

Exploring the relationships between perceptions of peer prejudice, school attendance, and academic performance among adolescent youth

Abstract

Research pertaining to perceived prejudice among adolescents has been limited despite the growing prevalence and incidence of issues centered around race relations and the impact it has on youth development and academic achievement. Given the research gap in this area, especially as it relates to the variations among different racial and ethnic groups, this study examined the relationships between youths' perceptions of peer prejudice in the school environment to school attendance and academic performance among a cross-sectional sample of 68,825 adolescents from Wave 1 of the In-School data set from the¹ National Longitudinal Study of Adolescent Health (Add Health). Multiple regression analyses pertaining to perceptions of peer prejudice was predictive of school attendance among African American, Caucasian, and Hispanic males and females. Results also revealed that perceived peer prejudice was predictive of academic performance among African American males and females and Caucasian females, but not predictive of Caucasian males and Hispanic males and females. Implications for research, intervention, and prevention as it relates to educational achievement among adolescent youth are discussed.

Keywords: adolescence, school, prejudice, academic achievement, race and ethnicity

Volume 3 Issue 5 - 2015

Roslyn M Caldwell-Gunes,¹ N Clayton Silver²

¹California Polytechnic State University, San Luis Obispo, USA

²Psychology Department, University of Nevada, Las Vegas, USA

Correspondence: Roslyn M Caldwell-Gunes, Psychology and Child Development Department, California Polytechnic State University, San Luis Obispo, 1 Grande Ave, San Luis Obispo, CA 93407, USA, Tel (805)756-2686, Email rmcalde@calpoly.edu

Received: September 15, 2015 | **Published:** October 13, 2015

Introduction

Adolescent development is shaped by interactions encountered within one's environment that influence both cognitive and social development.^{2,3} Such interactions involve family, peer, and teacher-adolescent relationships that contribute to his or her progress that impact their thinking, perceiving, reacting and relating to the world around them.^{4,5} Cognitively, this is a time period adolescents become capable of sophisticated thinking and develop a high-level intellectual functioning.⁶ Socially, adolescent years encompass the development of new experiences and relationships with family, peers, teachers, and to a larger degree, their community which contributes to their overall sense of mental health and well being and also their sense of self-identity, self-concept, autonomy, and independence.^{7,4} This time period can also be marked by challenges associated with dynamic social and personal domains the adolescent experiences which oftentimes leads to newly found emotions, both positive and negative.^{8,9} While experiences faced by adolescents are unique to each individual during these developmental years, it is this time period that tends to lay the foundation for successful transition into adulthood.⁴

The school environment is one area where adolescents spend much of their critical developmental years, which simultaneously exposes them to many positive encounters and unique developmental challenges.¹⁰ School not only provides adolescents with important academic related knowledge and skills, it also aids in the socialization process by exposing adolescents to a large variety of interactions with peers and school staff.^{9,11,12} However, not all socialization experiences in the school setting are positive. The potential exists for adolescents to encounter negative situations and interactions at any stage of the academic realm. For instance, adolescents can oftentimes be exposed to prejudice within the classroom, a negative attitude(s) or idea(s) about social groups that are based on faulty and unjustified generalizations, and usually manifested in discriminatory acts towards one person or an entire group(s).¹³ While studies have shown that such experiences (whether perceived or actual) can create difficulties for adolescents

including mental health issues such as depression, anxiety,¹⁴ decreased life satisfaction,^{15,16} substance use,¹⁷ violent and aggressive behavior¹⁸ and poor academic performance¹⁹ other research suggests these experiences may provide positive adaptive coping styles. For instance, adolescents engaging in pro-social behavior have been found to be the most frequent mechanism used as a positive coping response to perceived prejudice in the school environment among African American and Mexican American adolescents.²⁰ Similarly,²¹ examined the ways in which racial and ethnic minorities cope with various stressors (i.e., stereotypes, discrimination and prejudice) and found that positive coping styles resulted in positive self esteem.²²

Racial/ethnic group differences and similarities in perceptions of prejudice

Research has also found significant differences in the ways in which adolescents from various racial and ethnic minority groups perceive prejudice (i.e., African American and Hispanic Americans), with studies revealing differences in the amount and the ways in which perceived racial prejudice is interpreted.²³⁻²⁵ One of the major differences has been found in a study by Triandis et al.,²⁶ who examined perceived barriers to school adjustment among African American, Caucasian and Hispanic students. The authors found that African American and Hispanic adolescents were more likely to interpret ambiguous behaviors, such as being ignored by peers as being prejudice in nature. Furthermore, Fisher et al.,²⁷ compared the types and prevalence of perceived racial prejudice among African American, Asian American, Caucasian and Hispanic adolescents with results indicating Caucasian adolescents reporting significantly less prejudice and discrimination by peers in school than African American, Asian American and Hispanic adolescents. Additional findings showed that African American and Hispanic adolescents reported a greater frequency than Caucasians of perceiving others in stereotypical ways such as "not being smart" and being "dangerous" because of their race and/or ethnicity. Currently, two studies have compared the amount of and responses to perceived peer prejudice

among African American, Caucasian and Hispanic adolescents and found that all three racial/ethnic groups perceived that they were excluded from activities with peers based on their race and ethnicity.^{4,27}

