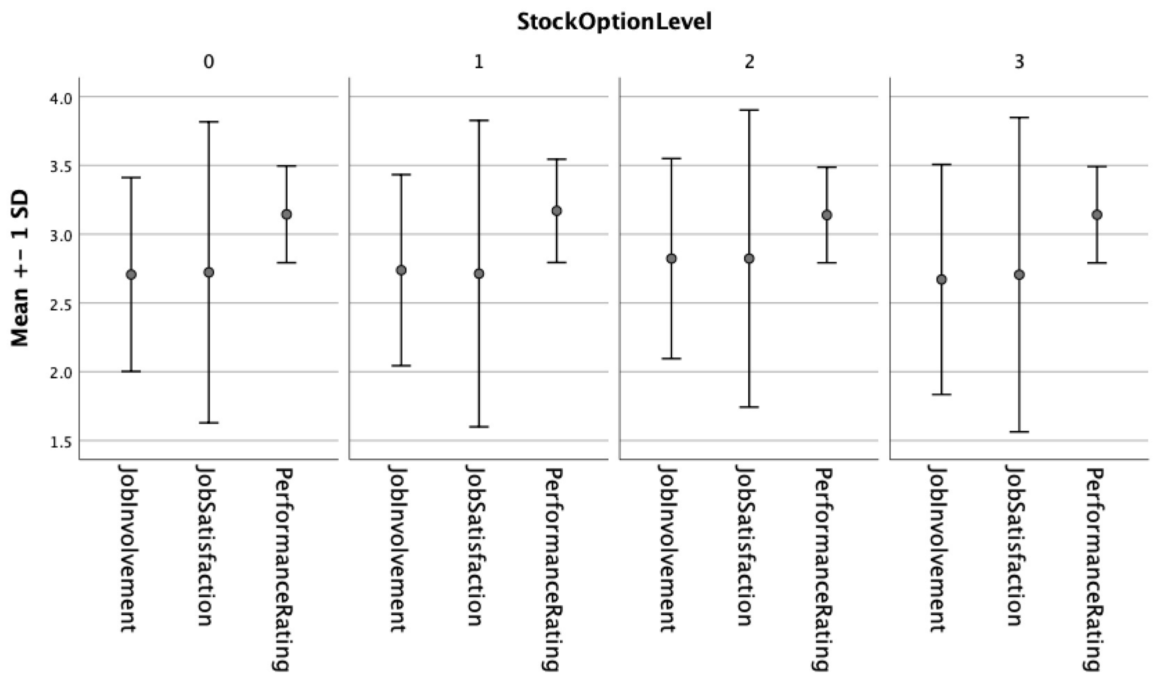
Mean comparison: is stock option motivating?

Report

StockOptionLevel		JobInvolvement	JobSatisfaction	PerformanceRating
0	Mean	2.71	2.72	3.14
	N	631	631	631
	Std. Deviation	.705	1.094	.352
1	Mean	2.74	2.71	3.17
	N	596	596	596
	Std. Deviation	.695	1.114	.375
2	Mean	2.82	2.82	3.14
	N	158	158	158
	Std. Deviation	.727	1.080	.347
3	Mean	2.67	2.71	3.14
	N	85	85	85
	Std. Deviation	.836	1.143	.350
Total	Mean	2.73	2.73	3.15
	N	1470	1470	1470
	Std. Deviation	.712	1.103	.361



