

Documentation for TeachingRatings Data

TeachingRatings contains data on course evaluations, course characteristics, and professor characteristics for 463 courses for the academic years 2000-2002 at the University of Texas at Austin. These data were provided by Professor Daniel Hamermesh of the University of Texas at Austin and were used in his paper with Amy Parker, "Beauty in the Classroom: Instructors' Pulchritude and Putative Pedagogical Productivity," *Economics of Education Review*, August 2005, Vol. 24, No. 4, pp. 369-376.

Variable Definitions

Variable	Definition
<i>Course_eval</i>	"Course overall" teaching evaluation score, on a scale of 1 (very unsatisfactory) to 5 (excellent)
<i>Beauty</i>	Rating of instructor physical appearance by a panel of six students, averaged across the six panelists, shifted to have mean zero.
<i>Female</i>	= $\begin{cases} 1 & \text{if the instructor is female} \\ 0 & \text{if the instructor is male} \end{cases}$
<i>Minority</i>	= $\begin{cases} 1 & \text{if the instructor is a non-White} \\ 0 & \text{if the instructor is White} \end{cases}$
<i>NNenglish</i>	= $\begin{cases} 1 & \text{if the instructor is not a native English speaker} \\ 0 & \text{if the instructor is a native English speaker} \end{cases}$
<i>intro</i>	= $\begin{cases} 1 & \text{if the course is introductory (mainly large Freshman and Sophomore courses)} \\ 0 & \text{if the course is not introductory} \end{cases}$
<i>onecredit</i>	= $\begin{cases} 1 & \text{if the course is a single-credit elective (yoga, aerobics, dance, etc.)} \\ 0 & \text{otherwise} \end{cases}$
<i>age</i>	Professor's age

Dependent Variable = <i>Course_Eval</i>				
Regressor	(1)	(2)	(3)	(4)
<i>Beauty</i>	0.166** (0.032)	0.160** (0.030)	0.231** (0.048)	0.090* (0.040)
<i>Intro</i>	0.011 (0.056)	0.002 (0.056)	-0.001 (0.056)	-0.001 (0.056)
<i>OneCredit</i>	0.635** (0.108)	0.620** (0.109)	0.657** (0.109)	0.657** (0.109)
<i>Female</i>	-0.173** (0.049)	-0.188** (0.052)	-0.173** (0.050)	-0.173** (0.050)
<i>Minority</i>	-0.167* (0.067)	-0.180** (0.069)	-0.135 (0.070)	-0.135 (0.070)
<i>NNEnglish</i>	-0.244** (0.094)	-0.243* (0.096)	-0.268** (0.093)	-0.268** (0.093)
<i>Age</i>		0.020 (0.023)		
<i>Age</i> ²		-0.0002 (0.0002)		
<i>Female</i> × <i>Beauty</i>			-0.141* (0.063)	
<i>Male</i> × <i>Beauty</i>				0.141* (0.063)
<i>Intercept</i>	4.068** (0.037)	3.677** (0.550)	4.075** (0.037)	4.075** (0.037)
<i>F</i>-statistic and <i>p</i>-values on joint hypotheses				
<i>Age</i> and <i>Age</i> ²		?		
<i>SER</i>	0.514	0.514	0.511	0.511
\bar{R}^2	0.144	0.142	0.151	0.151

Significant at the *5% and **1% significance level.

- a) Is there evidence that age has a non-linear effect on *Course_Eval*?
- b) Is there evidence that age has any effect on *Course_Eval*?
- c) Discuss the difference between model (1) and model (3).
- d) Using model (2), predict the effect on *Course_Eval* of Professor Godwin becoming 1 year older.
- e) Using model (3) or (4), predict the effect on *Course_Eval* of Professor Godwin increasing his beauty by 0.1.
- f) Why can't you add the variable $Female \times Beauty$ to the regression in (4)?
- g) How might you make model (4) simpler? Show any hypotheses tests. What F-test statistic might you need to calculate?