The Relationship Between Perceptions of Peer Prejudice and School Attendance Among Adolescents

Currently, no studies exist that examine the relationships between perceptions of peer prejudice and school attendance. However, previous research^{28,29} has identified perceived peer prejudice in school to be a factor related to negative experiences and behaviors in the school environment among adolescents including but not limited to unexcused absences and/or truancy, violence and aggression, and bullying.²⁸⁻³⁰

The relationship between perceptions of peer prejudice and school academic performance among adolescents

Studies^{31,32} have also shown that adolescents who perceive themselves to be a target of prejudice in the school environment by peers tend to focus on the qualities that make them different or deficient (i.e., race and or ethnicity) as compared with other students, ultimately diverting their attention away from academics, which creates difficulty to attain achievement and excellence^{31,33}. Consequently, adolescents who perceive they are the target of prejudice are often rejected by their peers, which can lead to feelings of alienation, and poor academic performance, including school dropout, and violence and aggression.^{31,32,34} For example, studies that focus on academic performance have shown that African American youth who perceive teachers and peers to be prejudice begin to de-value the importance of educational attainment,^{35,36} experience decreased interest and value in their own academic success,^{37,38} and decreased confidence in their own academic abilities.^{39,40}

While there is considerably less research regarding Hispanic adolescents' perceptions of peer prejudice and academic performance, existing studies regarding general perceptions of prejudice in the school environment have found that Hispanics also experience such issues. Valenzuela⁴¹ examined academic success in relation to classroom perceptions among Hispanic adolescents and found poor school performance and academic attainment on the part of Hispanic adolescents was attributed to negative experiences in the classroom (i.e., prejudice), and feeling inconsequential in the eyes of their peers. Furthermore, Stone & Han¹⁹ examined the school performance of Hispanic adolescents and their perception of prejudice by their teachers and found adolescents who perceived their teachers to be prejudice had poor academic performance as evidenced by lower grade point averages.

Even fewer studies examine Caucasian adolescents' perception of peer prejudice in school and academic performance. Existing research indicates that Caucasian adolescents have a generally positive school experience with factors including teacher and peer support contributing to their overall academic success.^{33,42} Kuperminc et al.,⁴³ examined racial/ethnic differences in school adjustment among adolescents and found Caucasians had significantly less conflict with their peers, compared to African American and Hispanic adolescents. Moreover, research has shown that Caucasian adolescents have higher grade point averages and greater school adjustment than their African American and Hispanic counterparts.⁴³

Given the limited number of studies that exist in this area of research, the alarming statistics that African American and Hispanics

have the highest high school dropout rate nationwide (11%, and 24%, respectively) when compared to their overall composition within the United States,^{44,45} poor academic achievement, mental health issues, substance abuse, and gang involvement,^{12,46} the present study attempts to further existing research by focusing on differences that may exist in the relationships between perceptions of prejudice in school and the relationship between attendance and academic performance among African American, Caucasian and Hispanic adolescents. With the limited research in the field it seems apparent that such an examination would be necessary to understand potential risk factors among adolescents in hopes to bolster treatment intervention and prevention programs that target these populations, ultimately improving academic achievement among this population.

Method

Dataset

The present study analyzed data from the National Longitudinal Study of Adolescent Health,¹ which is a nationwide school based longitudinal study of health-related behaviors among adolescents throughout the United States. The study provides a very unique opportunity to examine the relationship between contextual factors and life achievement outcomes.⁴⁶ The data sampling was based on a sample of 80 high schools and 52 middle schools throughout the United States, producing a sample intended to be representative of schools throughout the United States with respect to region, urban city, school type, ethnicity, and school size. This study used the Wave 1 In-Home and In-School data set of students in grades 7 through 12, who were eligible to participate in the study by completing the In-Home and In-School surveys. The Wave 1 In-Home survey included such topics as peer networks, family composition, educational aspirations and expectations, and self-report of behaviors. The Wave 1 In-School survey included such topic questions as risk behaviors, friendships, self-esteem, and expectations of the future. The main purpose of the Wave 1 data survey was to understand the factors associated with adolescents including their health and risk behaviors.^{47,48}

Sample

Of the eligible participants (those who completed both survey questions and items as it related to the current study), the final number used for analysis in this study was 68,825 adolescents (32,942 males, 35,883 females). The ages ranged from 10 to 17 African Americans (M males = 14.98, SD males = 1.745, M females = 14.83, SD females = 1.716), Caucasians (M males = 15.08, SD males = 1.689, M females = 14.90, SD females = 1.681) and Hispanic

(M males = 15.31, SD males = 1.767, M females = 15.21, SD females = 1.741). The racial composition was 21.3% African Americans, 64.1% Caucasians, and 16.5% Hispanics.

