



Asian Pacific American College Freshman: Attitudes toward the Abolishment of Affirmative Action in College Admissions

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Introduction: The Prevalence of Colorblindness

Affirmative action is perceived as a corrective policy intended to promote social equity (Crosby, Iyer, & Sincharoen, 2006; Curry & West, 1996; Kaplin & Lee, 2007; Oppenheimer, 1996). Indeed, affirmative action as a policy has been used to address minority underrepresentation (Ball, 2000), remedying the effects of past/current discrimination (Oppenheimer, 1996; Tsuang, 1989), increasing diversity (Hsia, 1988), and providing equal opportunity (Dong, 1995). Dong (1995) states that in order for educational affirmative action to equalize opportunity for all students, at times it requires that some students be treated differently. Originally something that was created for employment (Executive Order 11246 under the direction of Lyndon Johnson; also see Crosby, Iyer, & Sincharoen, 2006; Oppenheimer, 1996, p. 929), affirmative action spread into other areas such as higher education. As a result, affirmative action facilitates the offering of flexible college admissions requirements for underrepresented applicants (Inkelas, 2003b). Underrepresented students may be racial minorities, but they may also be low-income, immigrants, language minorities, non-traditional, female, White, and/or first-time generation college students (Levine & Nidiffer, 1996).

This article examines the attitudes that Asian Pacific American (APA)¹ college freshmen hold toward the abolishment of affirmative action in college admissions. Frequently APAs are stereotyped as being “model minorities” (Brydolf, 2009; Chinn, 2002; Empleo, 2006; Pang, Han, & Pang, 2011). This label implies that they are educationally and socially successful, and that they do not experience discrimination. As a consequence of this label, oftentimes APAs are not considered “underrepresented,” and are thus ineligible for affirmative action protection (Wu & Wang, 1996). Most insidious though, studies have documented that APAs may support the elimination of affirmative action against their better judgment (Kang, 1996; Kidder, 2006).

APAs are misidentified as being overrepresented at 4-year colleges/universities. According to CARE (2011), the majority of APAs actually matriculate into 2-year institutions of higher education. According to Hsia (1988), APAs are less likely than other applicants to be accepted by their top-choice college/university, but due to their devotion to education and economic survival, they matriculate at community colleges with plans to transfer to four-year institutions. Consequently, the model minority stereotype is problematic for APAs since it masks subgroups that actually *are* actu-

¹ This article uses the term Asian Pacific Americans (APA) due to the fact that the data that was analyzed included Pacific Islanders. The authors of this study understand the limitation that results from using such term (e.g., see Diaz, 2004). Further, the term Asian American is used only when citing previous literature in order to maintain the integrity of the original research.

ally underrepresented. Risk factors are often associated with APA subgroups that are underrepresented in college. For instance, CARE (2011) states the following:

Similar to Southeast Asians, Pacific Islanders have a very high rate of attrition during college. Among Pacific Islanders, 47.0 percent of Guamanians, 50.0 percent of Native Hawaiians, 54.0 percent of Tongans, and 58.1 percent of Samoans entered college, but left without earning a degree. Southeast Asians and Pacific Islanders also had a higher proportion of college attendees who earned an associate's degree as their highest level of education, while East Asians and South Asians were more likely to have a bachelor's degree or advanced degree. (p. 10)

Limited affirmative action research has been done that uses APAs as an analytical sample in higher educational research. This lack of research is consequential, considering APAs are the fastest growing racial/ethnic groups in the United States (Inkelas, 2003b).

Research and policy analyses point to the societal and legal trends toward colorblindness, as seen in the states of Arizona, Nebraska, Michigan, Washington, and California. In 2010 Arizona abolished affirmative action as a result of Proposition 107, while in 2008 voters in Nebraska passed Initiative 424, a constitutional ban abolishing government affirmative action. In 2006, Michigan also became a colorblind state as the result of passage of Proposal 2. In 1998 the state of Washington passed Initiative 200, barring the state from using preferential treatment, while California passed Proposition 209 in 1996 which similarly abolished affirmative action.

The decision of these states to support colorblind policies is in direct opposition to the desires of the APA population (Wang & Wu, 1996). For example, Wong (2010) writes that "although California passed Proposition 209 in 1996 that prohibited affirmative action in public education and employment, the majority of Asian [Pacific] Americans in California voted against this proposition" (p. 160). Research has confirmed that this trend favors White college students. Indeed, White university applicants were the main beneficiaries of the ban on race-conscious affirmative action in the UC system as a result of proposition 209 (e.g., see Allred, 2007).

Review of Previous Literature

Any discussion of APA students that does not address the model minority stereotype is incomplete given their unique position in the affirmative action debate which tends to be framed as a Black-White issue (Takagi, 1992; Wu, 1995). Therefore, the next section reviews relevant literature on the model minority stereotype (Lee, 1994, 2001, 2005, 2006, 2007, 2009), while the subsequent section addresses APAs and affirmative action specifically.

