

Discrimination, Acculturative Stress, and Academic Achievement: A Mediating Model

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Overview

Background: Research indicates that racial discrimination leads to poorer academic outcomes, however, the mechanisms that explain this relationship remain unclear.

Objective: The aim of this pilot study is to test the hypothesis that acculturative stress and academic self-efficacy mediate the relationship between discrimination and academic achievement.

Methods: The sample consisted of undergraduate students ($N = 55$) at a large, private university in the northeast, who were recruited via the university's online course credit remitting system. Participants completed an online survey and submitted their grade reports.

Results: Results found that the relationship between discrimination and academic achievement can be explained by the effects of acculturative stress, but not academic self-efficacy.

Background

Research has shown that racial minority students who face classroom-based discrimination produce lower quality work than their racial majority peers (Neblett, Philip, Cogburn, & Sellers, 2006; Rosenbloom & Way, 2004; Thomas, Caldwell, Faison, & Jackson, 2009).

Acculturative stress may be a form of stress salient to racial and ethnic minority group members (Thompson, Anderson, & Bakeman, 2000; Walker, Obasi, Wingate, & Joiner, 2008).

Researchers have consistently found a strong relationship between discrimination and acculturative stress in both adolescents and adults (Ahmed, Kia-Keating, & Tsai, 2011; Dawson & Panchanadeswaran, 2010; Torres, Driscoll, & Voell, 2012).

Both general stress and academic self-efficacy have been shown to be predictive of academic achievement (Chemers, Hu, & Garcia, 2001; Gore, 2006; Kötter, Wagner, Brühm, & Voltmer, 2017; Pritchard & Wilson, 2003).

Some research has suggested that academic self-efficacy is a stronger predictor of academic achievement than stress (Zajacova, Lynch, & Espenshade, 2005), but these results have not been replicated.

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Gaps & Hypotheses

Gaps:

- The mechanism that explains the relationship between racial discrimination and poor academic outcomes is unclear.
 - Two pathways have been identified in research that are likely related, but have not been connected in a single study:

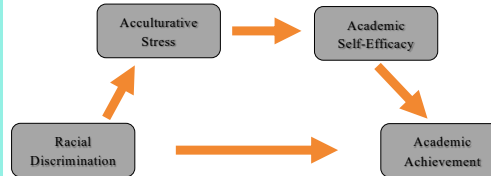


- There is a paucity of research examining the effects of both stress and self-efficacy on academic achievement.

Hypotheses:

The purpose of this study is to test the hypothesis that *acculturative stress*, which is more sensitive to racial/ethnic factors than general stress, serves as the primary mediator in the relationship between racial discrimination and academic achievement.

A secondary hypothesis is that academic self-efficacy acts as a sequential mediator with acculturative stress in this relationship as illustrated below.



Operational Definitions

Racial discrimination, is defined as the process by which an individual, or a larger group, is treated unfairly based on membership in a culturally or socially defined group (Krieger, 2000).

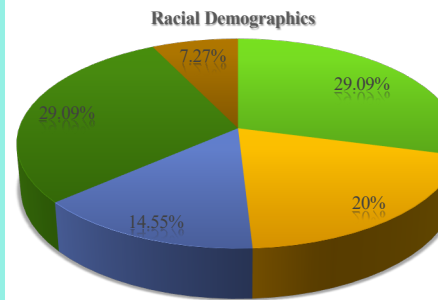
Acculturative stress is defined as a form of internal conflict that occurs as a result of being faced with the decision to conform, adjust, or remain faithful to one's culture when experiencing consistent and prolonged exposure to a different culture (Walker, 2007).

Academic self-efficacy is defined as an individual's appraisal of his or her capability to plan and act in a manner that promotes an attainment of academic achievement and positive academic performance (Zimmerman, 1995).

Methods

Participant Characteristics:

GENDER	
Men (n, %)	17, 30.91%
Women (n, %)	38, 69.09%
Age (mean, SD, range)	(19.54, 1.36, 7)



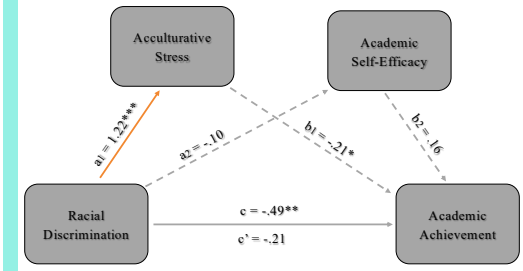
■ Asian ■ Black ■ Hispanic ■ White ■ Biracial

Measures (Self-Report):

Racial Discrimination	Brief Lifetime Perceived Ethnic Discrimination Questionnaire – Community Version (PEDQ-CV; Brondolo et al., 2005)
Acculturative Stress	Social, Attitudinal, Familial, and Environmental Acculturative Stress Scale (SAFE; Padilla et al., 1986)
Academic Self-Efficacy	Patterns of Adaptive Learning Scale (PALS; Midgley et al., 2000)
Academic Achievement	GPA was obtained from participants' academic records

Results

Multiple mediation analyses were performed with interpersonal discrimination as the predictor variable, acculturative stress and academic self-efficacy as the mediators, academic achievement as the outcome variable, and race variables as the covariates:



* $p < .10$
** $p = .06$
*** $p = .0001$

There was a trend for a total effect of interpersonal discrimination on academic achievement ($p = .06$). Analyses of the *a* paths revealed interpersonal discrimination was positively associated with acculturative stress, but not academic self-efficacy. Analyses of *b* paths revealed a marginal effect for acculturative stress ($p < .10$) but not academic self-efficacy on GPA. There were significant indirect effects for acculturative stress (bias corrected and accelerated CI = $-.80$ - $-.02$), but not for academic self-efficacy.

***** Pearson Partial Correlation Coefficients, $N = 55$, controlling for race *****

	PEDQ	SAFE	SE	GPA
Discrimination (PEDQ)	1.00000	0.50963	-0.04088	-0.25621
Acculturative stress (SAFE)	0.50963	1.00000	-0.13216	-0.34565
Academic Self Efficacy (SE)	-0.04088	-0.13216	1.00000	0.25230
GPA	-0.25621	-0.34565	0.25230	1.00000

Conclusion, Limitations, & Future Directions

In sum, the relationship between racial discrimination and academic achievement can be explained largely by the effects of acculturative stress rather than academic self-efficacy.

Limitations include the small sample size and the inability to make causal statements due to the cross-sectional nature of the study.

Future research should address these limitations by obtaining longitudinal data, which will both provide the power necessary for a smaller sample and allow for the analyzing of causal relationships between variables.