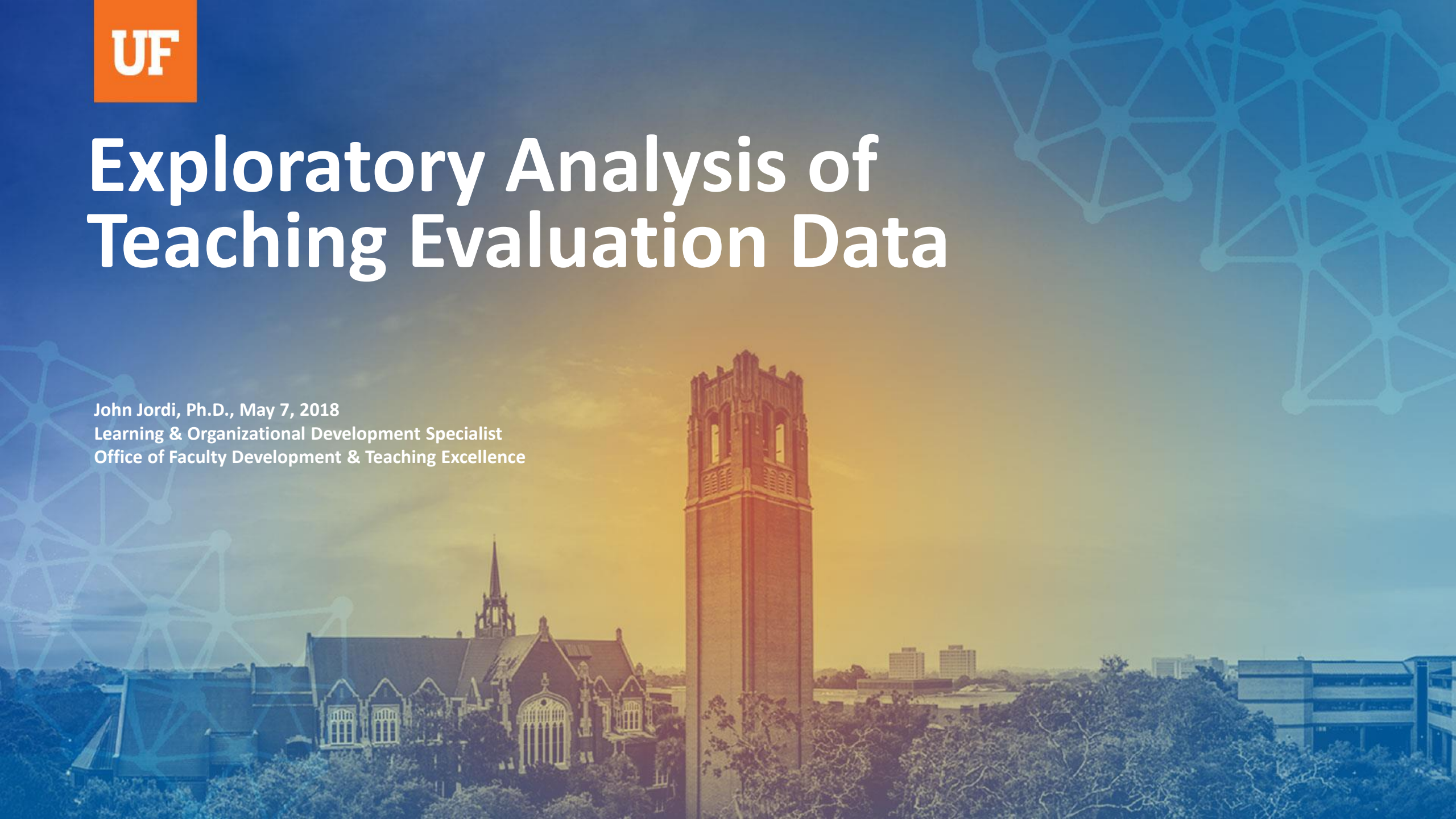


The logo for the University of Florida, consisting of the letters 'UF' in white on an orange square background.