Model Minority Stereotype

Much has already been written about the model minority myth. Nevertheless, the stereotype continues to grow in interest for researchers. For instance, writings began to emerge as early as the 1960s (Petersen, 1966), continuing into the 1970s (Endo, 1974; Hayes, 1976; Kim, 1973; Wong, 1976). The 1980s (Hu, 1989; Martinelli & Nagasawa, 1987; Nakayama, 1988; Ueda, 1989; Wei, 1989) and 1990s (Delucchi & Do, 1996; Fong, 1998; Hoy, 1993; Kobayashi, 1999; Kim, 1994; Mayeda, 1999; Tang, 1997; Winnick, 1990; Wong, 1997) also produced many writings that decried the limitations that the stereotype placed on APAs. But the decade of the 2000s (Chen, 2003; Lee, 2001; Li & Wang, 2008; Mannur, 2005; Museus, 2008; Museus & Kiang, 2009; Nance 2007; Ng,

Lee, & Pak, 2007; Ngo & Lee, 2007; Ono & Pham, 2009; Teranishi, 2002; Weaver, 2009; Wong & Halgin, 2006; Yang, 2004a) has seen the most literature on the model minority stereotype; even more than the four previous decades combined (e.g., see Hartlep, In-Press).

The most well-known and acclaimed scholarly expert on the model minority stereotype is Stacey Lee, a Professor of Education at the University of Wisconsin-Madison. Author of countless articles (Lee, 1994, 2006; Ngo & Lee, 2007), book chapters (Lee, 2007; Lee, Wong, & Alvarez, 2009; Park & Lee, 2010), reports (Lee & Kumashiro, 2005) and books (Lee, 2005, 2009), Lee has fought tirelessly to dispel the model minority stereotype in her scholarship. Much of Lee's scholarly work points out the myriad problems that APA students experience in American schools and society. Lee's scholarship illuminates the deleterious consequences of the model minority stereotype: mislabeling APAs as universally successful limits access for needy APAs to get the assistance that they need.

This article is most concerned with the possibility that since the model minority stereotype inaccurately identifies APA students as highly successful, they are prone to be excluded from affirmative action policies. For more thorough literature reviews on the model minority stereotype see Hartlep (In-Press), Ng, Lee, and Pak (2007), and also Ngo and Lee (2007).

Asian Pacific Americans and Affirmative Action

While the previous section outlined the tremendous amount of literature on the model minority stereotype and the consequences this label has on APAs, this section addresses literature on APAs and affirmative action (e.g., see Teranishi, 2012). Wang and Wu (1996) write the following in their article, "Beyond the Model Minority Myth: Why Asian Americans Support Affirmative Action": "Perhaps the most damaging impact of the model minority myth is that policymakers regularly assume that Asian [Pacific] Americans do not need *affirmative action*, and automatically exclude them without any analysis" (p. 40, italics added). Wang and Wu's (1996) article further supports earlier work by Wu (1995). Since APAs are thought to be "model minorities," they are not perceived to need affirmative action. This "halo effect" is detrimental to the APA students that do not fit this narrowly constructed academic characterization (Pang & Cheng, 1998).

Asian Pacific American Attitudes Toward Affirmative Action

Educational researchers have previously studied White undergraduates' (Knight & Hebl, 2005), as well as Asian American undergraduates' (Inkelas, 2003b) attitudes toward affirmative action. Other scholars have specifically researched Asian Americans and affirmative action in K-12 education (e.g., Robles, 2006). By and large, attitudes toward affirmative action have been found to be influenced by demographic characteristics (Inkelas, 2003a; Kravitz & Platania, 1993), especially political ideology (Kravitz et al., 2000).

Inkelas (2003b), for instance, found that Asian American women supported affirmative action more than Asian American men. Indeed, other research has found that women view affirmative action more favorably than men (Knight & Hebl, 2005; Niemann & Maruyama, 2005). Perhaps the differential attitude between genders can be attributed to the fact that White women have been the largest beneficiaries of affirmative action (Katznelson, 2005; Ladson-Billings, 2004; U.S. Census Bureau, 2000). Ladson-Billings (2004) states that despite "all of the conservative arguments against affirmative action, an analysis of affirmative action policies indicates that white women...are the major beneficiaries of affirmative action" (p. 58).

Smith's (1998) multivariate analysis found greater differences in affirmative action views

along racial/ethnic than gender lines. European and Asian American students expressed greater opposition than African and Hispanic American students. Research has also found that APA students' views toward affirmative action are strongly influenced by their personal beliefs, racial/ethnic identity, and involvement in college extra-curricular activities (Inkelas 2003b).

Oh, et al. (2010) found that depending upon how one feels about discrimination and whether or not he/she believes that it exists in our society, will shape one's attitude toward either supporting or opposing affirmative action. This was known as the "racism beliefs model" (Oh, et al., 2010, p. 165). Reyna et al. (2005) similarly looked at *merit-upholding* versus *merit-violating* manifestations as a function of either supporting or opposing affirmative action. These views are defined as either "leveling the playing field" in a white dominant society mentality, or "undermining the fairness" in a democratic society (Reyna et al., 2005, p. 669).

Niemann and Maruyama (2005, p. 410) state that affirmative action "violates values of individualism and meritocracy." They go on to affirm that "[t]o individuals supporting a meritocracy, almost any type of differential treatment [affirmative action] is viewed as reverse discrimination" (p. 410). Awad, Cokley, and Ravitch (2005) examined the relationship between colorblind attitudes, modern racist attitudes, and attitudes toward affirmative action. After controlling for race and sex, they found that colorblind attitudes emerged as the strongest predictor of attitudes toward affirmative action, followed by modern racism.

Generational differences have also been shown to influence attitudes toward affirmative action for Asian Americans (Corey, 2000). Corey (2000) suggests that Asian Americans tend to be inclined to choose a career path due to parental pressure, racial prejudice, and cultural values. Corey (2000) also notes that there are three factors which tend to influence career choice: cultural values as related to Asian ethnicity; experience of racism; and acculturation differences between Asian children and their parents.

