Supporting Unauthorized Immigrant Students

Gregory J. Cramer
UW-Parkside
April 28, 2017

Background

- Civics/American Government is a graduation requirement in WI
- Civics is *the* class where students learn about democracy, how government functions, the rights and responsibilities of citizenship such as voting, etc.
- Civics Textbooks do not acknowledge the presence of undocumented students, despite that fact that each year an estimated 65,000 graduate from U.S high schools.
- Thus, undocumented students are made invisible and mainstream students do not learn about the issue.

Civics Textbooks: "You"

- "As an American citizen, did you know you have certain rights as well as responsibilities? Read to find out what it means to be a citizen of a country" (*Civics Today*, Glencoe, 2018, p. 6).

- "Your vote is your voice to express your opinion on issues and to choose your representatives on our political system" (*United States Government*, Holt McDougal, 2012, p. 71).

- Similarly, undocumented students are urged to go to college, to apply for FAFSA, etc.

The 14th Amendment: The Constitutional Basis for Undocumented Students

- The Equal Protection Clause of the 14th Amendment:

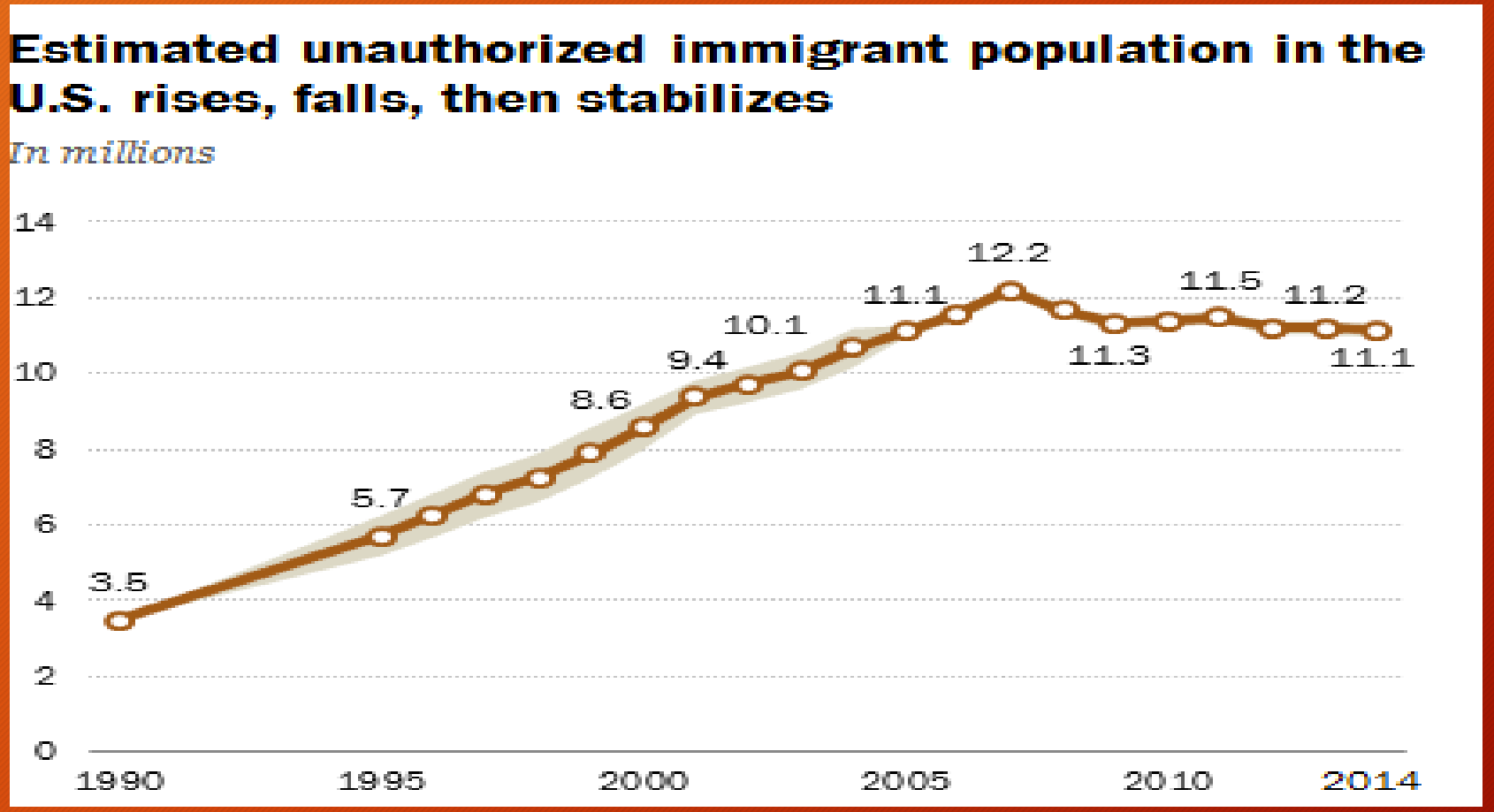
- "No State shall make or enforce any law which shall abridge the privileges or immunities of citizens of the United States; nor shall any State deprive any person of life, liberty, or property, without due process of law; *nor deny to any person within its jurisdiction the equal protection of the laws*" (emphasis added).

Plyler v. Doe (1982)

- States cannot deny undocumented immigrant children an education, because they are protected under the equal protection clause of the 14th Amendment.

- Plyler only applies to K-12 education

Demographics
Pew Hispanic Center (2016)



Demographics
Pew Research Center (2016)

- **There were 11.1 million unauthorized immigrants in the U.S. in 2014**
- **The U.S. civilian workforce included 8 million unauthorized immigrants in 2014, accounting for 5% of those who were working or were unemployed and looking for work**
- **Mexicans made up 52% of all unauthorized immigrants in 2014, with increasing numbers from Asia, Central America and Sub-Saharan Africa**
- **Six states accounted for 59% of unauthorized immigrants in 2014: California, Texas, Florida, New York, New Jersey and Illinois**
- **A rising share of unauthorized immigrants have lived in the U.S. for at least a decade.**

Mixed-Status Families
Pew Hispanic Center (2011)

- Approximately 1 million unauthorized immigrants are children
- An additional 4.5 million people younger than 18 were born in the U.S. to at least one unauthorized immigrant parent.
- While the population of unauthorized immigrant children has decreased from a peak of 1.6 million in 2005, the number of U.S.-born children with at least one unauthorized immigrant parent has more than doubled since 2000.

Mixed-Status Families, con't
Pew Research Center (2011)

- At least 9 million people are in "mixed-status" families that include at least one unauthorized adult and at least one U.S.-born child.
- This makes up 54% of the 16.6 million people in families with at least one unauthorized immigrant.
- There are 400,000 unauthorized immigrant children in such families who have U.S.-born siblings.

Immigration and Customs Enforcement (ICE) 287(g) Program

- Local law enforcement agencies can deputize officers as ICE agents

- Milwaukee County Sheriff David Clarke is participating in the 287(g) program

“Sanctuary Cities” Under Attack

- President Trump signed an executive order on January 25 that strips sanctuary cities of federal funds.
- Sanctuary Cities (such as Chicago, Milwaukee, NYC, LA, etc.) limit how much they cooperate with federal immigration authorities
- Executive order blocked by a Federal Judge in late April.

Ways to support our immigrant students

- Be aware of the fact that your students probably have undocumented parents, siblings, or friends
- The Dream Act
- DACA
- In-state tuition for undocumented students

The Dream Act

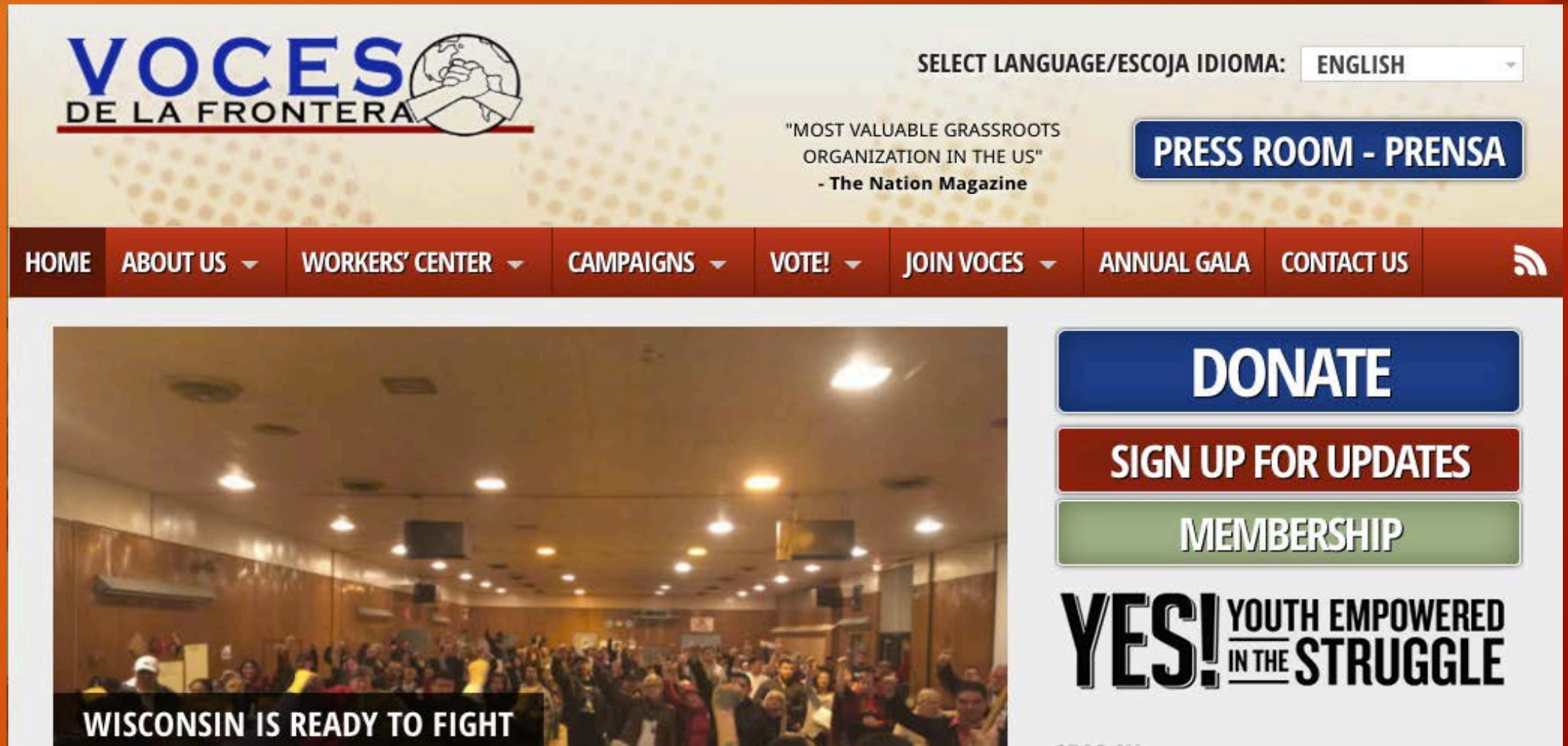
- Among other provisions, the Dream Act would have extended in-state tuition rates to undocumented graduates of U.S. High Schools.

