

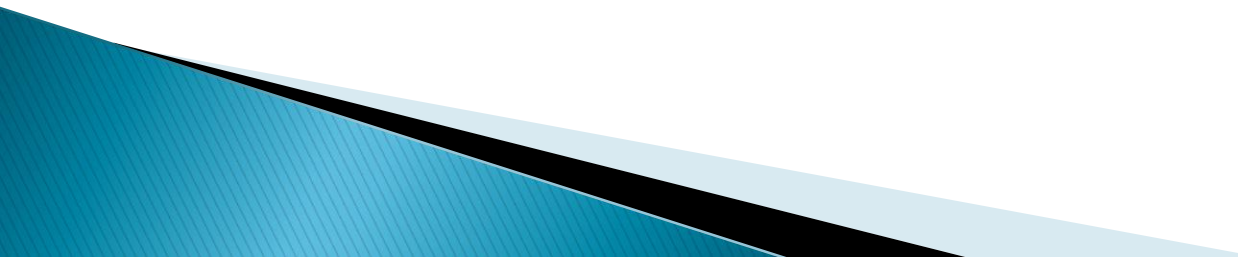
Students' Perceptions of the Impact of Health Concerns Affecting Their Academic Performance: Are There Differences between Racial and Ethnic Groups?

American College Health Association
Annual Meeting 2010
Philadelphia, PA
June 4, 2010

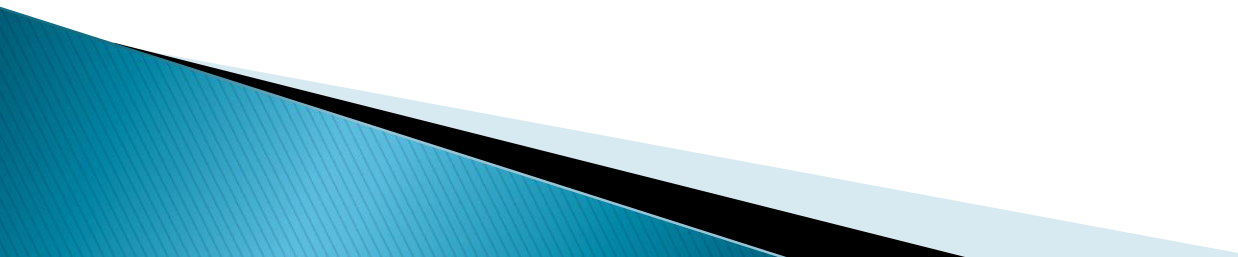
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Objectives

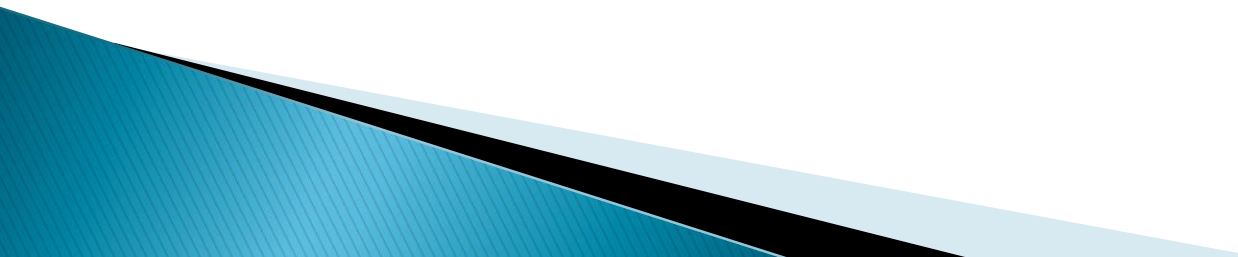
At the end of this session, participants will be able to:

- Describe how to analyze ACHA–National College Health Assessment data from their home institution to identify major differences between racial and ethnic groups' reports of health concerns and academic impediments.
 - Identify ways to assess how the experience of bias impacts perception of health concerns and academic performance.
 - Discuss how to translate research into practice with regards to the role of health services addressing health disparities using the Standards of Practice for Health Promotion and the CAS standards.
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Agenda