Bell, Harrison, and McLaughlin (1997) examined Asian Americans' attitudes toward Affirmative Action Programs (AAP). Their article shares two interrelated studies. Study 1 participants consisted of 124 students from an introductory organizational behavior course at a large Southwestern university and 202 managers. These participants completed the Job Opinion Survey. Students and managerial survey responses were statistically analyzed. Findings indicated that attitudes toward AAP were "more favorable from Whites to Hispanics to Asians to Blacks" (p. 365). Bell, Harrison, and McLaughlin (1997) write that "the beliefs and attitudes of Asians about AAPs [in study 1], although not identical, more closely resemble those of Hispanics and Blacks than those of Whites" (p. 367). Study 2 participants consisted of 367 students and 367 field managers. Survey data was statistically analyzed. Bell, Harrison, and McLaughlin (1997) write that "the assertions that Asian Americans are more similar to Whites than to other minorities were once again refuted by these Study 2 data on AAPs and experience with discrimination in employment" (p. 373). Both studies, especially when taken together, indicate that Asian Americans share more attitudinal similarity with Hispanics and Blacks than with Whites, invalidating the model minority stereotype.

Wang and Wu's (1996) article "Beyond the Model Minority Myth: Why Asian Americans Support Affirmative Action" explains why the view that Asian Americans do not need affirmative action supports the model minority myth. As a result, Wang and Wu (1996) warn, "Contrary to the popular perception [that Asian Americans are model minorities], Asian Americans remain underrepresented in many areas and also continue to experience discrimination [and thus should fight for affirmative action]" (p. 35). Their article covers the origins of the model minority myth and how affirmative action has been used as a wedge issue to divide and conquer minorities, namely African and Asian Americans. According to Wang and Wu (1996), "Asian Americans should avoid allowing themselves and their communities to be used as a *wedge* by politicians whose own ideologies

and ambitions explain their sudden concern for Asian Americans” (p. 36, italics added). They also go on to say that “the ‘model minority’ myth ensures that poor Asian Americans will be ignored” (Wang & Wu, 1996, p. 39). By and large, Wang and Wu’s (1996) article supports the idea that the model minority is a rhetorical and political device that is used to maintain the *status quo*. They close their article with the following statement: “The dilemma of Asian Americans and affirmative action, however, should be recognized as a problem manufactured for political purposes” (Wang & Wu, 1996, p. 46).

Aims of Study

Based on the review of the literature, it appears that beliefs about racism as well as beliefs about meritocracy are associated with Asian Pacific Americans’ attitudes toward affirmative action. Additionally, it is noted that Asian Pacific American students are understudied in this area. Therefore, this study aimed to answer the following research question:

Q: *Does racism ideology moderate the association between bootstrap ideology and attitude toward the abolishment of affirmative action in college admissions amongst Asian American college freshmen?*

Method

Data

The Higher Education Research Institute’s (2007) survey—The 2007 Freshman Survey² (TFS07) from the University of California, Los Angeles’ Cooperative Institutional Research Program (CIRP)—was used. Each year, approximately 700 two-year colleges, four-year colleges and universities administer TFS07 to over 400,000 entering students during orientation or registration. TFS07 is a large-scale survey that covers a wide range of student characteristics, including parental income and education, ethnicity, and other demographic items, financial aid, secondary school achievement and activities, educational and career plans, and values, attitudes, beliefs, and self-concept. TFS07 is administered to all incoming first-year students who are first-time college students at participating colleges and universities.

Although TFS07 is comprised of 272,036 respondents and 356 institutions, UCLA only granted data to the researchers from those TFS07 student respondents who self-identified as having some or all “Asian” background³ (N =28,591). IRB approval was granted prior to conducting this study.

Hypothesis

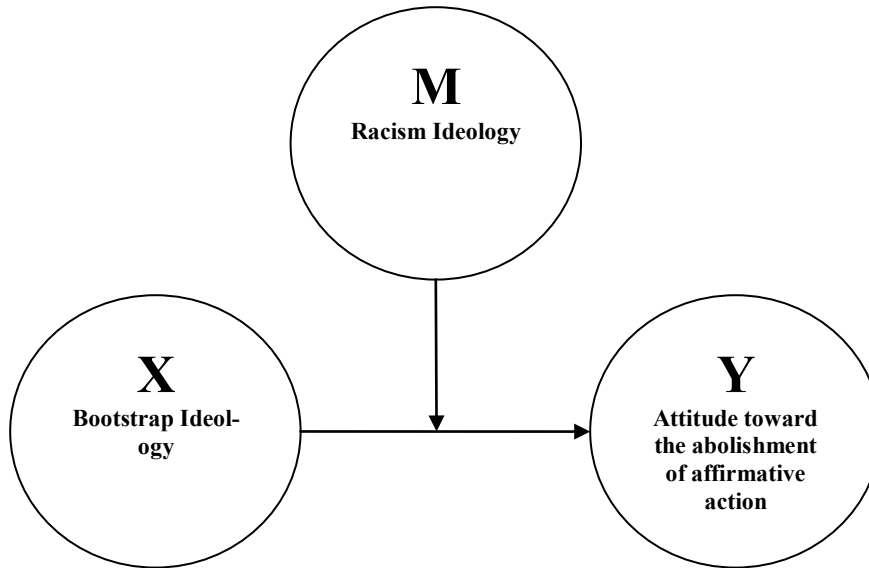
This study hypothesizes finding a statistically significant moderation effect when analyzing the moderation model. Figure 1 is not a path model; it illustrates the conceptual model of the hypothesis: showing that racism ideology moderates the relationship between bootstrap ideology and

² This was the most current data; datasets that are available for use by researchers outside HERI are only those that are three years and older.