- The Dream Act was defeated introduced, defeated, and re-introduced many times between 2001 and the present

Deferred Action for Childhood Arrivals (DACA)

- Executive action by Obama administration
- DACA allows certain undocumented immigrants who entered the country as minors to receive a renewable two-year period of deferred action from deportation and eligibility for a work permit.
- DACA is a stop gap; it provides no legal path to citizenship

Voces De La Frontera



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Combating Stereotype Threat in Introductory Biology

Natalia Taft and Cathy Mossman

Department of Biological Sciences

April 28th, 2017

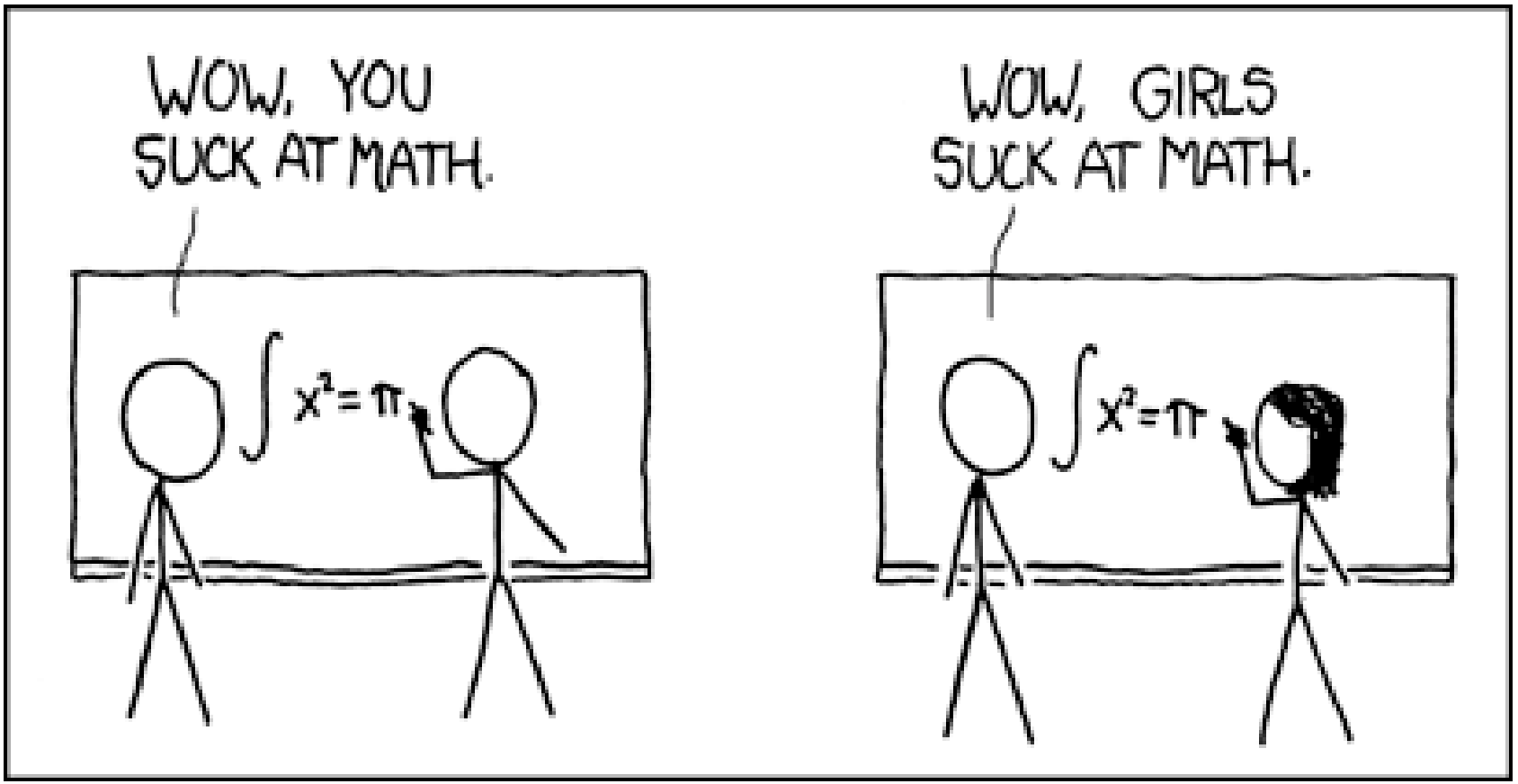
Promoting Diversity and Inclusion Mini-Conference

University of Wisconsin Parkside

What is stereotype threat?

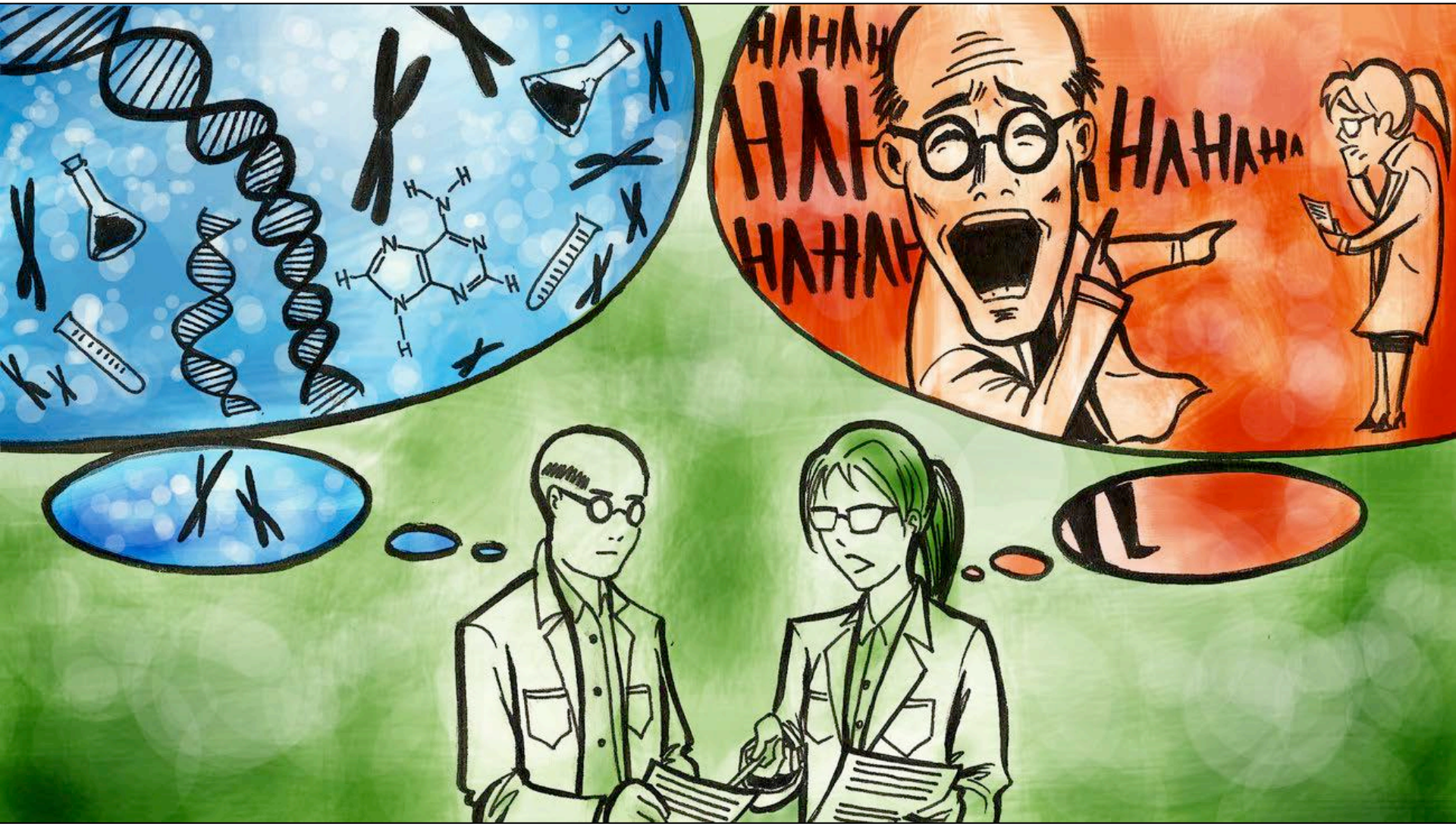
Stereotype Threat

Fear of validating stereotypes about your group,
(even if you don't believe them).