- Background
 - Research questions
 - Methods
 - Data collection
 - Analysis
 - Results
 - Implications
 - Discussion
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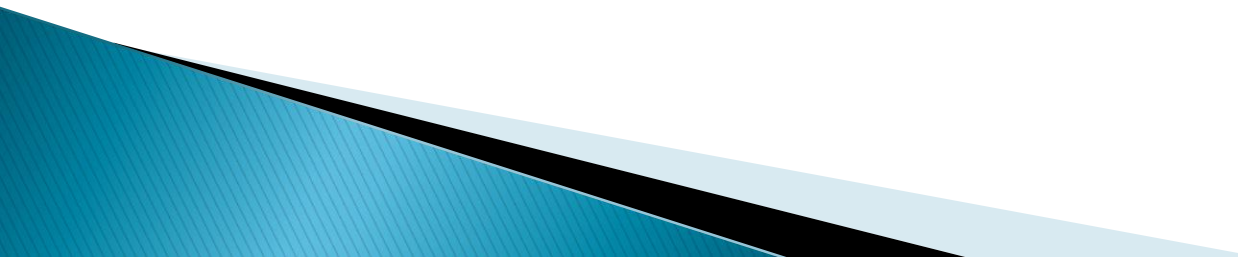
Background and Assumptions

- Increased access to college
 - Relationship between educational attainment and health status
 - Pascarella and Terenzini (2005) “educational attainment is strongly linked with good health” (pg. 563).
 - Is higher education the great equalizer?
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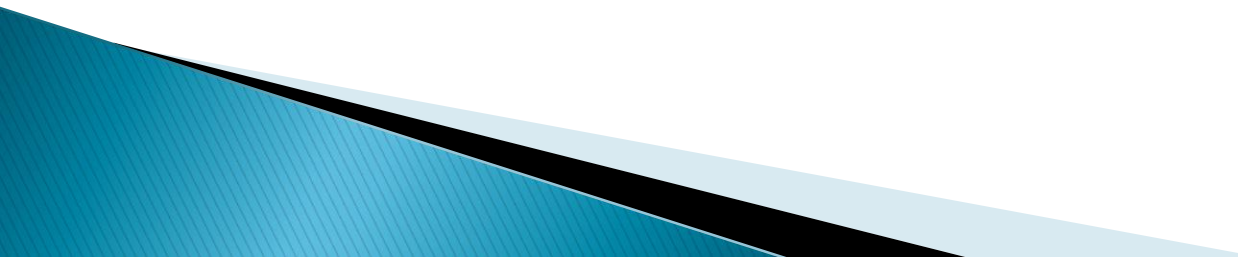
Background and Study Rationale

- College students who are "members of traditionally stigmatized groups continue to experience relatively poorer health, lower achievement outcomes, and greater psychological alienation than members of non-stigmatized groups." (London, Downey, Bolger, and Viella, 2005)
- Significant relationship between minority status-related stress and lower GPA. (Smedley, Myers, & Harrell, 1993)
- "African American students come to school with greater feelings of social alienation and isolation, are less likely to utilize campus mental health services when the providers are White, and perceive campus mental health services to be unresponsive to their concerns." (Walden, 1994)
- The experience of racial bias can generate distress and adversely affect health. (Williams, Yu, Jackson, and Anderson, 1997)
- Current research limited to medical students or emotional health.

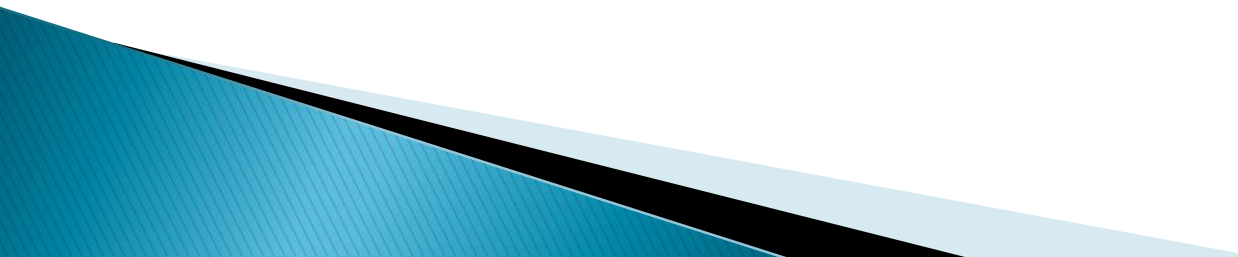
Hypotheses

- White students are less likely than students of color to report experiencing
 - a negative academic outcome due to a health concern
 - bias
 - Experience of bias is significantly associated with reporting an academic impact due to a health concern.
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Research Questions

1. To what extent are there differences between races in reports of bias?
 2. To what extent are there differences between races in reports of academic impacts due to health conditions?
 3. What is the effect of reports of bias on reports of academic impacts due to health concerns?
 4. To what extent are there differences between races in the effect of reports bias on reports of academic impacts due to health concerns?
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Methods: Data Collection