³ The following are the racial classifications that are used in TFS07: (1) White (2) Black; (3) American Indian; (4) Asian; (5) Native Hawaiian/Pacific Islander; (6) Mexican/Chicano; (7) Puerto Rican; (8) Latino; and (9) Other. Consequently, this study’s sample includes both Asians and Native Hawaiian/Pacific Islanders.

attitude toward the abolishment of affirmative action in college admissions (it models that the effect of X on Y is a function of M).

Figure 1
Conceptual Model of Moderator Hypothesis
 (M moderates the association between X and Y)



Theory Testing

The constructs that are seen in the conceptual framework were formulated for theory testing. The three operationalized concepts used (Appendix A) are:

Racism ideology. The degree to which one believes that racism does or does not exist.

Bootstrap ideology. The degree to which one believes that meritocracy does or does not exist.

Attitude toward the abolishment of affirmative action. The degree to which one agrees or does not agree that affirmative action in college admissions should be abolished.

TFSO7 Measures

Racism Ideology (View06). The moderator variable was derived from the survey stem/question: “Racial discrimination is no longer a major problem in America.” There were 4 levels of possible responses (Agree Strongly; Agree Somewhat; Disagree Somewhat; Disagree Strongly).

Bootstrap Ideology (View17). The focal predictor variable was derived from the survey stem/question: “Through hard work, everybody can succeed in American society.” There were 4 levels of possible responses (Agree Strongly; Agree Somewhat; Disagree Somewhat; Disagree Strongly).

Attitude toward the abolishment of affirmative action (View10). The criterion variable was derived from the survey stem/question: “Affirmative action in college admissions should be abolished.” There were 4 levels of possible responses (Agree Strongly; Agree Somewhat; Disagree Somewhat; Disagree Strongly).

Analytic Strategies Used

All of the statistical procedures were conducted using SPSS for Windows v17.0 and v18.0. A series of descriptive and multivariate analyses were employed in this study. A multiple regression (MR) was performed testing the moderator hypothesis. The statistical model is illustrated in Figure 2. The resulting regression equation for this model is depicted as:

$$\hat{Y} = b_1x + b_2m + b_3xm + b_0 + e$$

Where \hat{Y} = Attitude Toward The Abolishment of Affirmative Action in College Admissions;

b_1 = Main Effect of Bootstrap Ideology;

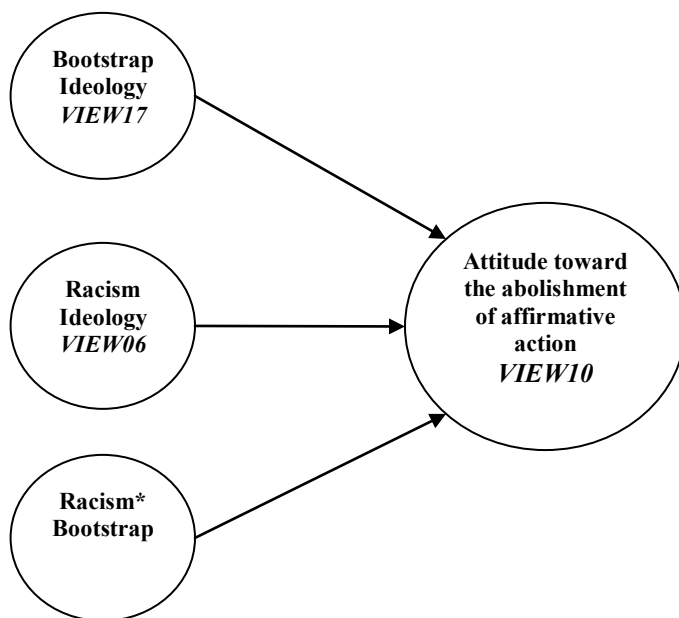
b_2 = Main Effect of Racism Ideology; and

b_3 = Interaction Effect of Bootstrap Ideology and Racism Ideology.

Figure 2

*Statistical Model of the test of moderator hypothesis
(Racism Ideology moderates the association*

between Bootstrap Ideology and Attitude Toward the Abolishment of Affirmative Action)



Ordinary Least Squares (OLS) Regression Assumptions

Cohen, Cohen, West, and Aiken (2003) detail six assumptions underlying multiple regression: (1) correct specification of the form of the relationship between independent variables (IVs) and dependent variable (DV); (2) IVs are uncorrelated with errors; (3) no measurement error in the IVs; (4) constant variance of residuals (homoscedasticity); (5) independence of residuals; and (6) normality of residuals.

After testing regression assumptions, it was found that the correct specification of the form of the independent variables in the regression model assumption was met. Visual inspection of the scatterplot of the residual by *View17* and the scatterplot of the residual by *View06* indicate a relatively linear relationship between residuals and predictors.

The “endogeneity” assumption (that IVs are uncorrelated with errors) was not able to be checked. The measurement error in the independent variable assumption also could not be checked for these data because reliability of the survey instrument was unknown.

The homogeneity of variance assumption was checked and met as indicated by visual inspection of the scatterplot (unstandardized residual by unstandardized predicted value) that showed equal variance at different levels of predicted values. Also, visual inspection of the scatterplot of the residual by individual predictor found the same consistency of this homogeneity of variance assumption. A loess line was fit to the scatterplot and the trend of the *X Y* relationship in the scatterplot suggests that outliers may exist; however, overall there appears to be a linear relationship between the variables. Therefore, it can be assumed that the unstandardized residuals are homoscedastic.