https://xkcd.com/385/

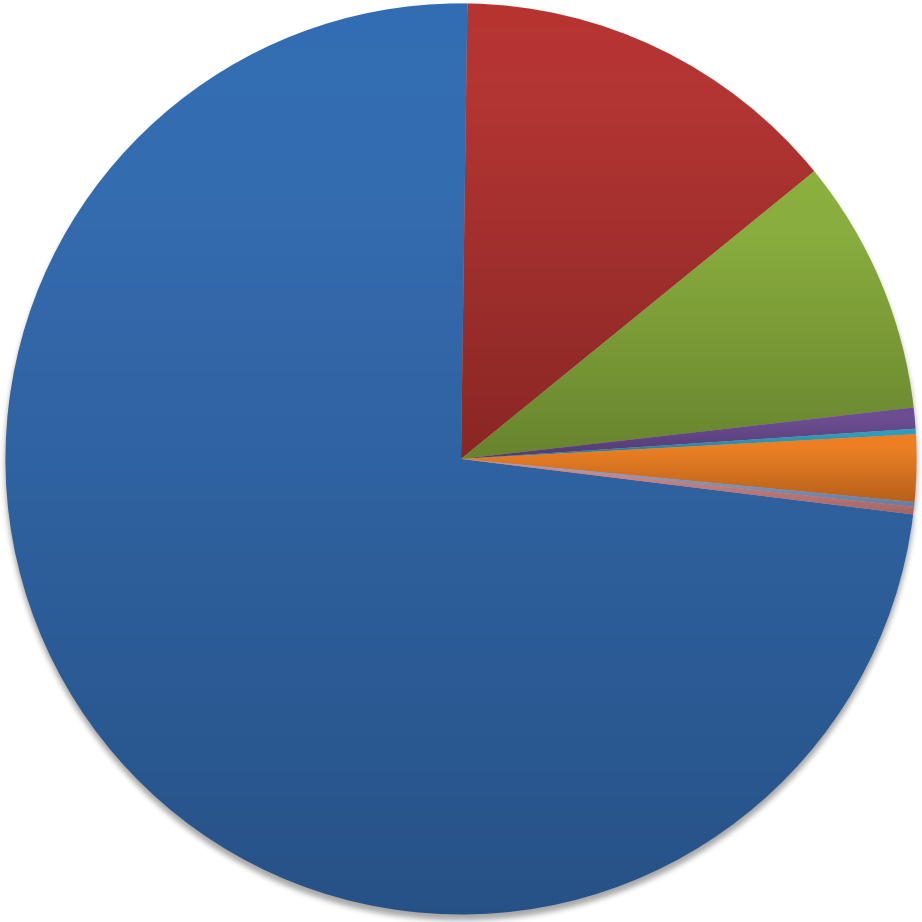
How does stereotype threat work?



http://www.npr.org/2012/07/12/156664337/stereotype-threat-why-women-quit-science-jobs

Who is at risk of stereotype threat?

Ethnicity of Parkside Students (2015-16)



- White
- Hispanic
- African American
- Southeast Asian
- Hawaiian/Pacific Islander
- International

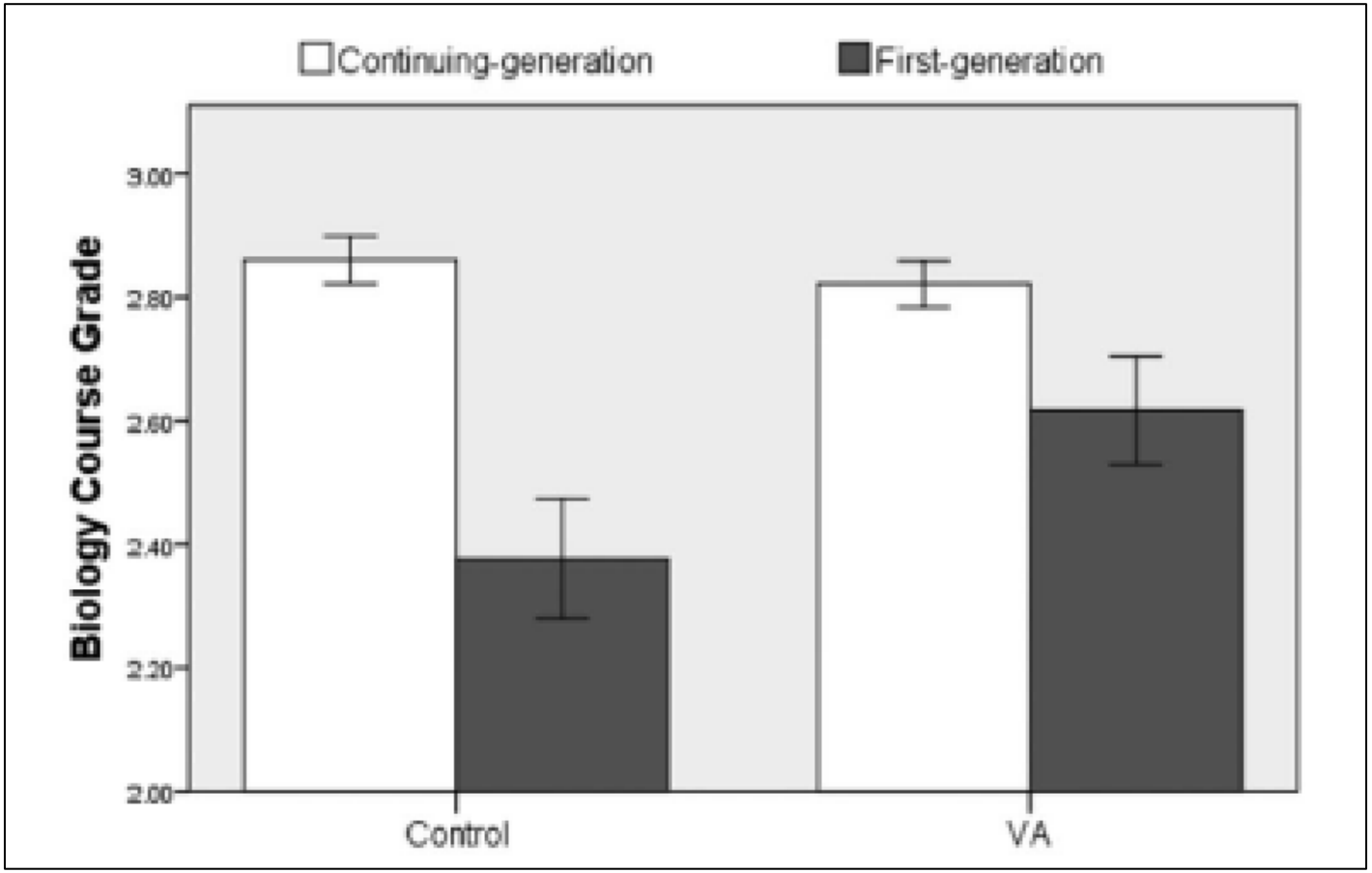
What can we do?

Values Affirmation writing exercises have been shown to help alleviate stereotype threat in students at risk for stereotype threat.

Journal of Educational Psychology
2014, Vol. 106, No. 2, 375–389

Closing the Social Class Achievement Gap for First-Generation Students in Undergraduate Biology

Judith M. Harackiewicz, Elizabeth A. Canning, Yoi Tibbetts, Cynthia J. Giffen, Seth S. Blair, Douglas I. Rouse, and Janet S. Hyde
University of Wisconsin–Madison