- ACHA–NCHA
 - Spring 2009
 - All students over the age of 18 invited to participate
 - Only undergraduate students used in this analysis
 - Questions
 - Academic Impacts
 - Bias
 - Race/Ethnicity
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Methods: Data Collection

Academic Impact

- Within the last school year, have any of the following affected your academic performance? (please select the most serious outcome for each item below).
- Response options include: this did not happen to me/not applicable, I have experienced this issue but my academics have not been affected, received lower grade on an exam or important project, received a lower grade in the course, received an incomplete or dropped the course, significant disruption in thesis, dissertation, research, or practicum work.
- For the purposes of this analysis, response options were collapsed into three categories: did not experience the condition, experienced but no academic impact, experienced and academics were impacted. From this group, students who reported an academic impact due to a health condition were coded “yes.” Respondents were given one point for each “yes,” for a total possible number of points of 31.

Methods: Data Collection

Bias/Discrimination

- During the past 12 months, have you personally experienced bias and/or discrimination based on any of the following?
- Ability, Age, Body size or shape, Economic status, Education, English language skills, Gender, Health status, Personal appearance, Race, Religion or spiritual beliefs, Sex, Sexual orientation, Skin color, Social class.
- Response options include: yes and no. For the purposes of this analysis, response options were collapsed into a continuous variable by assigning one point for each “yes” response and adding the total points, which gave respondents a total score for the variable of up to 15.

Methods: Data Collection

Race/Ethnicity

- How do you usually describe yourself?
- Response options include: White – not Hispanic (includes Middle Eastern), Black – not Hispanic, Hispanic or Latino/a, Asian or Pacific Islander, American Indian or Alaskan Native or Native Hawaiian, Biracial or Multiracial, Other. Respondents are asked to mark all that apply.
- Recoding
 - All who selected only one race/ethnicity category were coded as their selection
 - Those who selected Biracial or Multiracial, Other, or more than one category were coded as Multiracial or other
 - American Indian or Alaskan Native or Native Hawaiian were excluded due to small sample size

Methods

- Data recoding
 - Academic Impact Question
 - Did not experience health concern ('missing')
 - Experienced health concern, no impact (0)
 - Experienced health condition, with impact (1)
 - Bias Question
 - No response ('missing')
 - No (0)
 - Yes (1)
- Scale
 - Scales were created by summing the responses
 - Bias Scale
 - Possible range of scores: 0–16
 - Reliability: Cronbach's Alpha = 0.939
 - Academic Impact Scale
 - Possible range of scores: 0–30
 - Reliability: Cronbach's Alpha = 0.995

Methods: Analysis

- Are reports of experiencing bias [a negative academic impact] different by race/ethnic groups?
 - Chi-square
- Among those who report experiencing bias [1 + negative academic impacts], are the number of experiences of bias [negative academic impacts] different by race/ethnic groups?
 - Kruskal-Wallis Test
- Is there a relationship between experiencing bias and experiencing a negative academic impact? AND
- Is the relationship between experiencing bias and negative academic impact different by race/ethnic groups?
 - Logistic Regression

Sample

- 2300 in total sample
- 98% responded to race/ethnicity question
 - White, non-Hispanic: 50.5%
 - Black, non-Hispanic: 5.7%
 - Hispanic or Latino/a: 8.8%
 - Asian or Pacific Islander: 21.0%
 - Multiracial or Other: 14.0%

Results: Top 5 Biases

Rank	Race/Ethnicity				
	White	Black	Hispanic/Latino/a	Asian/Pacific Islander	Multiracial or Other
1	Gender (19.3%)	Race (45.7%)	Race (26.0%)	Race (23.4%)	Race (23.9%)
2	Age (19.0%)	Skin color (34.3%)	Age (25.5%)	Personal appearance (18.8%)	Personal appearance (21.6%)
3	Personal appearance (16.4%)	Personal appearance (27.9%)	Economic status (25.5%)	Ability (18.5%)	Age (21.0%)
4	Body size/shape (14.6)	Social class (23.8%)	Social class (24.9)	Age (15.1%)	Gender (20.6%)
5	Ability (14.2%), Economic status (14.2%)	Economic status (21.7%)	Gender (21.5)	Gender (15.1%)	Skin color (19.2%)

