1785
The University of Georgia

1785
The University of Georgia

Interdisciplinary Soft Skills: A Model for Integrating Public Speaking into Science-based Courses to Reduce Public Speaking Anxiety

Chris Morgan, Nick Fuhrman, Milton Newberry, & Sarah DeLoach

University of Georgia

Introduction

- College graduates lack soft skills such as public speaking necessary to succeed in the workplace (Brooks et al., 2008; Crawford et al., 2011)
- Traditional public speaking courses build oral communication skills in a formal (classroom) environment
- Can science-based courses taught in a non-formal environment reduce public speaking anxiety like a public speaking course can?

1785 The University of Georgia

Methods
Course Set-up

Public Speaking Course (n = 44)	Science-based Course (n = 17)

• Three **indoor** speaking opportunities (including a demonstration)
 	
• Course content:
  • Reducing anxiety
  • Speaking to inform and persuade
  • Using body language
	• Three **outdoor** speaking opportunities (including a demonstration)
	
	• Course content:
	  • Wildlife ID
	  • Influencing conservation efforts
	  • Teaching 101

1785 The University of Georgia

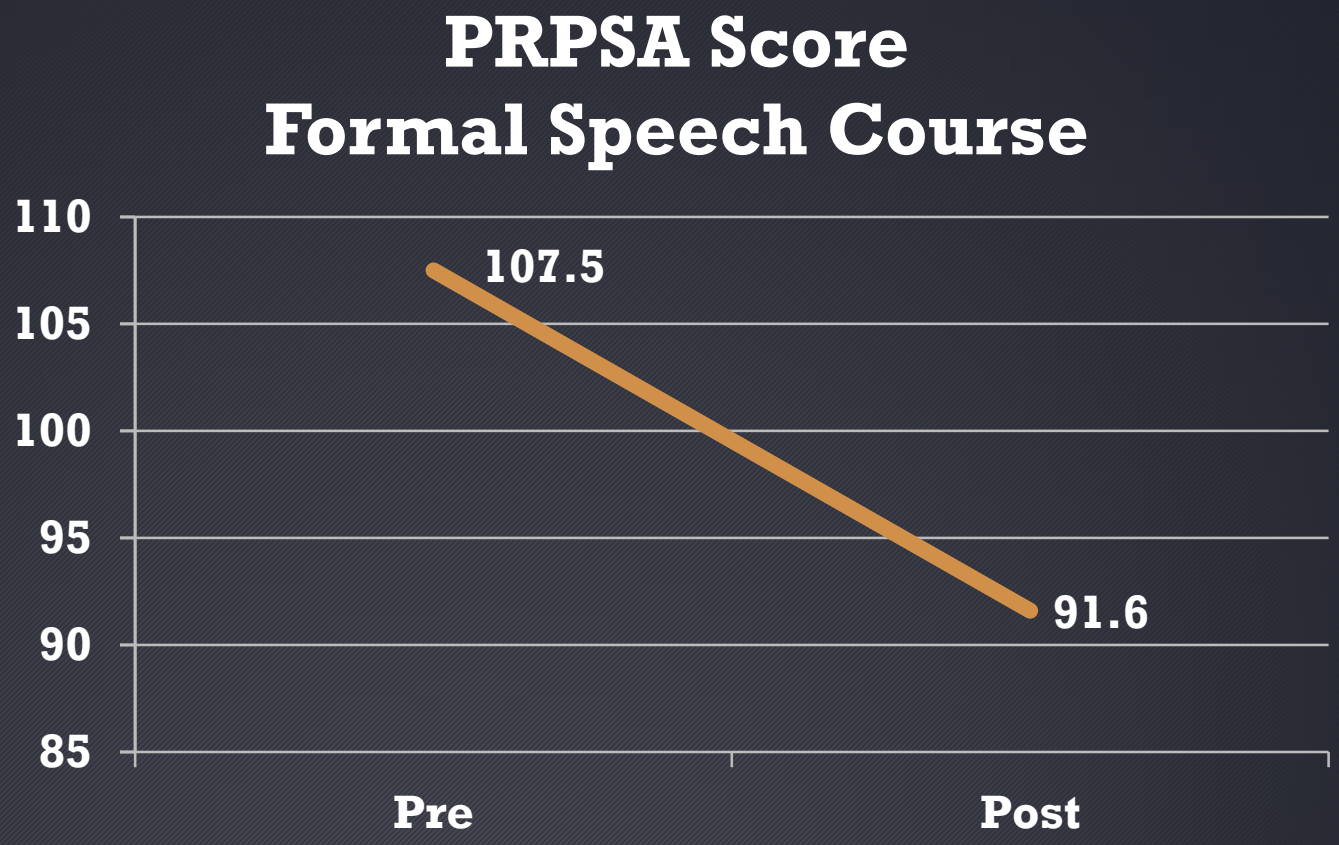
Methods

Data Collection and Analysis

- Student public speaking anxiety (PSA) measured using the *Personal Report of Public Speaking Anxiety* (PRPSA) instrument (McCroskey, 1970)
  - Cronbach's alpha > 0.90 in pilot tests
- Paired samples *t*-test to check for differences between pre-course and post-course anxiety scores
- Independent samples *t*-test to check for differences between groups