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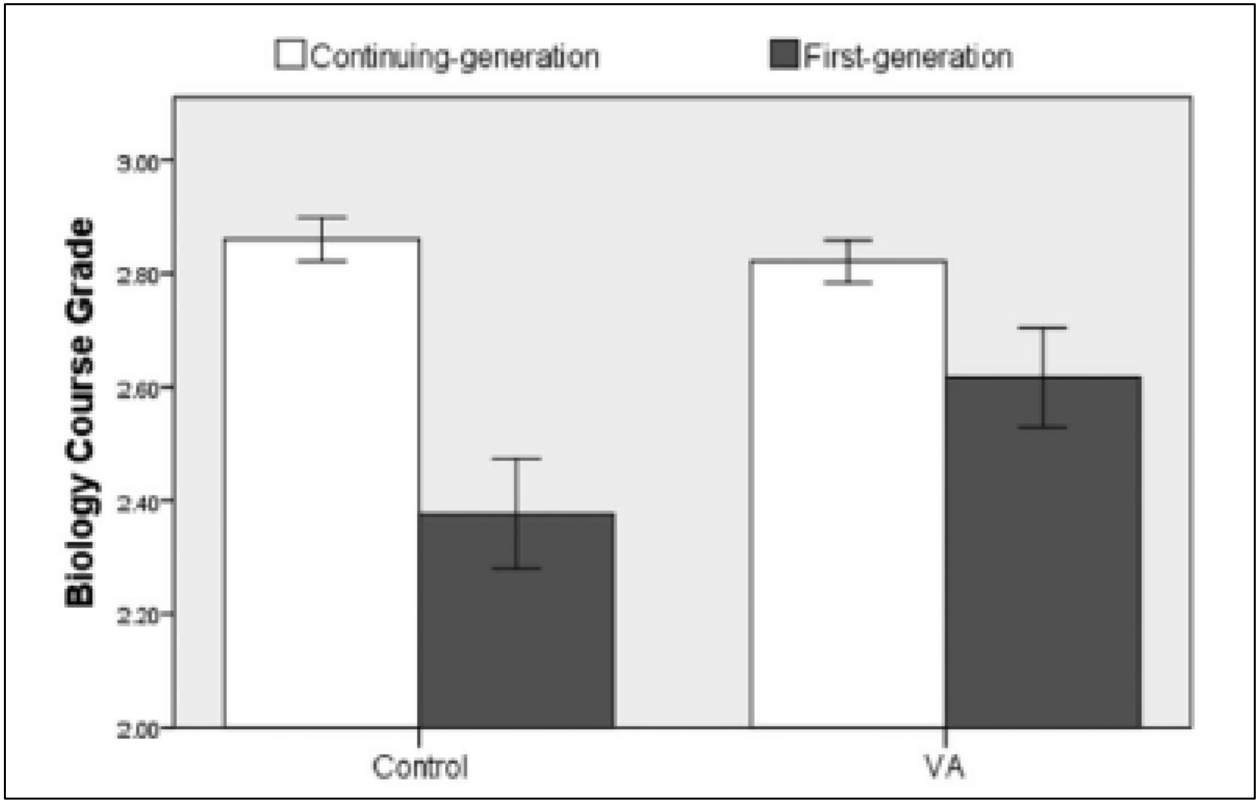
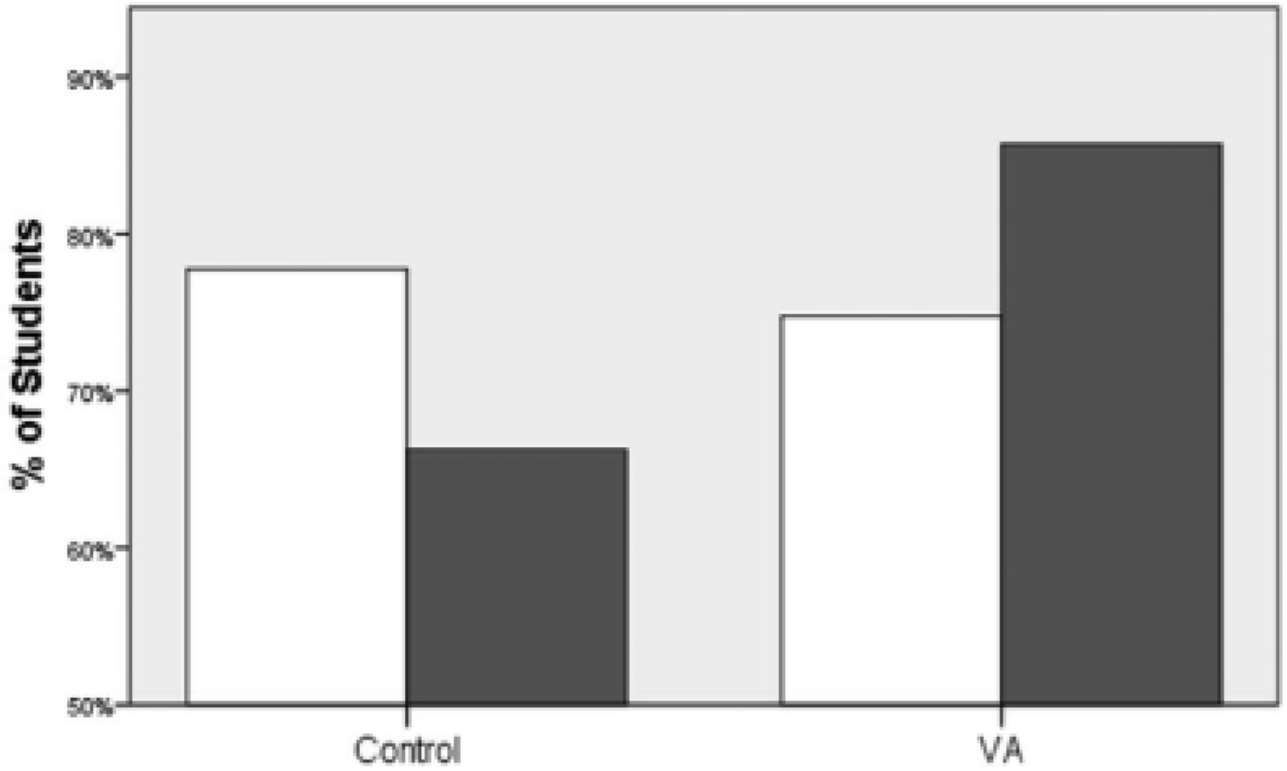


At UW Parkside, first generation students make up a majority of our students at **52.9%** in 2015-2016

The values affirmation also helped with retention!



At UW Madison, a higher percentage of students enrolled in the second semester of biology from the intervention group (white bar is continuing generation, dark bar is first generation)

(Harackiewicz et al. , 2014)

Hypothesis

Implementing a short (15 minute) values affirmation writing exercise early in the semester will help combat stereotype threat in BIOS 102.

Predictions

Students who affirm their own values will have higher average exam performance than the control group.

This effect will be more pronounced in first-generation (FG) students and under-represented minority students (URMS) than for continuing-generation (CG) and non-URMS.

Experimental Design

All students received an identical list of 14 values:

Athletic Ability
Being Good at Art
Belonging to a Social Group
Career
Creativity
Curiosity
Government or Politics
Independence
Learning and Gaining Knowledge
Music
Nature and Environment
Relationships with Family and Friends
Sense of Humor
Spiritual or Religious Values

Experimental Design

Students in two sections of BIOS 102 in Fall 2015 were randomly sorted into control and values affirmation groups and asked the following:

Affirmation

Choose the three values MOST important to you and briefly explain why they are important to you

Control

Choose the three values that are LEAST important to you and briefly explain why they might be important to someone else

Table 1. Demographics of students participating in the study

	Values Affirmation	Control Group
URM	12	11
Non-URM	25	26
First Generation	18	24
Continuing Generation	19	13
Female	21	24
Male	15	12
Section 001	18	17
Section 002	20	21

76 total students participated in study;
15 of the 91 original population were excluded
(dropped, no consent, or name illegible)

Analysis

Fixed Effects	REML	Log-Likelihood	Model df	AIC	BIC	χ^2_1	p
Intercept Only	-292.3	-293.7	3	593.5	600.3		
Race	-287.5	-291.0	4	590.1	599.2	5.388	0.020
Treatment Race	**-283.0**	**-288.6**	**5**	**587.2**	**598.6**	**4.875**	**0.027**
Treatment Race 1st Generation	-280.6	-288.3	6	588.7	602.3	0.547	0.460
Treatment Gender Race	-276.5	-287.4	7	588.9	604.8	1.771	0.183
Treatment Gender Race 1st Generation	-274.2	-287.2	8	590.5	608.7	0.415	0.520