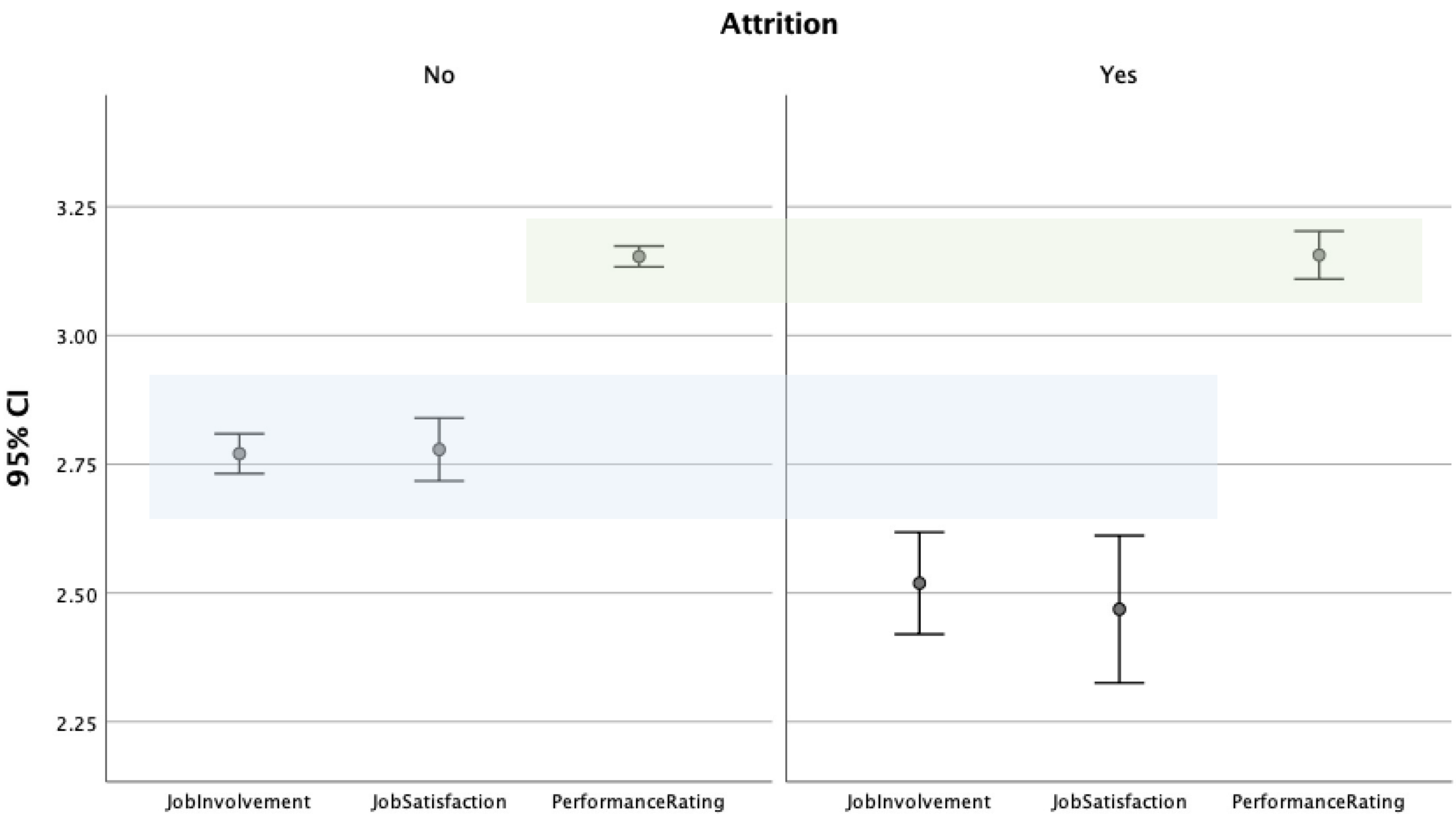
A common mistake: just look at the mean

Who is leaving and why?

Report

Attrition		JobSatisfaction	JobInvolvement	PerformanceRating	WorkLifeBalance	Age	MonthlyIncome	YearsAtCompany	DistanceFromHome
No	Mean	2.78	2.77	3.15	2.78	37.56	6832.74	7.37	8.92
	N	1233	1233	1233	1233	1233	1233	1233	1233
	Std. Deviation	1.093	.692	.360	.682	8.888	4818.208	6.096	8.013
Yes	Mean	2.47	2.52	3.16	2.66	33.61	4787.09	5.13	10.63
	N	237	237	237	237	237	237	237	237
	Std. Deviation	1.118	.773	.364	.816	9.689	3640.210	5.950	8.453
Total	Mean	2.73	2.73	3.15	2.76	36.92	6502.93	7.01	9.19
	N	1470	1470	1470	1470	1470	1470	1470	1470
	Std. Deviation	1.103	.712	.361	.706	9.135	4707.957	6.127	8.107

How are leavers different?



Are the differences real?

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
JobInvolvement	Between Groups	12.573	1	12.573	25.242	.000
	Within Groups	731.210	1468	.498		
	Total	743.783	1469			
JobSatisfaction	Between Groups	19.133	1	19.133	15.890	.000
	Within Groups	1767.567	1468	1.204		
	Total	1786.700	1469			
PerformanceRating	Between Groups	.002	1	.002	.012	.912
	Within Groups	191.253	1468	.130		
	Total	191.254	1469			

Correlations

		PerformanceRating	JobInvolvement	JobSatisfaction	MonthlyIncome	TrainingTimesLastYear
PerformanceRating	Pearson Correlation	1	-.029	.002	-.017	-.016
	Sig. (2-tailed)		.265	.930	.512	.551
	N	1470	1470	1470	1470	1470
JobInvolvement	Pearson Correlation	-.029	1	-.021	-.015	-.015
	Sig. (2-tailed)	.265		.411	.559	.557
	N	1470	1470	1470	1470	1470
JobSatisfaction	Pearson Correlation	.002	-.021	1	-.007	-.006
	Sig. (2-tailed)	.930	.411		.784	.825
	N	1470	1470	1470	1470	1470
MonthlyIncome	Pearson Correlation	-.017	-.015	-.007	1	-.022
	Sig. (2-tailed)	.512	.559	.784		.405
	N	1470	1470	1470	1470	1470
TrainingTimesLastYear	Pearson Correlation	-.016	-.015	-.006	-.022	1
	Sig. (2-tailed)	.551	.557	.825	.405	
	N	1470	1470	1470	1470	1470

Will training time predict performance?

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.016[a]	.000	.000	.361

a. Predictors: (Constant), TrainingTimesLastYear

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.046	1	.046	.356	.551[b]
	Residual	191.208	1468	.130		
	Total	191.254	1469			

a. Dependent Variable: PerformanceRating

b. Predictors: (Constant), TrainingTimesLastYear

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.166	.023		140.659	.000
	TrainingTimesLastYear	-.004	.007	-.016	-.597	.551

a. Dependent Variable: PerformanceRating