Results: Bias

	% Experiencing Bias	p-value [#]	Bias Score				p-value ^t
Race/Ethnicity		<0.001*	Mean	Median	Min.	Max.	<0.001*
White	37.3		2.72	2	1	8	
Black	56.6*		5.04	4*	1	15	
Hispanic/Latino/a	52.0*		5.31	4*	1	15	
Asian or Pacific Islander	36.1		3.42	3	1	12	
Multicultural or Other	52.7*		4.84	3*	1	15	
All undergraduates	41.8						

#Chi-square, ^tKruskal-Wallis Test

*Post-hoc p-value <0.001; reference group: White

Results: Academic Impacts

	% Experiencing 1+ Academic Impacts	p-value [#]	Academic Impact Score				p-value ^t
			Mean	Median	Min.	Max.	
Race/Ethnicity		<0.001*					0.64
White	57.7		3.12	3	1	15	
Black	64.2		4.39	4	1	15	
Hispanic/Latino/a	72.0*		3.91	3	1	13	
Asian or Pacific Islander	62.8		3.67	3	1	16	
Multicultural or Other	66.8*		3.82	3	1	14	
All undergraduates	61.7						

[#]Chi-square, ^tKruskal-Wallis Test

*Post-hoc p-value <0.0125; reference group: White

Bias & Academic Impact

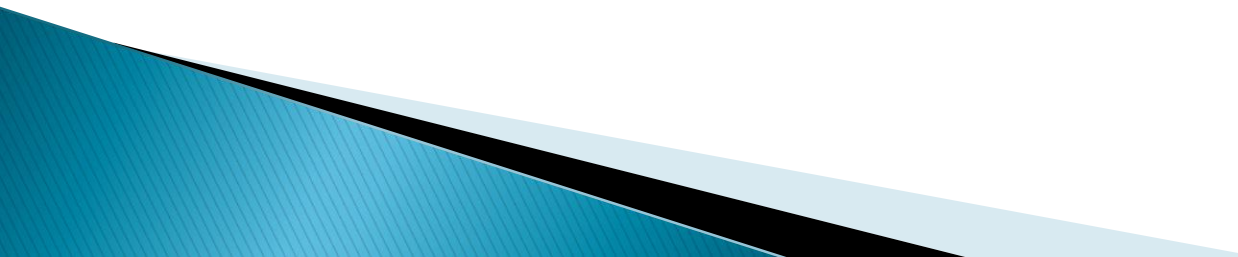
Logistic Regression (Dependent: Academic Impact)

Variable	OR	p-value	95% CI
Bias	2.109	<0.001	(1.750, 2.542)

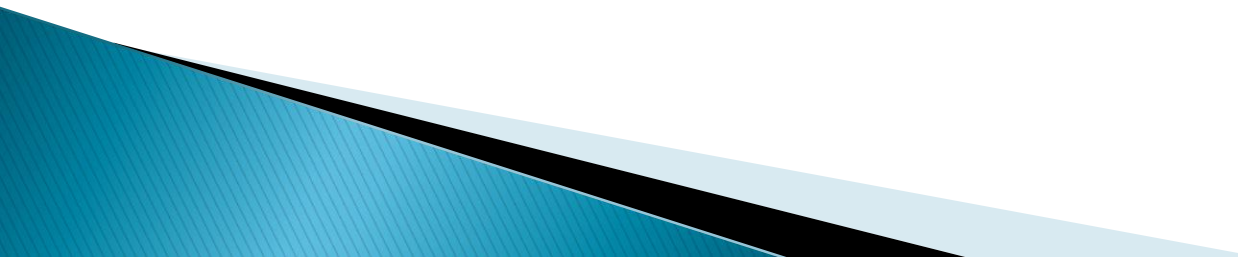
Logistic Regression (Dependent: Academic Impact)

Variable	OR	p-value	95% CI
Bias	2.276	<0.001	(1.741, 2.976)
Race/Ethnicity	---	0.009	---
Black, NH	1.754	0.600	(0.976, 3.151)
Hispanic or Latino/a	2.054	0.003	(1.282, 3.292)
Asian or Pacific Islander	1.297	0.085	(0.965, 1.744)
Multiracial or Other	1.393	0.082	(0.959, 2.023)
Bias*Race/Ethnicity	---	0.352	---
Bias*Black, NH	0.465	0.058	(0.211, 1.028)
Bias*Hispanic or Latino/a	0.684	0.282	(0.342, 1.367)
Bias*Asian or Pacific Islander	0.966	0.896	(0.578, 1.616)
Bias*Multiracial or Other	0.924	0.783	(0.529, 1.616)