Results

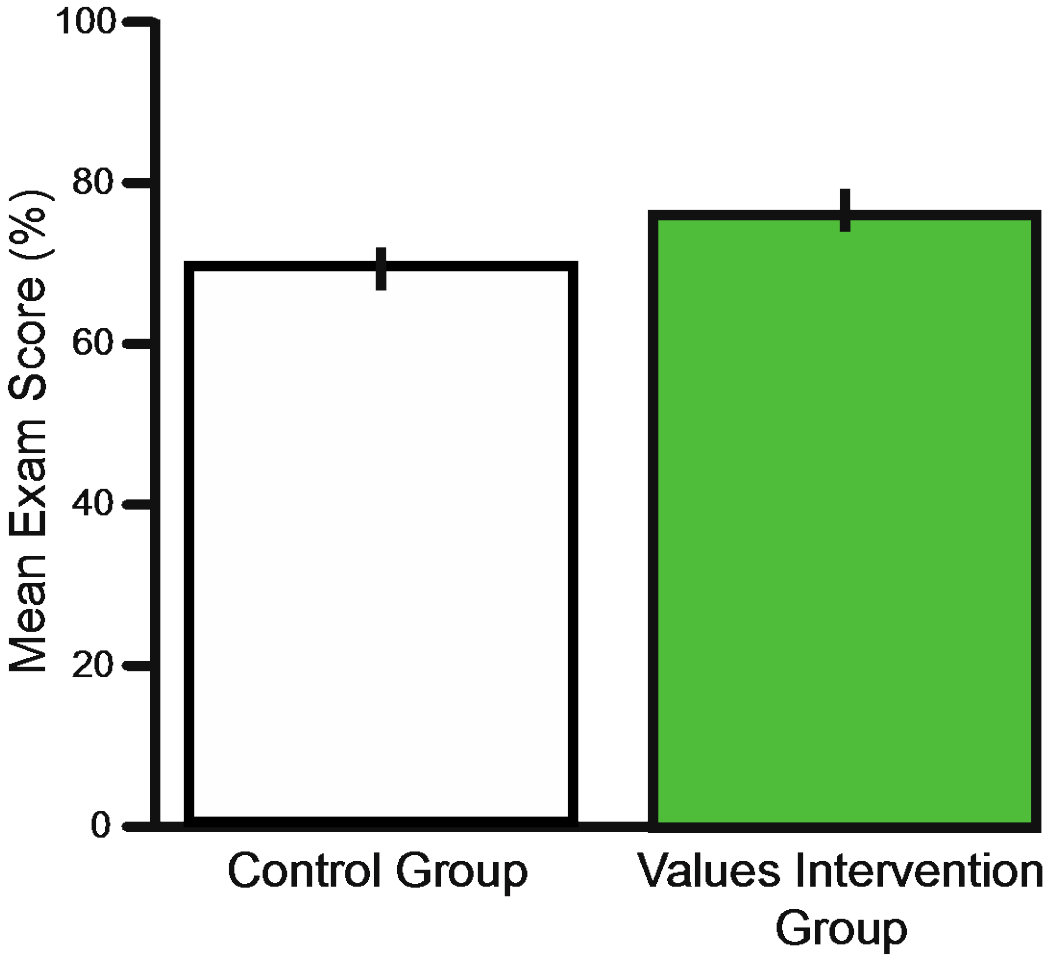


Figure 1. Mean exam scores (%) of all students in the values affirmation intervention group (green) vs. control group (white). Vertical lines represent standard error.

Results

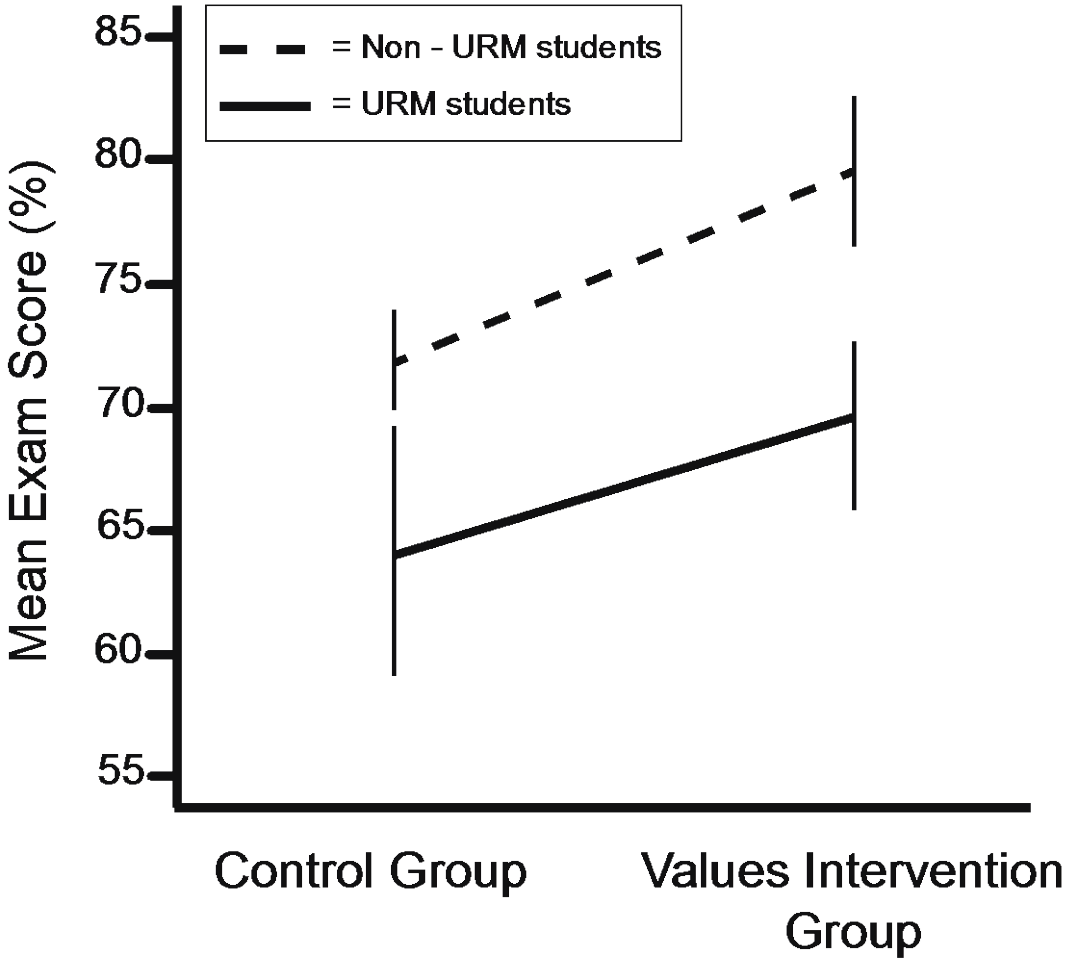
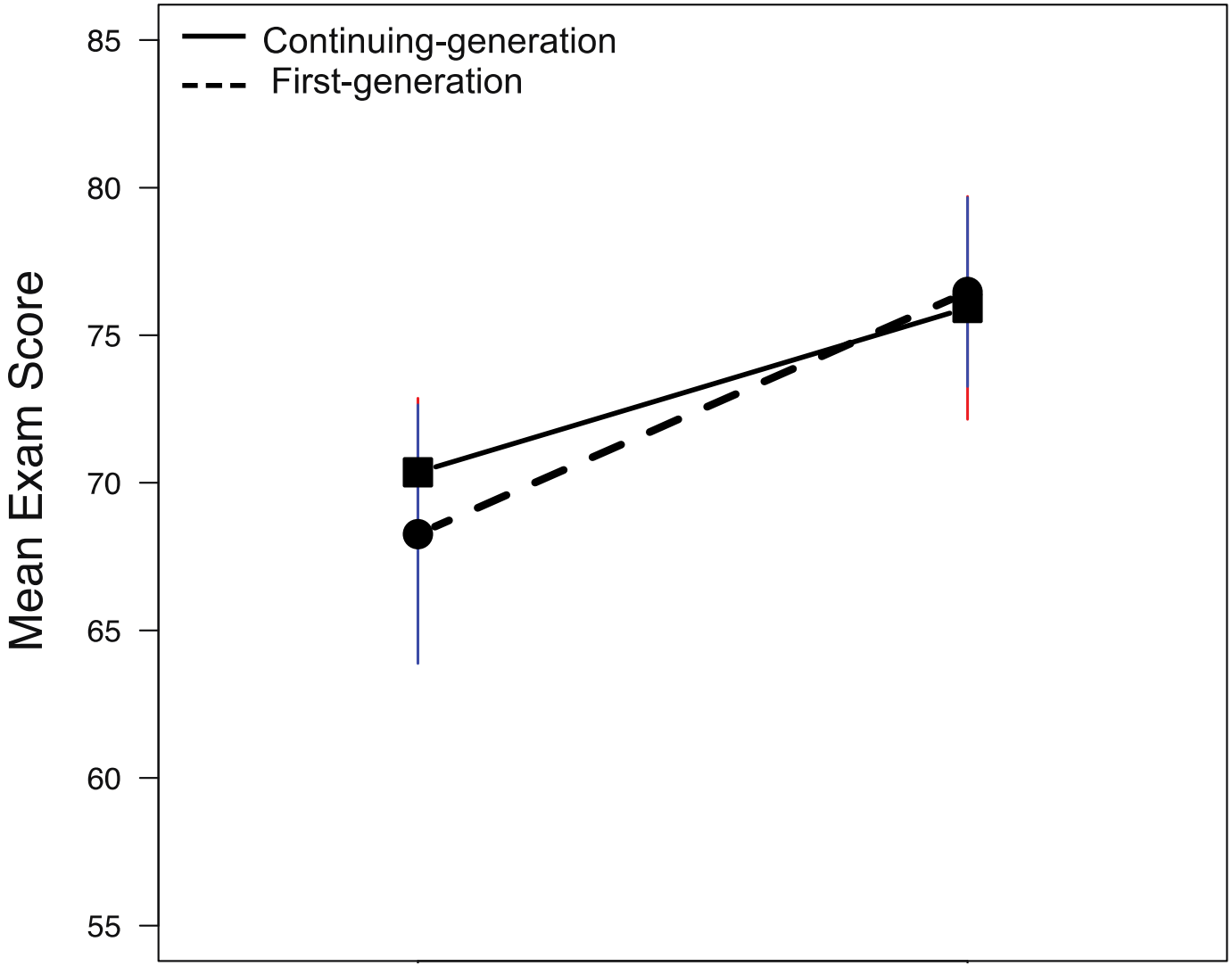
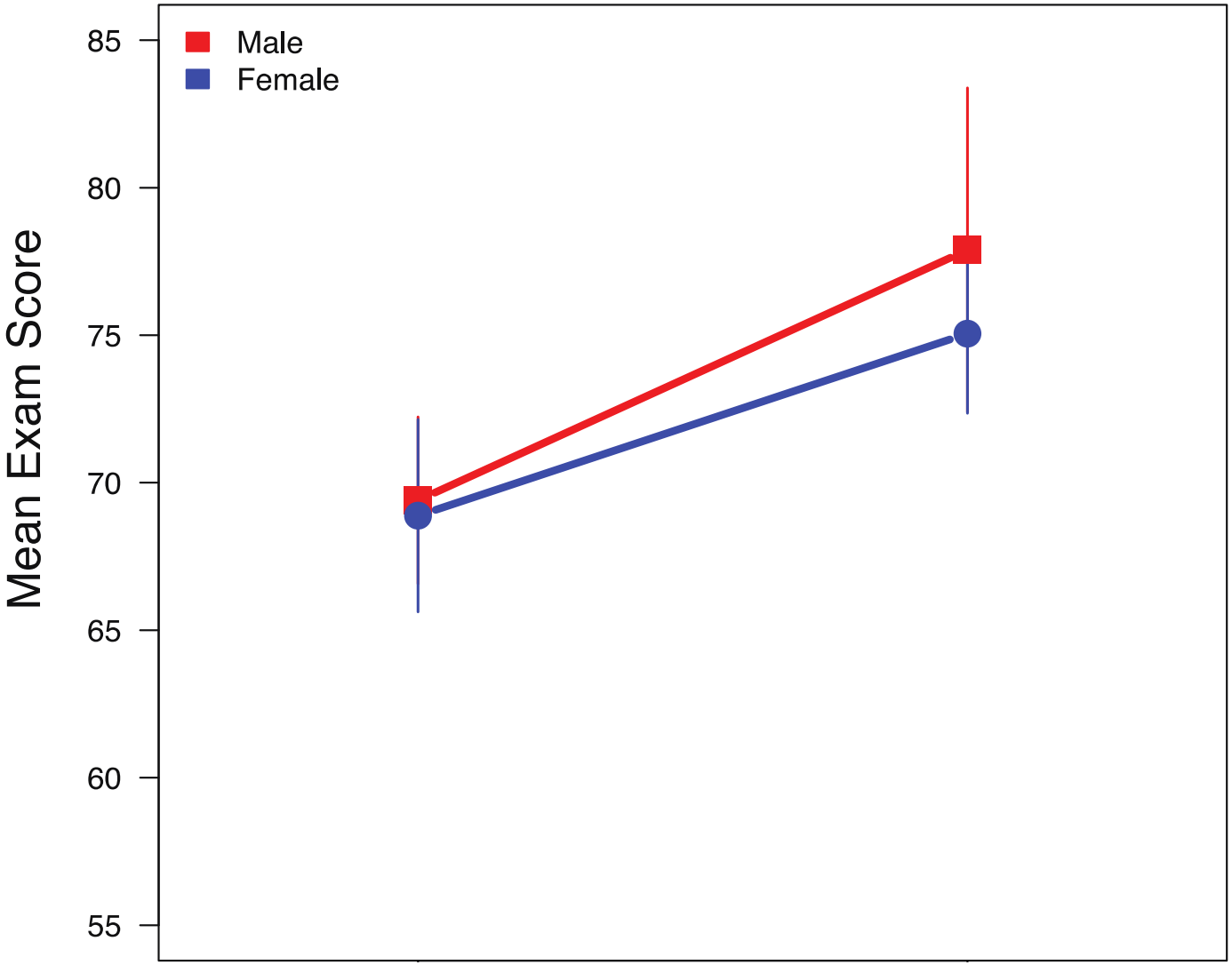


