

## Gold Mining: Sustainability Learning Situation in Higher Education

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**HYPOTHESIS:** If teachers-to-be know about the **gold** content inside the plate of each **smartphone**, being **aware** of the **complexity of gold extraction in nature**, their intention to **recycle** it will be positively reinforced

**OBJECTIVE:** Carrying out **correlational statistical** research, targeting higher education students of **master's degree in teacher training**, specializing in **Geology**



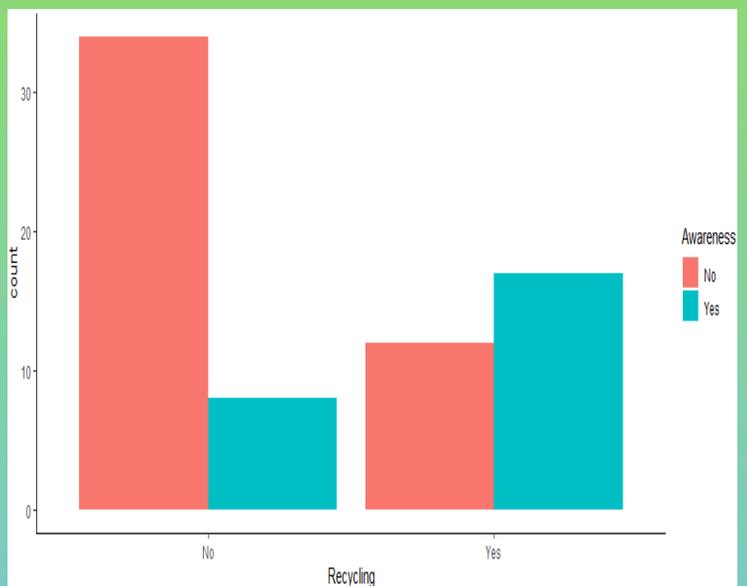
Total observations in Table: 71

GoldDataMining\$Recycling	GoldDataMining\$Awareness		Row Total
	No	Yes	
No	34	8	42
	1.694	3.116	0.592
	0.810	0.190	
	0.739	0.320	
	0.479	0.113	
Yes	12	17	29
	2.453	4.513	0.408
	0.414	0.586	
	0.261	0.680	
	0.169	0.239	
column Total	46	25	71
	0.648	0.352	

**METHODOLOGY:** Based on two dichotomous nominal qualitative variables, such as "**Awareness**" and "**Recycling**", a survey is held among **71** teachers-to-be. To cross both variables, a **contingency table** and a **bar diagram** display the proportion of crossed responses. Additionally, since these are independent samples, the **Pearson Chi-square test** is applied.

### RESULTS:

1. The **more awareness** of gold composition on mobile phones, the **more they recycle** them once they become waste.
2. Pearson Chi-square test reveals a **p-value < 0.05**, that denotes the significance of the study. Therefore, the **null hypothesis can be rejected** in favor of the proposed alternative hypothesis.



**CONCLUSION:** Importance of **teaching**, through **gold mining** issues based on **Geology**, the noble metal **composition** of smart **phones**, for a proven **conscious and voluntary recycling** when they become scrap.