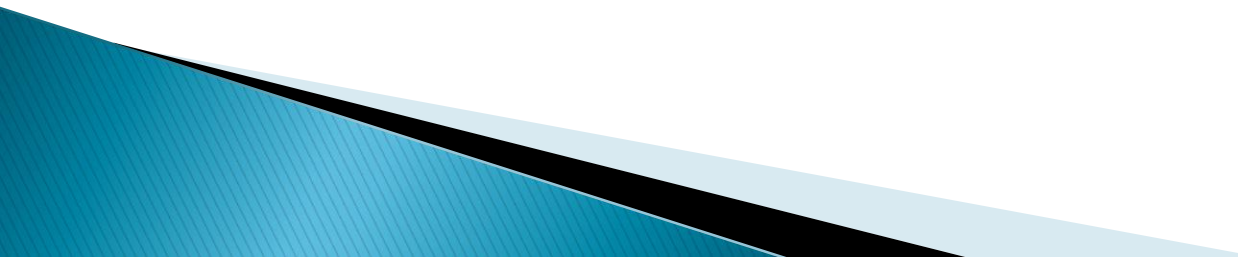
Results: Conclusions

- A significantly larger percentage of Black, Hispanic/Latino/a, and Multiracial/Other students reported experiencing an academic impact due to a health concern than White and Asian/Pacific Islander students.
 - A significantly larger percentage of Black, Hispanic/Latino/a, and Multiracial/Other students reported experiencing bias than White and Asian/Pacific Islander students.
 - Of students who reported experiencing bias, Black, Hispanic/Latino/a, and Multiracial/Other students reported experiencing significantly more acts of bias than White and Asian/Pacific Islander students.
 - Students who reported experiencing bias had a significantly higher odds of reporting an academic impact due to a health concern.
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Implications

- Experience of bias on academic impacts does not differ based on race/ethnicity
 - Look deeper to determine if different races/ethnicities report significantly different types of bias
 - Explore which types of bias are more strongly associated with academic impact
 - Repeat study with other non-dominant groups on campus (gender, age, sexual orientation, international student status, a proxy measure for socioeconomic status, and disability status)
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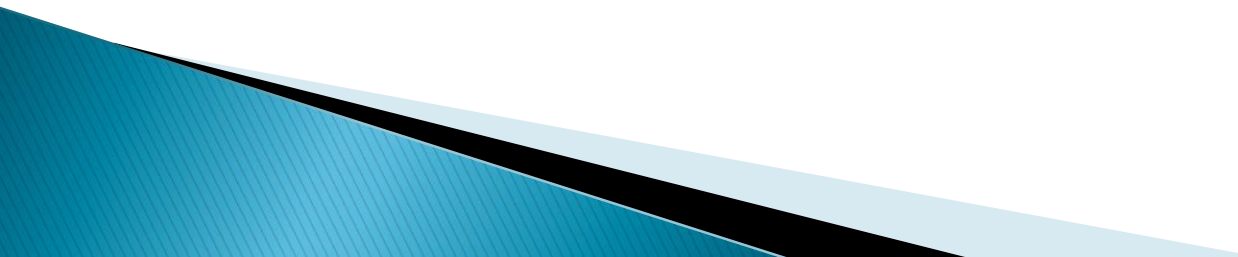
Implications

- Role of Health Services
 - Is our staff reflective of our student population?
 - Campus partnerships and strategic collaborations
 - Professional development activities
 - CAS Health Promotion Services- Student Learning Outcomes (social responsibility, appreciating diversity) "HPS must acknowledge that health and social justice are inextricably connected."
 - SPHPHE- Cultural Competence
 - Healthy Campus 2020- Social Determinants of Health
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Implications

- ▶ Commonwealth Fund recommendations for eliminating health disparities:
 - Consistent racial & ethnic data collection by Health Care Providers
 - Effective evaluation of disparities–reduction programs
 - Minimum standards for culturally and linguistically competent health care workforce
 - Establishment of government offices of minority health
 - Expand access to service for all ethnic and racial groups
 - Involvement of all health systems representatives in minority health improvement efforts

Discussion

- Why is bias related to academic success?
 - Does bias affect all ethnic/racial groups the same?
 - Does the ethnic/racial demographics of the students at an institution affect reports of bias?
 - Would these results hold true for other institutions?
 - What is the responsibility of the health in higher education field to addressing the issue of bias given the findings from this study?
 - What additional information do we need to know to further our understanding of this issue?
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References / Resources

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