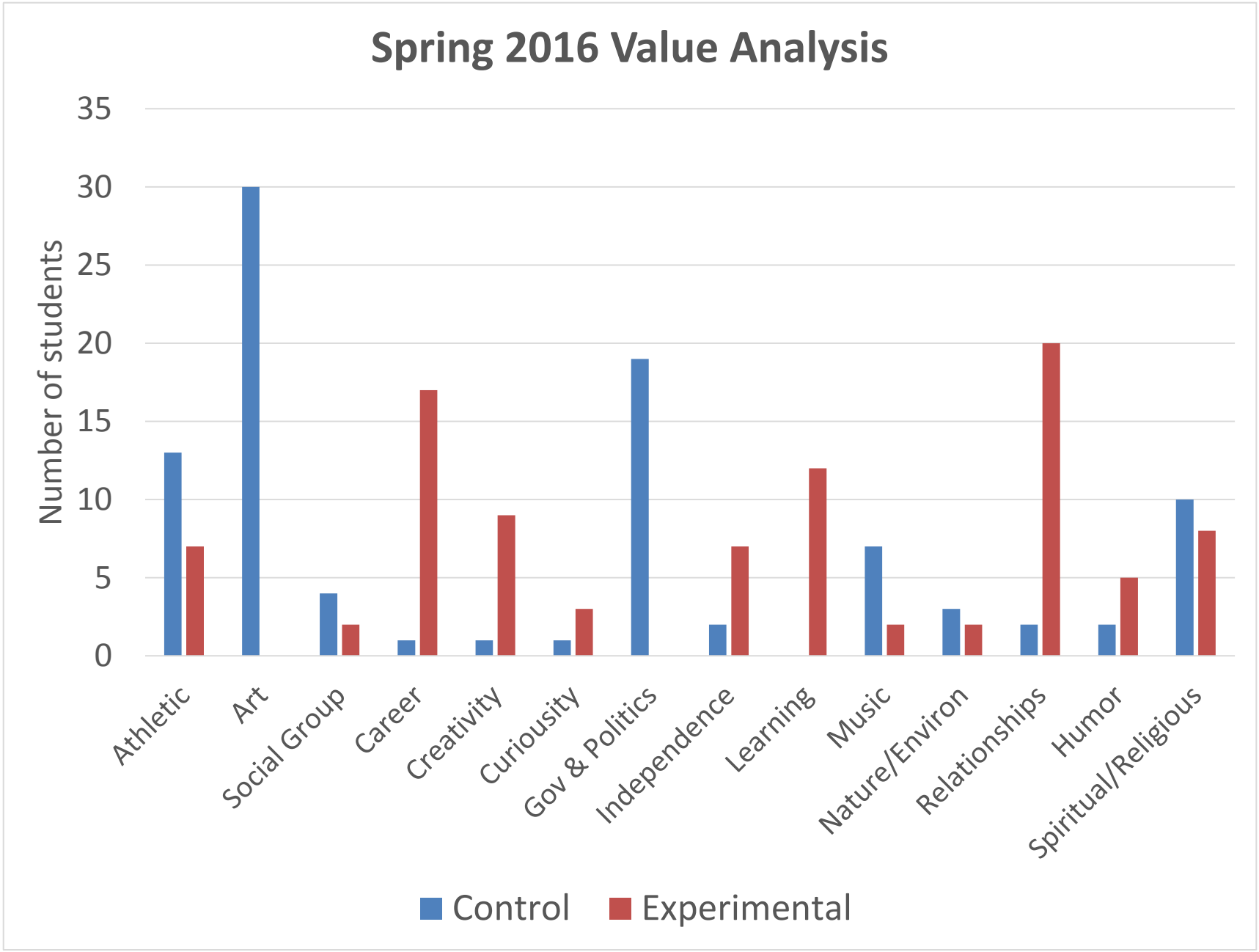
Figure 2. Mean exam scores (%) of underrepresented minority students (URM, solid line) and non-URM (dotted line) students in the values affirmation intervention group (green) vs. control group (white). Vertical lines represent standard error.

Continuing-Generation vs. First Generation



Males and Females




Spring 2016 Value Analysis
Number of students
35
30
25
20
15
10
5
0
Athletic
Art
Social Group
Career
Creativity
Curiousity
Gov & Politics
Independence
Learning
Music
Nature/Environ
Relationships
Humor
Spiritual/Religious
Control
Experimental

Discussion

- On average, students in the values affirmation group performed **7% better** on exams than students in the control group.

- URMs in the values affirmation group performed higher than controls. However, non-URMs still performed, on average, **8.5% better** on exams.

- The values affirmation intervention helped all students, even traditional students.

- Campuses vary, more work needs to be done!

Future Directions

- The experiment was repeated this semester, Fall 2016.

- This intervention helps all students, so we have spoken with colleagues about incorporating it into the first week of classes in the future.

- Continue to research ways to attract, support and retain students in STEM, with a special focus on URM students.

Acknowledgments

UW-Parkside Office of the Provost for funding to participate in the Wisconsin Teaching Fellows and Scholars program and OPID spring conference.