UF

Exploratory Analysis of Teaching Evaluation Data

John Jordi, Ph.D., May 7, 2018
Learning & Organizational Development Specialist
Office of Faculty Development & Teaching Excellence



Introduction & Research Questions

- Student evaluation of instruction has played a key role in higher education for decades.
- Common uses of evaluations
 - Improvement of instruction
 - Promotion and Tenure
 - College, Department, and Program accreditation

Introduction & Research Questions

1. What does our teaching evaluation instrument actually tell us about our teaching?
 - Are the items that students use to evaluate us actually measuring different things?
 - Do the items in the teaching evaluation instrument actually produce a reliable scale?
2. How much, on average, are teaching evaluations affected by level of instruction and class size?

Current Course Evaluation Questions

Part I: Instructor	
1. Description of course objectives and assignments	<input type="radio"/> ★★★★★
2. Communication of ideas and information	<input type="radio"/> ★★★★★
3. Expression of expectations for performance in this class	<input type="radio"/> ★★★★★
4. Availability to assist students in or out of class	<input type="radio"/> ★★★★★
5. Respect and concern for students	<input type="radio"/> ★★★★★
6. Stimulation of interest in course	<input type="radio"/> ★★★★★
7. Facilitation of learning	<input type="radio"/> ★★★★★
8. Enthusiasm for the subject	<input type="radio"/> ★★★★★
9. Encouragement of independent, creative, and critical thinking	<input type="radio"/> ★★★★★
10. Overall rating of the instructor	<input type="radio"/> ★★★★★

Data Set

- UF evaluations from Fall 1995 to Fall 2017.
 - 19 colleges
- Only includes publicly visible data.
- 419,563 sections.
- 13,721,751 Students enrolled.

Inter-item correlations

	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
Q1	1.000									
Q2	0.882	1.000								
Q3	0.900	0.878	1.000							
Q4	0.776	0.789	0.802	1.000						
Q5	0.771	0.798	0.797	0.854	1.000					
Q6	0.813	0.878	0.840	0.791	0.823	1.000				
Q7	0.860	0.918	0.873	0.818	0.836	0.917	1.000			
Q8	0.741	0.793	0.770	0.749	0.780	0.872	0.821	1.000		
Q9	0.784	0.833	0.820	0.793	0.820	0.879	0.868	0.845	1.000	
Q10	0.869	0.918	0.884	0.848	0.875	0.910	0.934	0.841	0.883	1.000

Cronbach's Alpha (0.981), Average Inter-item correlation (0.839).

Regression of Instruction Evaluation (Q10) on Level of Course and Class Size.

	CALS	CLAS	Education	Engineering	Fine Arts	Medicine	WCBA
Lower	.037 (.013)	-.150 (.003)	.102 (.023)	.164 (.014)	-.042 (.008)	.525 (.407)	-.037 (.012)
Graduate	.014 (.007)	.105 (.006)	.103 (.011)	.266 (.008)	-.083 (.012)	.180 (.019)	.024 (.008)
Lg enroll	-.056 (.002)	-.102 (.002)	-.071 (.006)	-.083 (.004)	-.124 (.004)	-.026 (.002)	-.079 (.004)
Constant	4.568 (.009)	4.657 (.007)	4.499 (.024)	4.295 (.013)	4.811 (.011)	4.382 (.021)	4.499 (.017)
R ²	.016	.056	.022	.061	.054	.004	.018
N of cases	29,665	142,898	14,854	29,139	19,264	39,645	18,332

Entries are unstandardized regression coefficients, with standard errors in parentheses.

Expected Mean Values (Overall Rating of Instructor)

CLAS

Size	Male Faculty Undergraduate	Male Faculty Graduate	Female Faculty Undergraduate	Female Faculty Graduate
0-49	4.21	4.54	4.23	4.47
50-99	4.09	4.47	4.11	4.35
100-249	4.05	4.12	4.07	4.31
250+	4.07	4.02	4.09	4.33

Engineering

Size	Male Faculty Undergraduate	Male Faculty Graduate	Female Faculty Undergraduate	Female Faculty Graduate
0-49	4.03	4.27	4.06	4.29
50-99	3.92	4.15	3.94	4.18
100-249	3.87	4.11	3.90	4.13
250+	3.90	4.13	3.92	4.16

Expected Mean Values (Overall Rating of Instructor)

Medicine

Size	Male Faculty Undergraduate	Male Faculty Graduate	Female Faculty Undergraduate	Female Faculty Graduate
0-49	4.27	4.51	4.30	4.53
50-99	4.15	4.39	4.18	4.41
100-249	4.11	4.35	4.14	4.37
250+	4.13	4.37	4.16	4.39

