

2. Multiple regression analysis of salary vs rank/step. As indicated in Table 1, the simplest model with only demographic variables shows women earn salaries that are 14% lower, Asian and URM faculty earn 4%, compared to their colleagues who are white and male. However, only 2% of salary variation is explained by this model. As control factors are added to the model, salary differences change with women and Asian faculty earning 3% more, and URM faculty earn 1% less, compared to white male faculty. The percentage of salary variation explained by the model increases to 92%.

Table 1.

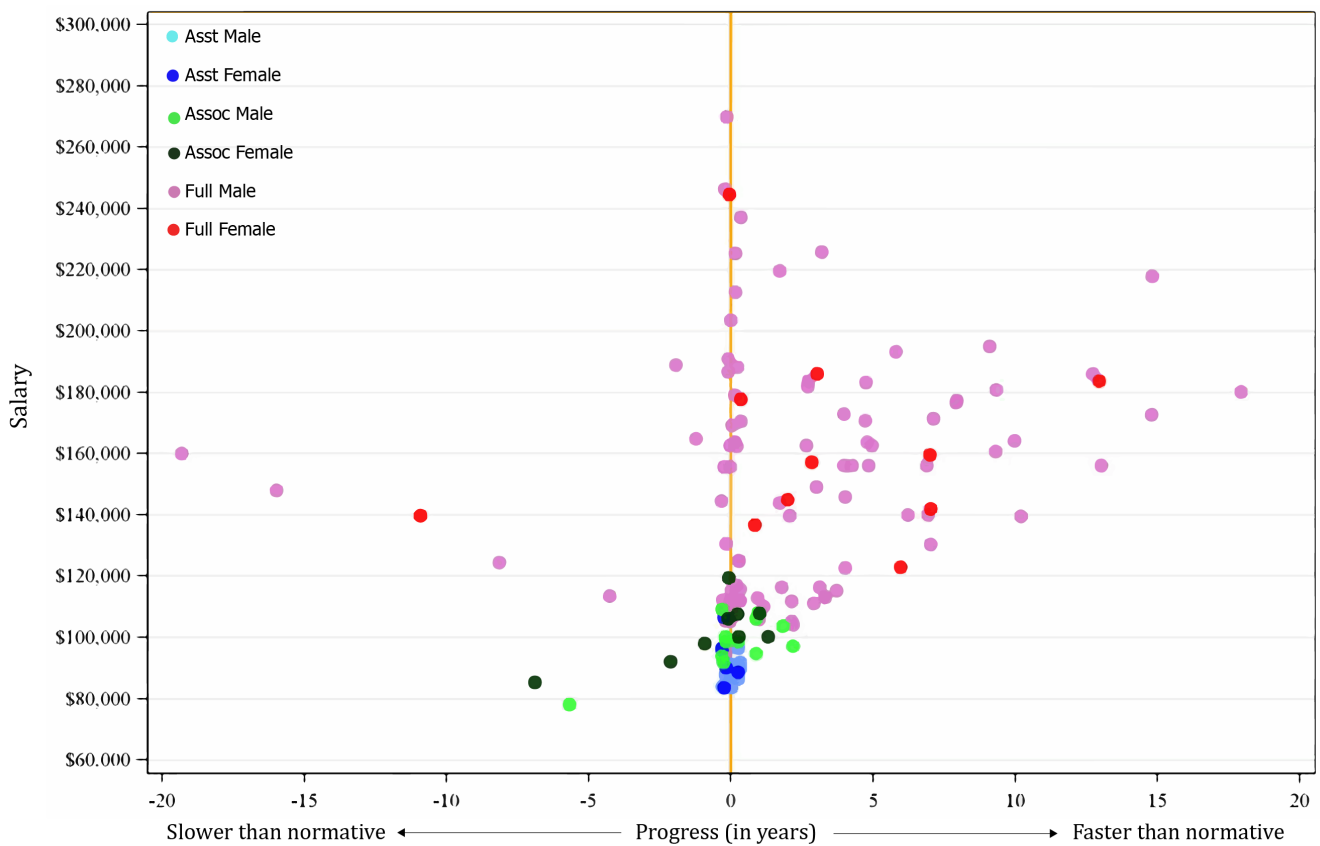
Submodel	R-sq	Significant Variables	Salary Difference		
			Women vs White Men	Asian vs White Men	URM vs White Men
1 Demography	0.02		-14.3%	-4.2%	-3.6%
2 Demography, Experience	0.64	Experience***	-3.9%	3.8%	-6.8%
3 Demog, Exper, Field	0.71	Experience***,Field***	1.3%	6.3%	-6.6%
4 Demog, Exper, Field, Rank	0.92	Exper*,Rank***	1.7%	3.3%	0.4%
5 Demog, Exper, Field, Rank ¹	0.92	Exper**,Rank***	2.9%	3.1%	-0.6%

