# **■** Quality Results

#### F1 Score Report

F1 Score (Original)	F1 Score (Statistic)	F1 Score (Influence)
0.28421052631578947	0.25136612021857924	0.27807486631016043

### **Outlier Summary**

Influence Outliers (Count)	Influence Outliers (%)	Mahalanobis Outliers (Count)	Mahalanobis Outliers (%
93	2.8562653562653564	203	6.2346437346437344

## **■■** Fairness Results

### Top Patterns

Pattern Column 1	Pattern Value 1	Pattern Column 2	Pattern Value 2	Support	Resp
income	>50K	None	None	0.2350230414746544	12.89
occupation	Machine-op-inspct	None	None	0.060675883256528416	3.004
relationship	Wife	None	None	0.05261136712749616	2.086
race	Black	None	None	0.08755760368663594	2.832
occupation	Exec-managerial	None	None	0.1282642089093702	3.491

### Fairness (No Influence)

Sensitive Feature	DPD	DPD Fair	EOD	EOD Fair	PPV Diff	PPV Fair
age	1.0	False	1.0	False	1.0	False
marital.status	0.386	False	1.0	False	1.0	False
occupation	1.0	False	1.0	False	1.0	False
race	0.2941	False	0.75	False	0.6509	False
sex	0.1616	False	0.104	False	0.1225	False
native.country	1.0	False	1.0	False	1.0	False

### Fairness (With Influence)

Influence Group	Positive Group	Mean (Positive)	Mean (Other)	Mean Difference	Influence Fair
income	>50K	3.108e-05	-7.78e-06	3.886e-05	True
occupation	Machine-op-inspct	-2.05e-05	2.76e-06	2.326e-05	True
relationship	Wife	5.607e-05	-1.69e-06	5.776e-05	True
race	Black	-9.49e-06	2.39e-06	1.188e-05	True

occupation Exec-managerial -1.646e-05 3.97e-06 2.043e-05 True	occupation		-1.0406-03	3.97e-06	2.043e-05	True
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