The independence of residuals assumption cannot be assumed to be met because TFS07 was not a simple random sample. Therefore, it cannot be guaranteed that residuals of observations are independent of one another.

The normality of residuals assumption was not met because the Kolmogorov-Smirnov⁴ test of normality was found to be statistically significantly different than zero ($df=28591$), $D = .229$, $p < .001$. Also, visual inspection of the Q-Q plots illustrates that the error terms (the residuals) do not map onto what would be predicted to occur at the low and high levels of the observed value(s).

Multiple regression was assumed to be robust against any potential violations to these six assumptions. Therefore, the study proceeded with data analysis.

Missing Data and Outliers

TFS07 data had missing cases (Table 1). Missing data was coded as 0 in the original dataset by HERI. Using SPSS’ default setting, missing data was excluded and percentages were based on the number of non-missing values. Therefore, missing data did not have an impact on the appropriate interpretations of results. Descriptive statistics were run substantiating that there were no outliers (Table 1).

Table 1
Missing Data and Outliers

	Missing (%)	Range	Minimum	Maximum
Racism Ideology	833 (2.7)	3	1	4
Bootstrap Ideology	999 (3.3)	3	1	4
Attitude Toward The Abolishment of Affirmative Action	1,642 (5.4)	3	1	4

⁴ The Kolmogorov-Smirnov test of normality was used since the sample size was greater than the threshold of 2,000.

Descriptives and Correlations

Table 2
TFS07, Descriptive Statistics (Unweighted)

	<i>N</i>	<i>M</i>	<i>SD</i>
(a) Racism Ideology	29,635	1.81	.766
(b) Bootstrap Ideology	29,477	3.02	.865
(c) Attitude Toward The Abolishment of Affirmative Action	28,826	2.58	.832
Valid <i>N</i>	28,591		

Table 3
Correlation Matrix

		Correlations		
		View06: Racial discrimination is no longer a major problem in America	View10: Affirmative action in college admissions should be abolished	View17: Through hard work, everybody can succeed in American society
View06: Racial discrimination is no longer a major problem in America	Pearson Correlation	1	.071**	.126**
	Sig. (2-tailed)		.000	.000
	<i>N</i>	29635	28735	29328
View10: Affirmative action in college admissions should be abolished	Pearson Correlation	.071**	1	.008
	Sig. (2-tailed)	.000		.188
	<i>N</i>	28735	28826	28661
View17: Through hard work, everybody can succeed in American society	Pearson Correlation	.126**	.008	1
	Sig. (2-tailed)	.000	.188	
	<i>N</i>	29328	28661	29477

Results

Centering Independent Variables

The focal predictor and mediator were centered ($X_{cent} = X - \bar{X}$ and $M_{cent} = M - \bar{M}$) in order to: (1) make first-order effects meaningful and (2) avoid non-essential multicollinearity. These two terms were then multiplied together yielding a third predictor variable ($XM = X_{cent} * M_{cent}$). *Y* was then regressed onto these three variables (X_{cent} , M_{cent} , and $X_{cent} * M_{cent}$) (Table 4).

Table 4
Racism Ideology as a Moderator of the Bootstrap-Affirmative Action Association
 (N = 28,591)

Variable	B	Std. Error	95% CI Lower	95% CI Upper	β	Sig.
Bootstrap Ideology (<i>Xcent</i>)	.002	.006	-.009	.013	.002	.723
Racism Ideology (<i>Mcent</i>)	.076	.006	.063	.088	.070	.000
Bootstrap Ideology*Racism Ideology (<i>Xcent*Mcent</i>)	.027	.007	.013	.042	.022	.000

Interpretation of Main Effects

The average effect of bootstrap ideology on attitude toward the abolishment of affirmative action across all values of racism ideology was found to be .002. The average effect of racism ideology on attitude toward the abolishment of affirmative action across all values of bootstrap ideology was found to be .076.

Simple Regression Equation

Since the interaction term was statistically significant ($p < .001$), simple regression equations were calculated based on the following:

$$\hat{Y} = b_1x_c + b_2m_c + b_3x_cm_c + b_0$$

Where \hat{Y} = Attitude Toward The Abolishment of Affirmative Action in College Admissions;

b_1 = Main Effect of Centered Bootstrap Ideology;

b_2 = Main Effect of Centered Racism Ideology; and

b_3 = Centered Interaction Effect of Bootstrap Ideology and Racism Ideology.

The above equation was further reduced to:

$$\hat{Y} = (b_1 + b_3m_c)x_c + (b_2m_c + b_0)$$

Where $(b_1 + b_3m_c)$ is the simple slope, which is the effect of x_c on Y at a specific value of m_c .

The next step in analysis was to choose several values of m_c (racism ideology) to substitute into the equation to generate a series of simple regression equations representing various levels of the moderator (racism ideology). By convention, the mean of m_c (which is zero), one standard deviation above the mean (.76602), and one standard deviation below the mean (-.76602) were chosen. These three values were used in order to create the simple regression equations that will predict the effect of bootstrap ideology on attitude toward the abolishment of affirmative action when racism ideology is at three different levels (low, average, and high) (Table 5).