*p<0.05, **p<0.01, ***p<0.001

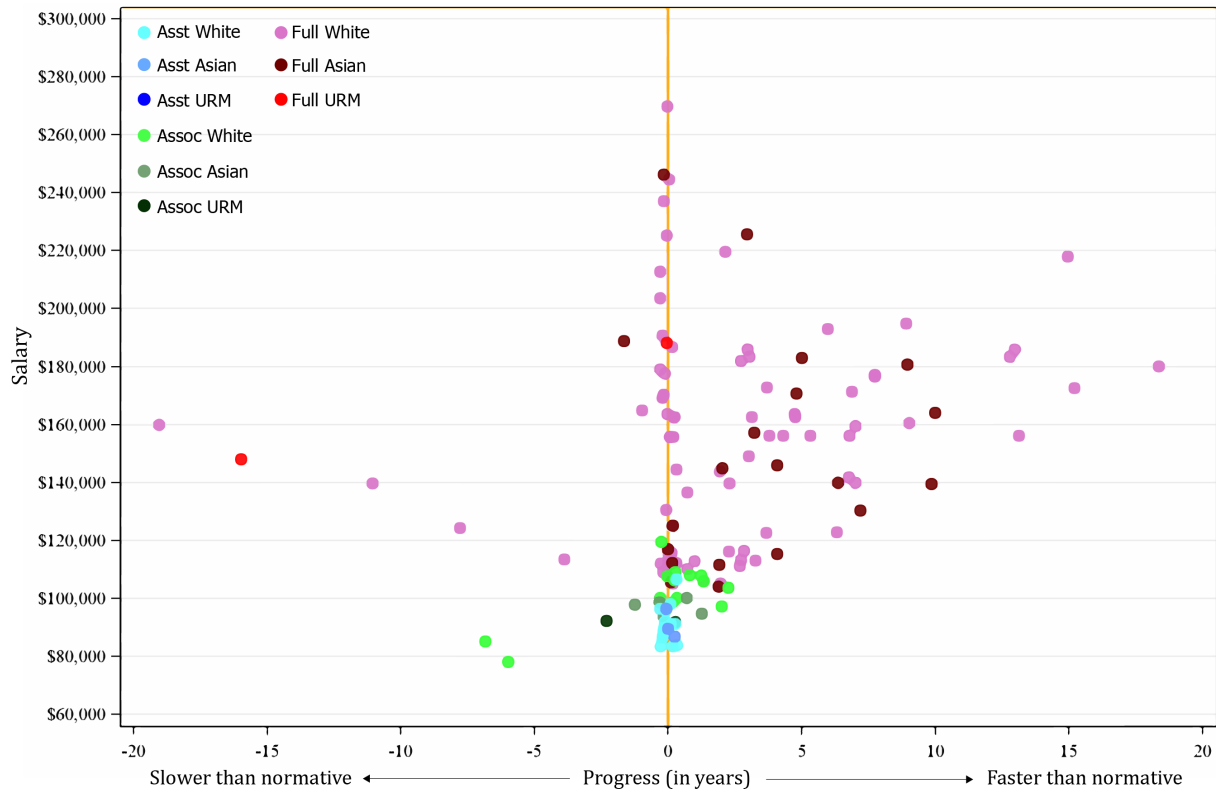
¹Final model corrected for collinearity.

3. Progress Rate plotted as a function of gender and ethnicity

Graph 3: Salary by Progress and Gender - Physical Sciences



Graph 4: Salary by Progress and Ethnicity - Physical Sciences



4. Progress Rate Analysis: The results indicate there isn't a statistically significant difference in progression rate means by gender when compared to white male faculty. URM faculty, however, progress approximately four and a half years slower ($p=0.01$).

Table 2. Progress Rate (in years) Comparison

Comparison	n	Mean	t	df	p-value
White Male	87	1.97			
Women vs White Male	26	0.88	1.03	111	0.3059
URM vs White Male	4	-4.50	2.57	89	0.0118
Asian vs White Male	28	2.54	0.58	113	0.5599