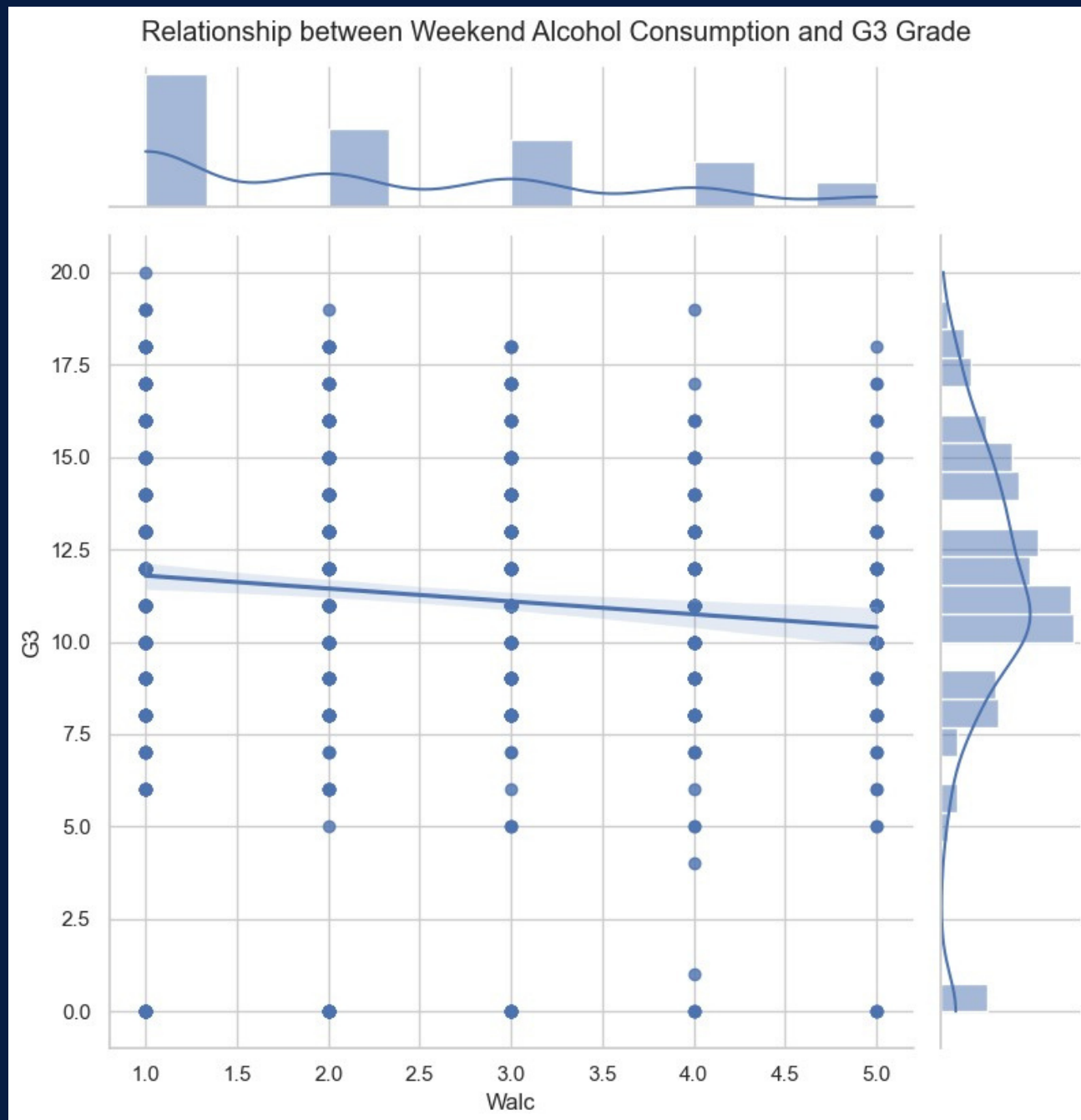
Impact of parents' jobs on the student's education







Quality of education have a positive or negative relationship with consuming alcohol?



- We can see that as the Daily and Weekly alcohol consumption increases there is decrement in the number of grades recieved by the student.
- Daily alcohol consumption of the students is less when compared to the Weekly consumption.