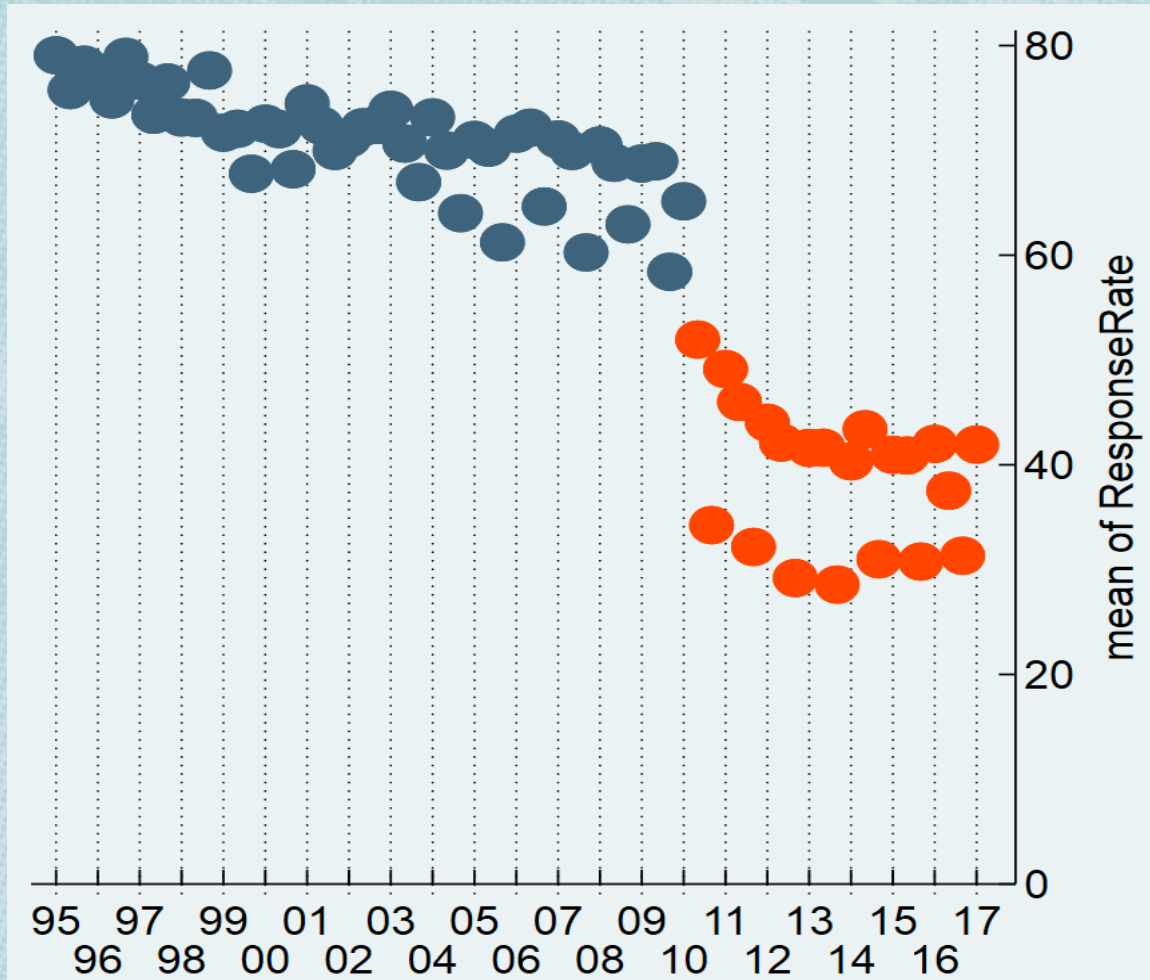
WCBA

Size	Male Faculty Undergraduate	Male Faculty Graduate	Female Faculty Undergraduate	Female Faculty Graduate
0-49	4.10	4.33	4.11	4.35
50-99	3.98	4.21	4.00	4.24
100-249	3.93	4.17	3.96	4.19
250+	3.97	4.19	3.98	4.22

Mean Values (Overall Rating of Instructor)

	Online Courses	On-Campus Courses
Average Mean Q10 (1995 to Fall 2017)	4.34	4.31

Response Rate Mean over Time



Overall Rating of Instructor Mean Over Time