1785 The University of Georgia

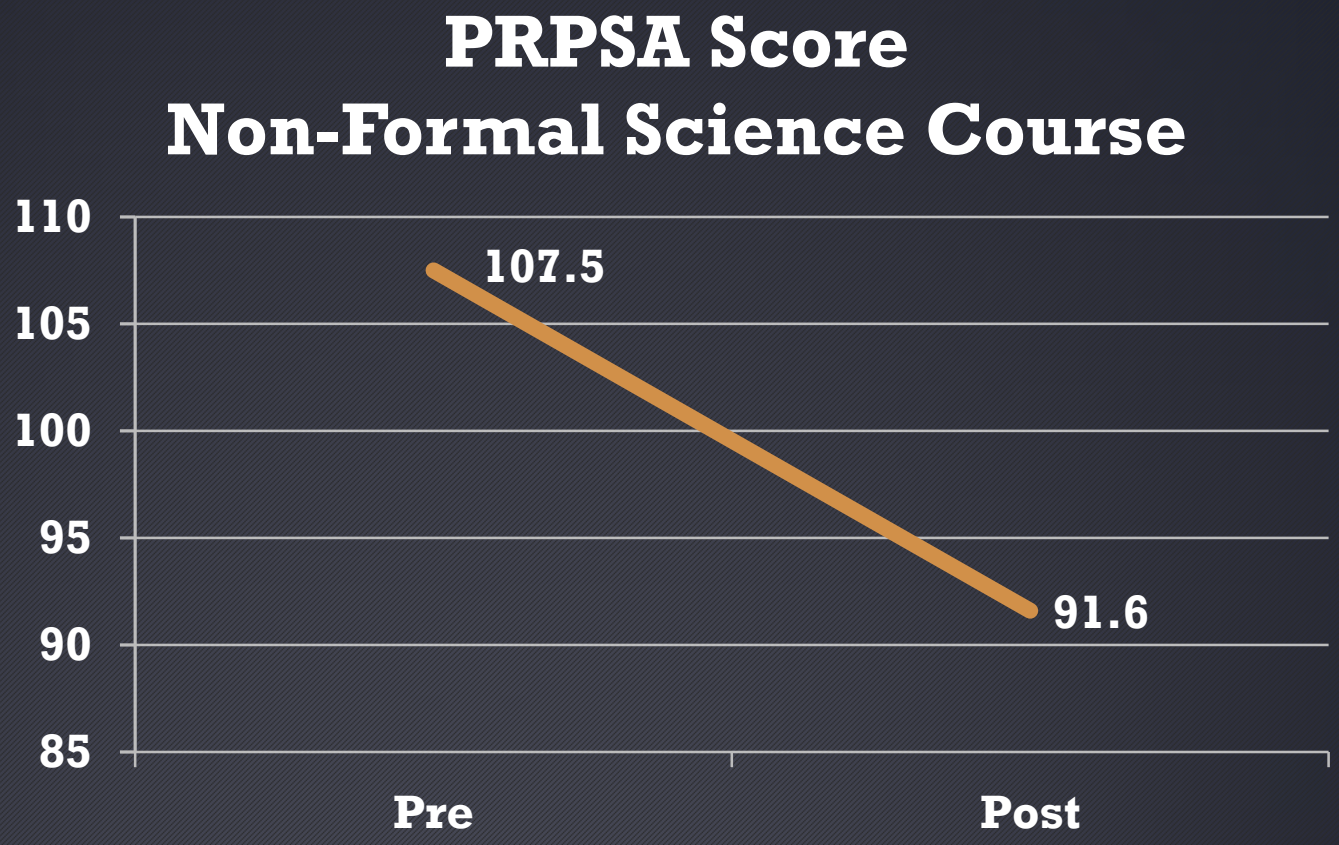
Results



t-value = 8.622, p = .000, Cohen's d = .72

1785
The University of Georgia

Results



t-value = 2.572, p = .020, Cohen's d = .54

1785
The University of Georgia

Model

S - Students **sign-up** for presentation topic and date

P - **Present** expectations to students

E – **Establish** grading rubric and share with students

A – Student **attends** meeting with instructor in advance to help them understand material, lab equipment, etc. (establish rapport)

C - Student **conveys** information using identified expectations

H - Student "**hears**" feedback on their presentation through rubric-based evaluations

1785
The University of Georgia

Thank you!

1785
The University of Georgia

PRPSA Scores by Course Type

Group	Mean (*SD*) Range					
	Pre	Post	*t*-value	*df*	*p*	Cohen's *d*
Formal Speech Course (*n* = 44)	107.5 (21.6) 57-160	91.6 (22.5) 44-137	8.622	43	.000	.72
Non-formal Science-based Course (*n* = 17)	107.5 (32.8) 49-170	91.6 (26.2) 54-139	2.572	16	.020	.54
t-value	.000	.007				
Between Groups *p*	1.00	.994				
Cohen's *d*	0	0				

1785 The University of Georgia