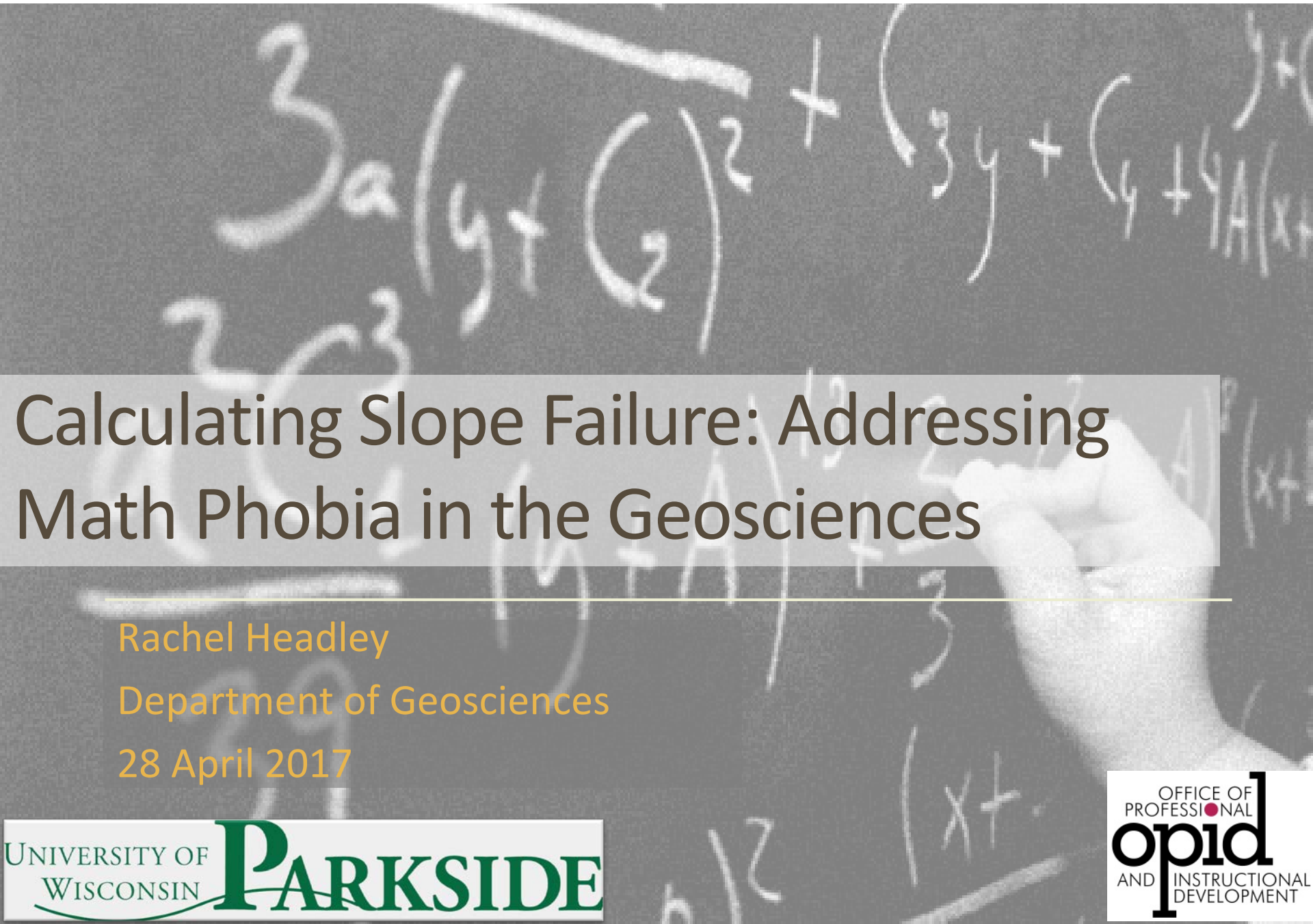
Drs. Cyndi Kernahan and David Voelker and all the organizers and participants of the 2015-2016 WTFS Program.

Drs. David Rogers for his participation in Fall 15.

Dr. Benjamin Taft for statistical analysis and graphics.

Dr. Jim Robinson for his assistance and continued support of SOTL at Parkside and beyond.

Shout Out: Wisconsin Teaching Fellows and Scholars!!!



Calculating Slope Failure: Addressing Math Phobia in the Geosciences

Rachel Headley

Department of Geosciences

28 April 2017

University of Wisconsin Parkside

Office of Professional and Instructional Development

Thanks to

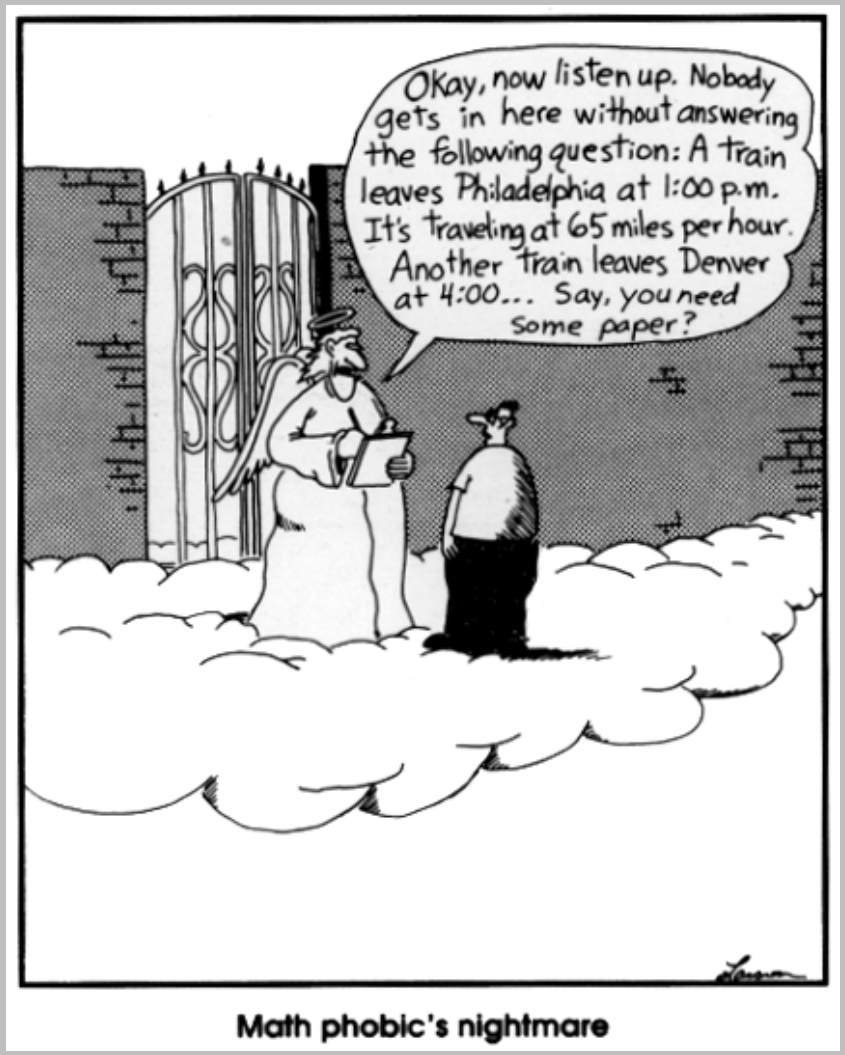
- OPID: Wisconsin Teaching Fellows & Scholars Program
- Parkside GEOS Department
- Parkside Teaching and Learning Center
- Allison Liegler

What is math phobia/anxiety?

Anxiety related to one's self-efficacy* toward their math skills

Not necessarily tied to ability to performance in math

*A person's feelings about their abilities



Math phobic's nightmare

High math anxiety effects

- Memory & Physiological symptoms
  - Anxiety and anxiety-related problems
  - Physical pain
  - Decrease function in working memory
- Underperformance in quantitative areas
  - Math courses and math-focused assessments
  - Lower levels of math in K-16+
  - Fewer quantitative-heavy courses
  - Less representation in STEM fields for careers

Lyons & Beilock, 2012; Maloney et al., 2013; Ashcraft, 2002; Furner & Gonzalez-DeHass, 2011; Maloney et al, 2013

Math Anxiety, Race, and Gender

- Gender
  - Women found to have higher math anxiety levels in general
  - Girls' anxiety highly influenced by female K-5 teachers
- Race
  - Few studies show distinct impacts of race on math anxiety
  - Stereotype threat has similar, and hard to untangle, impacts
- Socio-economic status
  - Low-SES status tied to higher math anxiety levels
  - Parents are very influential on math anxiety levels

Why does this matter for geoscience?

- Required math in geoscience curriculum varies widely from college algebra to multiple semesters of calculus (concentrations)
- Different upper-level courses might have very different requirements, i.e., Geophysics versus Geochemistry
- Career choice or graduate school attendance can greatly depend upon mathematical competence (or just math grades)

Summit on Future of Undergraduate Geoscience Education

"Next generation graduates should be able to think critically and readily solve problems, especially those requiring spatial and temporal (i.e. 3D and 4D) interpretations. They should possess strong **quantitative skills** and an ability to apply cognate sciences to geoscience problems."

Unique Opportunities @ Parkside

- Many returning and non-traditional students

- Many first-generation students*

Anecdotally, many students struggled with mathematics in high school or in early college experiences

*I don’t think I phrased my demographic question correct to catch this.

This Study

If students are afraid of math, how are we going to ensure they reach geoscience-related quantitative competencies?

- Intervention study of geoscience majors and math anxiety
- Scholarship of Teaching and Learning (SoTL) Project facilitated through the UW System OPID Wisconsin Teaching Fellows and Scholars (WTFS) Program

Math Phobia Assessment

- Math anxiety can be measured with a variety of tools including MARS* (Mathematics Anxiety Rating Scale) with ranges generally given from low to high anxiety

- This study uses the Abbreviated Version of the Mathematics Anxiety Rating Scale (A-MARS) with 1 (low)-5 (high) scale

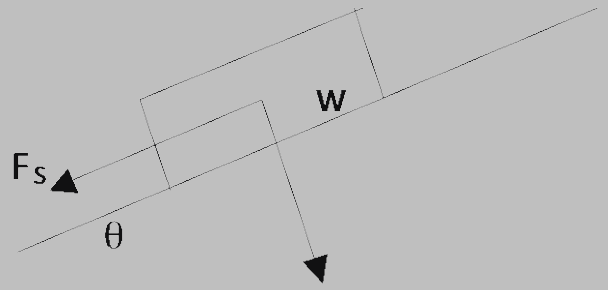
Study Set-up

- Intervention-based study within upper-level geoscience courses: Geomorphology, Sed/Strat, and Glacial Geology, and lower-level historical geology.
- Control group compared to intervention group.
- Data collected:
  - Embedded A-MARS in STEM anxiety survey at beginning and end of courses.
  - Collection of demographic information at end.
  - Optional, student-led interviews on STEM anxiety and views about anxiety research.