Table 5
Simple Regression Equation at three levels

Level of Racism Ideology	Simple Regression of Bootstrap Ideology
High	$\hat{Y} = .022682x_c + 2.634216$
Average	$\hat{Y} = .002x_c + 2.576$
Low	$\hat{Y} = -.01868x_c + 2.517784$

Interaction Plot

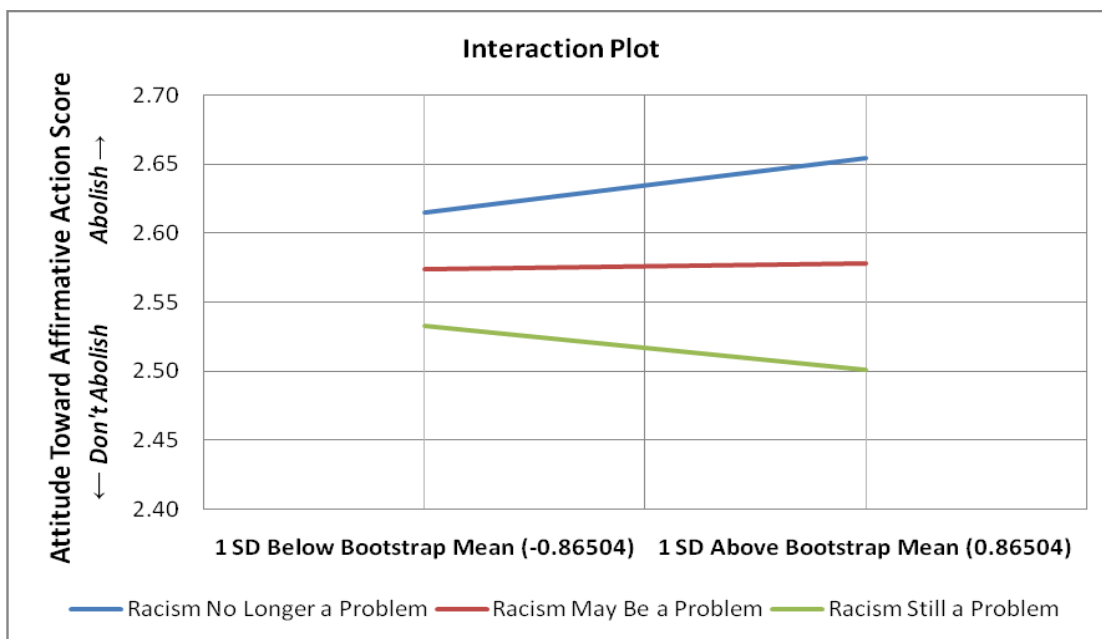
An interaction plot was created using the three simple regression lines (Figure 3). Two points for bootstrap ideology were chosen by convention: one standard deviation (.86504) above and below the mean (Table 6).

Table 6
Interaction Plot Data

Level of Racism Ideology	1 SD Below Mean of Bootstrap Ideology	1 SD Above Mean of Bootstrap Ideology
High	2.61	2.65
Average	2.57	2.58
Low	2.50	2.53

Figure 3

Interaction Plot (Racism Ideology moderates the association between Bootstrap Ideology and Attitude Toward the Abolishment of Affirmative Action)



Interpretation of the Interaction Plot

The interaction plot appears to be illustrating an enhancing moderation effect. All three coefficients (bootstrap ideology b_1 ; racism ideology b_2 ; and the interaction term b_3) have the same sign (positive). Adding racism ideology to the model produces a stronger than additive effect of bootstrap ideology on attitude toward the abolishment of affirmative action. Stated more precisely:

- (a) At lower levels of racism ideology there is a more negative effect of bootstrap ideology on attitude toward the abolishment of affirmative action;
- (b) At moderate levels of racism ideology there appears to be little effect of bootstrap ideology on attitude toward the abolishment of affirmative action; and
- (c) At higher levels of racism ideology there is a more positive effect of bootstrap ideology on attitude toward the abolishment of affirmative action.

Significance of the Interaction Effect

The statistical significance of the interaction effect was determined by testing the significance of the three simple slopes of bootstrap ideology (at low, average, and high levels of racism ideology). In order to test the significance the standard error ($b_1 + b_3Z_c$) was calculated by using the following equation:

$$S_{b_1+b_3Z_c} = \sqrt{V(b_1) + 2Z_c COV(b_1, b_3) + Z_c^2 V(b_3)}.$$

First, the simple slope of bootstrap ideology when racism ideology is high was found to be statistically significantly different than zero ($t = 2.62$, $\alpha = .01$, $df = 28,587$). Second, the simple slope of bootstrap ideology when racism ideology is average was not found to be statistically significantly different than zero ($t = 0.35$, $\alpha = .05$, $df = 28,587$). Third, the simple slope of bootstrap ideology when racism ideology is low was found to be statistically significantly different than zero ($t = 2.53$, $\alpha = .05$, $df = 28,587$).

Retrospective Power Analysis

A retrospective power analysis was conducted by first computing effect size (f^2) using the following equation: $f^2 = \frac{\Delta R^2}{1 - R^2}$. For the model, $\Delta R^2 = .006$ and $R^2 = .006$; therefore, $f^2 = .006$. Given $f^2 = .006$, the following equation was used ($\alpha = .05$): $L^* = f^2(n - k - 1)$ with $N = 28,591$ and $k = 2$. The resulting L^* statistic was 171.528 (Power, $1 - \beta = .99$) indicating that power was high.

Alternative Model

An alternative model with bootstrap ideology as the moderator, instead of racism ideology, was considered (Figure 4). This decision was made based on previous research (Awad, Cokley, & Ravitch, 2005) that indicates racism influences students' views on affirmative action. Analysis was conducted in the same way, by determining three simple regression equations for the effect of racism ideology on attitude toward the abolishment of affirmative action in college admissions at three levels (low, average, high) of bootstrap ideology (Table 7).