Evidence-based Intervention: Rebranding Factor of Safety Example

Control

1. **Calculate** the Factors of Safety for two slopes.
2. **Predict** which slope is most likely to fail.
3. **Discuss** which properties are most important for the stability of the slopes.



Intervention

1. **Predict** which of two slopes is most likely to fail.
2. **Discuss** which properties are most important for the stability of the slopes.
3. **Back up** your prediction by finding the Factors of Safety for both slopes.

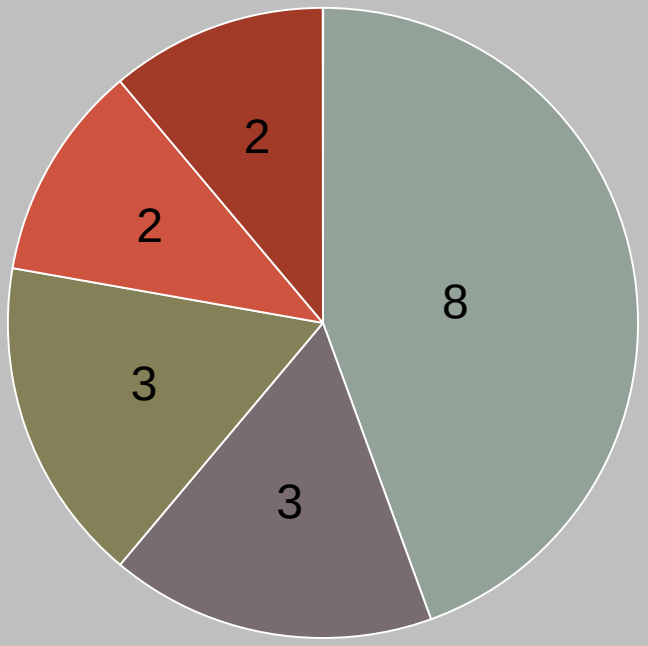
$$FS = \frac{c + (\rho g H \cos\theta - \rho_w g W)\tan\phi}{\rho g H \sin\theta}$$

Math Anxiety Ranking (AR) Results (preliminary)

- Overall (pre-course) survey
  - Average: 2.67, slightly elevated anxiety (Neutral: 2.5)
  - n=18
- Control Courses: Spring 16 Origins & Fall 15 Geomorph
  - Averages: 2.89 (pre) & 2.82 (post)
  - Change:- 0.07 (post-pre), statistically insignificant
  - Change Range: -0.65 to 0.38 (change standard deviation: 0.39)
  - n=9
- Intervention Course: Spring 16 Sed/Strat & Spring 17 Geomorph
  - Averages: 2.44 (pre) & 2.15 (post)
  - Change: -0.30 (post-pre), slight change to less anxious
  - Change Range: -0.75 to 0.11 (change standard deviation: 0.29)
  - n=9

AR Change Results (preliminary)

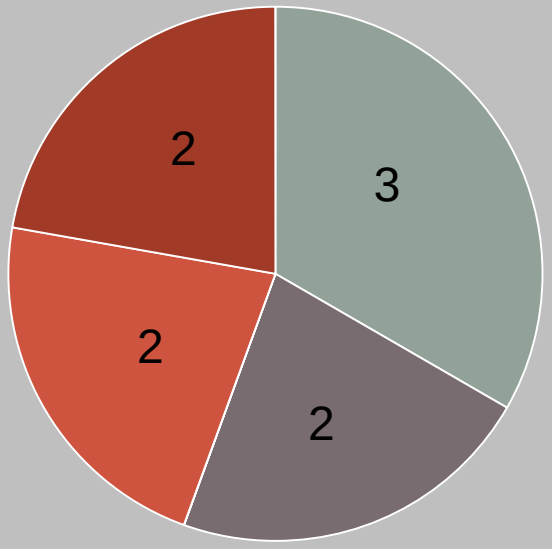
All Students n=18



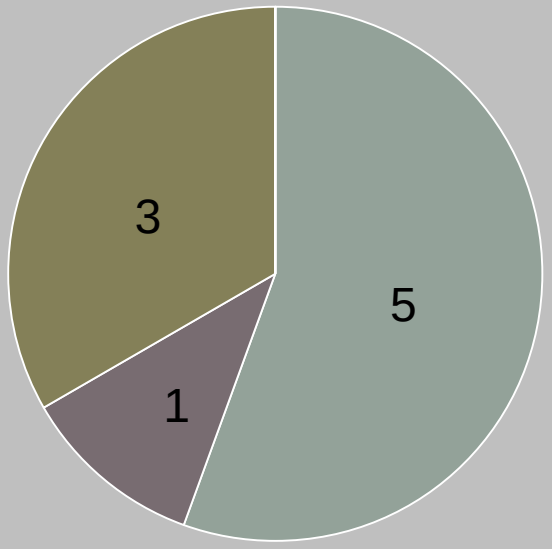
ΔAR: **Pre-AR – Post-AR**

- Much less anxiety (ΔAR<-0.3)
- Less anxiety (-0.3≤ΔAR<-0.1)
- Neutral (-0.1≤ΔAR<0.1)
- More anxiety (0.1≤ΔAR<0.3)
- Much more anxiety (0.3≤ΔAR)

No Intervention n=9



Intervention n=9



Complications

- Upper-level classes often less than <8 students
- Parkside's two geoscience concentrations have very different math requirements
- How generalizable will a study @ Parkside be?
  - Many returning and non-traditional students
  - Many first-generation students
  - Anecdotally, many students struggled with mathematics in high school or in early college experiences
  - Students expressed interest in anxiety research overall

Student Interviews

- Students could opt to be interviewed by a peer during the final part of the courses
- Among 9 eligible students, only 2 or 3 opted in
- Interview divided into 3 sections
  - **Geoscience/Major Questions:** major decision and reasons for choosing major/concentration
  - **General STEM Questions:** Favorite/least favorite STEM classes and why, classes that they would never take and why
  - **Anxiety & Meta-Anxiety Research Questions:** School/College/STEM-related anxiety, geoscience-related anxiety, anxiety research

Student 1

- Geoscience
  - Specifically mentioned choosing Earth Science Concentration (Parkside's version of Geoscience BA) because of less math requirements
  - Map scales were challenging
- STEM
  - Would never take college physics or math beyond requirements
  - Enjoyed programming courses in high school (was at a STEM magnet)
- Anxiety
  - Talked for a long time about how anxiety research should be very beneficial to students

Student 2

- STEM
  - “Appreciates math” but doesn’t like it
  - Feels slow at math but can do it given time
  - Doesn’t feel comfortable with computer-related assignments
  - Disliked physics and found calc. 2 challenging and had to drop (not a requirement at Parkside)
- Anxiety
  - Test anxiety was a big thing (more than that of math)
  - Was told in K-12 by teachers and LD evaluators that STEM skills would never be up to par
  - Anxiety research is very important, particularly focus on interventions: “Anxiety can destroy your perfect semester.”

Summary of Preliminary Results

- Overall geoscience students have slightly elevated math anxiety within a wide range
- Potentially positive impact of single intervention on math anxiety over a single course (v. small sample size)
- Students (self-selected) have interest in anxiety research in their classes

Thanks for listening!

Questions? Comments? Suggestions?

References & More Information

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- Richardson & Suinn (1972), The Mathematics Anxiety Rating Scale, *Journal of Counseling Psychology*, 19.
- Summary Report for Summit on Future of Undergraduate Geoscience Education, 2014

Everyday Anti-racism

Annie Grugel, PhD
Jody Siker, PhD
Institute of Professional Educator Development

Mission

UWP vision...is focused on student success, diversity, inclusion and community engagement.

IPED mission...is to collaborate with community partners in order to provide innovative, career-long educator development experiences that respond to the needs of all learners.

- Strategies that create community
- Demonstrate fallibility and vulnerability
- We will embrace our mistakes

Building the Context

- Safe place to have difficult conversations from day 1
  - "If you only knew this (_____) about me, you would know how to teach me better"
  - Create classroom discussion norms
- Empathy Strategies
  - Modeling and Teaching Point of View
  - Move judgement out
- Personal Stories
  - Educational histories with challenges
  - Share my own
  - On-going online discussions (anonymity allowed) with sensitive topics (bullying, racism in the classroom, privilege)

Journey to understanding own feelings about privilege (stages and resistance)

The Talk

- Assess students' progress and start from "othering" and move into racism
- Anonymous notecard questions and answers (from beginning of talk)
- Reflective discussion (see website below) of provocative artifact
- Privilege examination (Intersectionality)
  - I am…
  - *Unpacking the Knapsack of White Privilege*

http://davidjvoelker.com/reflective-discussion/

"Make America Great" Again?

- Curriculum: Studying Great Americans
- Literature
  - Teaching Tolerance (*Rhinos & Raspberries*)
  - *Everyday Anti-Racism: Getting Real about Race in School by Mica Pollack*
    - *Less opportunity----------More Opportunity*
- Course Readings
  - Can I Talk about Race?
  - Too many to mention

Daily Activities

Make a list from everyday anti racism

Avoid spot-lighting students