Figure 4
Conceptual Model of Alternative Moderator Hypothesis
 (M moderates the association between X and Y)

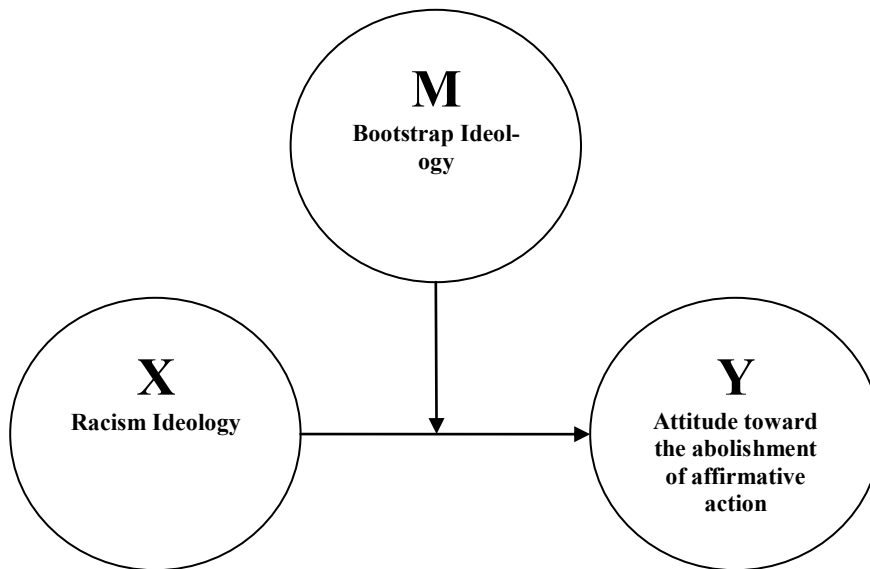


Table 7
Alternative Simple Regression Equation at three levels

Level of Bootstrap Ideology	Simple Regression of Racism Ideology
High	$\hat{Y} = .09935608x_c + 2.5777308$
Average	$\hat{Y} = .076x_c + 2.576$
Low	$\hat{Y} = .052644x_c + 2.57427$

Alternative Interaction Plot

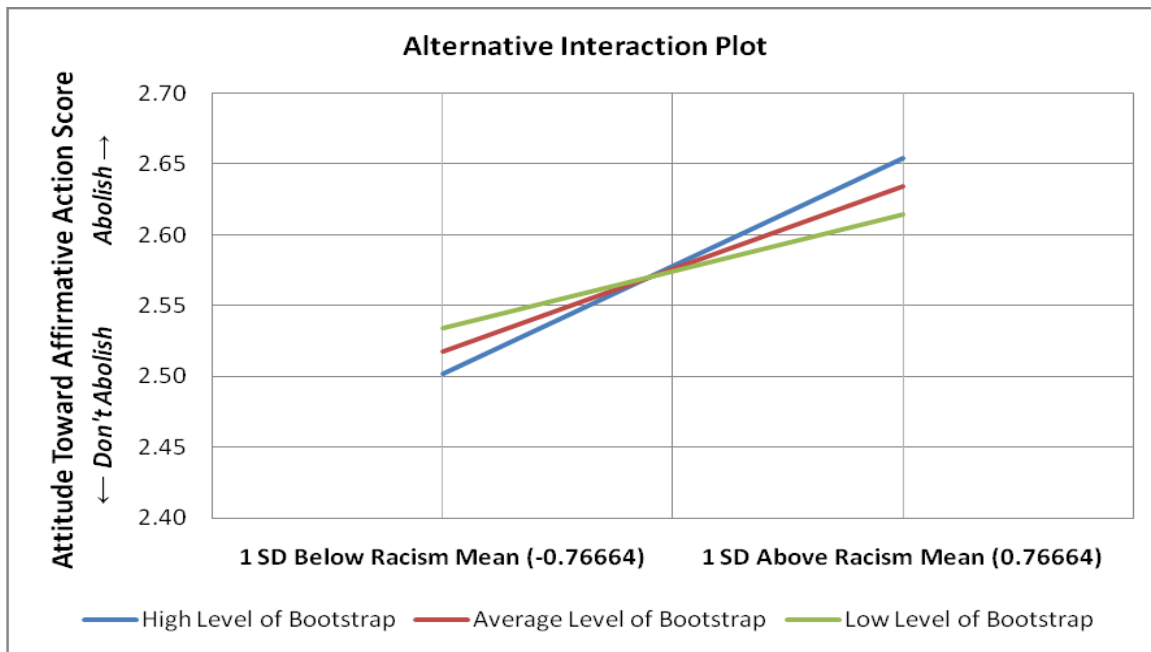
An alternative interaction plot was created using the three simple regression lines (Figure 5). Two points for racism ideology were chosen by convention: one standard deviation (.76602) above and below the mean (Table 8).

Table 8
Alternative Interaction Plot Data

Level of Bootstrap Ideology	1 SD Below Mean of Racism Ideology	1 SD Above Mean of Racism Ideology
High	2.50	2.65
Average	2.52	2.63
Low	2.53	2.61

Figure 5

Alternative Interaction Plot (Bootstrap Ideology moderates the association between Racism Ideology and Attitude Toward the Abolishment of Affirmative Action)



Interpretation of the Alternative Interaction Plot

The alternative interaction plot still appears to be illustrating an enhancing moderation effect. All three coefficients (bootstrap ideology b_1 ; racism ideology b_2 ; and interaction term b_3) remained positive. Adding bootstrap ideology to the model produces a stronger than additive effect of racism ideology on attitude toward the abolishment of affirmative action. Stated more precisely, at all three levels (low, average, high) of bootstrap ideology there is a more positive effect of racism ideology on attitude toward the abolishment of affirmative action.

Significance of the Alternative Interaction Effect

The statistical significance of the alternative interaction effect was determined by testing the significance of the three simple slopes of racism ideology (at low, average, and high levels of bootstrap ideology). In order to test the significance the standard error ($b_1 + b_3Z_c$) was calculated by using the following equation:

$$S_{b_1+b_3Z_c} = \sqrt{V(b_1) + 2Z_c COV(b_1, b_3) + Z_c^2 V(b_3)}.$$

First, the simple slope of racism ideology when bootstrap ideology is high was found to be statistically significantly different than zero ($t = 12.48$, $\alpha = .01$, $df = 28,587$). Second, the simple slope of racism ideology when bootstrap ideology is average was found to be statistically significantly different than zero ($t = 11.74$, $\alpha = .01$, $df = 28,587$). Third, the simple slope of racism ideology when bootstrap ideology is low was found to be statistically significantly different than zero ($t = 11.62$, $\alpha = .01$, $df = 28,587$).

Target and Alternative Model Comparison

Although the two conceptual models—the target model and the alternative model—look different, the statistical models are the same. Therefore, when comparing the two models, one cannot determine which one is better statistically. However, on theoretical grounds the alternative model would be selected since affirmative action policies are created to ameliorate historical inequality.

Bootstrap ideology, or the belief of whether or not meritocracy exists, is more suitable to be studied as a moderator. After theoretical consultation and consideration, it was found that all three of the simple slopes in the alternative model were statistically significantly different than zero ($\alpha = .01$); whereas, only two of the three simple slopes (low and high levels of racism) in the *a priori* target model were statistically significantly different from zero.

Discussion

The research question for this study was, “Does racism ideology moderate the association between bootstrap ideology and attitude toward the abolishment of affirmative action in college admissions amongst self-identifying Asian Pacific American college freshmen?” The findings support both the conceptual and the statistical models that were hypothesized—that racism ideology moderates the association between bootstrap ideology and attitude toward affirmative action in college admissions. Additionally, an alternative moderation model was examined and was found to support bootstrap ideology moderating racism ideology’s association on attitude toward the abolishment of affirmative action in college admission.

In other words, *there is* a relationship among APA college freshmen’s beliefs about whether or not racism still exists and their attitudes toward the abolishment of affirmative action in college admissions. If an APA believes racism still exists, they are more likely to be against the abolishment of affirmative action. Whereas if an APA does not believe racism still exists, they are more likely to be in support of the abolishment of affirmative action. Further, when considering bootstrap ideology (the belief that hard work leads to success or a “meritocracy”) this relationship is stronger.

A preponderance of previous studies conducted on affirmative action has focused disproportionately on African Americans, Latinos, and Whites (Ball, 2000; Katznelson, 2005; Kluegel & Smith, 1983; Knight & Hebl, 2005). By addressing the attitudes held by APAs, this study helps to fill a significant racial and ethnic gap.

Implications

Along with this study come implications for student affairs and higher education policymakers. If institutions of higher education wish for their affirmative action programs to remain viable, they should attend to their campuses’ racial climates (*c.f.* Nakanishi, 1989). By the year 2020, it is projected that one out of twenty voters will be Asian American (Barnett, 2005). This educational research becomes critically important given that demographers also project Whites being the minority by 2034. Further research should validate this study’s findings amongst disaggregated APA subgroups. In addition, this research should be replicated among other ethnic and racial groups. Inkelas (2003a) maintains that “ample consideration must be given to differences in opinion [toward affirmative action] among specific Asian ethnicities, [especially] when analyzing the APA group as a whole, [since] the effect of ethnic identity tends to be masked [when aggregating this population]” (p. 642).

Limitations and Future Research

There were several limitations of the present study, most notably that the data that was used limited the ability to analyze TFS07 survey respondents' attitudes toward the abolishment of affirmative action. The measures were restricted since the survey used a four-point Likert scale (Strongly Disagree; Somewhat Disagree; Somewhat Agree; Strongly Agree) and many respondents fell into the middlemost categories (Somewhat Agree and Somewhat Disagree).

Future studies could replicate this study using binary logistic regression analysis, as well as testing alternative conceptual models. Additionally, higher education (including admissions offices and student affairs) must pay close attention to disaggregating APA students by specific subgroups (Kagawa-Singer & Hune, 2011). Finally, causal inferences made as a result of this study need to be made cautiously. A final limitation is that since this cross-sectional study only examined APA college freshmen, it is limited in its generalizability and scope.

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Appendix A

Concepts and Measures Used In This Study			
Concept	Measure	Scale of Variable	Comments/SPSS Variable Labels
Bootstrap Ideology	1 = Disagree strongly 2 = Disagree somewhat 3 = Agree somewhat 4 = Agree strongly	Continuous	VIEW17 (Through hard work, everybody can succeed in American society)
Attitude Toward Abolishment of Affirmative Action	1 = Disagree strongly 2 = Disagree somewhat 3 = Agree somewhat 4 = Agree strongly	Continuous	VIEW10 (Affirmative action in college admissions should be abolished)
Racism Ideology	1 = Disagree strongly 2 = Disagree somewhat 3 = Agree somewhat 4 = Agree strongly	Continuous	VIEW06 (Racial discrimination is no longer a problem in America)

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