Definitions and measures

Perception of Peer Prejudice. Perceived peer prejudice is based upon a 5-point Likert type scale (strongly agree, agree, neither agree or disagree, disagree, and strongly disagree). Participants scores ranged from 1 to 5 with higher scores indicating a greater likelihood of an adolescent perception of peer prejudice, African Americans (M males = 3.05, SD males = 1.23, M females = 2.94, SD females = 1.15), Caucasians

(M males = 3.34, SD males = 1.14, M females = 3.32, SD females = 1.08) and Hispanics

($M_{\text{males}} = 3.14$, $SD_{\text{males}} = 1.15$, $M_{\text{females}} = 3.10$, $SD_{\text{females}} = 1.02$). This measure or question item has also been used in previous studies to assess perceived peer prejudice.^{46,49}

School attendance

School Attendance was composed of a self-report question that assessed the number of days the student was absent from school without a valid excuse (i.e., truancy). This measure was based on a 6-point scale with 0 indicative of “never” skipping school and 6 indicative of skipping school “nearly every day.” Participants scores ranged from 0 to 6 for African Americans ($M_{\text{males}} = .63$, $SD_{\text{males}} = 1.35$, $M_{\text{females}} = .51$, $SD_{\text{females}} = 1.14$), Caucasians ($M_{\text{males}} = .68$, $SD_{\text{males}} = 1.30$, $M_{\text{females}} = .54$, $SD_{\text{females}} = 1.08$), and Hispanics ($M_{\text{males}} = 1.05$, $SD_{\text{males}} = 1.65$, $M_{\text{females}} = .87$, $SD_{\text{females}} = 1.41$).

Academic performance

Academic Performance assessed participants’ most recent grade point average in English, history, science and math. These questions were added together to create a scale from 5 to 20, with 5 indicative of an “A” average and a 20 indicative of an “F” average. Participant’s scores ranged from 4 to 20: African Americans ($M_{\text{males}} = 13.92$, $SD_{\text{males}} = 7.403$, $M_{\text{females}} = 12.83$, $SD_{\text{females}} = 7.09$), Caucasians ($M_{\text{males}} = 11.50$, $SD_{\text{males}} = 6.70$, $M_{\text{females}} = 10.64$, $SD_{\text{females}} = 6.31$) and 4 to 33 for Hispanics ($M_{\text{males}} = 14.03$, $SD_{\text{males}} = 7.34$, $M_{\text{females}} = 13.44$, $SD_{\text{females}} = 7.25$).

Results

Relationships between perceptions of peer prejudice and school attendance

Statistically significant relationships were found among African American males ($r = .055$, $p < .01$), African American females ($r = .041$, $p < .01$), Caucasian males ($r = .119$, $p < .01$), Caucasian females ($r = .123$, $p < .01$), Hispanic males ($r = .062$, $p < .01$), and Hispanic females ($r = .083$, $p < .01$). The omnibus test of independent correlations revealed that among males there was a significant difference among the three racial/ethnic groups, $H = 26.82$, $p < .001$, as well as females, $H = 41.29$, $p < .001$.

Relationships between perceptions of peer prejudice and academic performance

Pearson Product-Moment Correlations were computed to examine the relationships between perceptions of peer prejudice and academic performance. The Bonferroni-Holm procedure was used for each group to control for Type I error. Statistically significant relationships were found among African American males ($r = -.053$, $p < .01$), African American females ($r = -.039$, $p < .01$), and Caucasian females ($r = .023$, $p < .01$). No significant relationships were found among Caucasian males, Hispanic males or females ($p > .05$). The omnibus test of independent correlations⁵⁰ was used to assess significant differences between independent correlations. Results showed a significant difference among the three racial/ethnic groups for males, $H = 14.57$, $p < .001$ and females, $H = 21.60$, $p < .001$.

Test of dependent correlations

In order to determine if there were differences between the correlations of perceptions of peer prejudice and academic achievement, and perceptions of peer prejudice and school attendance for all six groups individually, the Dunn and Clark z test for dependent correlations with one element in common was performed.⁵¹ This test

not only maintains reasonable control of Type I error but also exhibits good power.⁵² Perceptions of peer prejudice and attendance was significantly higher than perceptions of peer prejudice and academic achievement among, African American males ($Z = 5.68$, $p < .001$) and females ($Z = 4.94$, $p < .001$), Caucasian males ($Z = 12.50$, $p < .001$) and females ($Z = 11.09$, $p < .001$), Hispanic males ($Z = 2.955$, $p < .01$) and females ($Z = 3.24$, $p < .01$).

Predicting academic achievement from perceptions of peer prejudice

A multiple regression analysis indicated that academic achievement was significantly predicted from perceptions of peer prejudice among African American males, $R^2 = .003$, $F(1, 5523) = 15.4$, $p < .001$, African American females, $R^2 = .002$, $F(1, 7300) = 11.03$, $p < .001$, and Caucasian females, $R^2 = .001$, $F(1, 24326) = 12.552$, $p < .001$.

Predicting school attendance from perceptions of peer prejudice

School attendance was also significantly predicted from perceptions of peer prejudice among African American males, $R^2 = .003$, $F(1, 5920) = 18.10$, $p < .001$, and females, $R^2 = .002$, $F(1, 7628) = 12.68$, $p < .001$, Caucasian males, $R^2 = .014$, $F(1, 24028) = 345.03$, $p < .001$, and females, $R^2 = .015$, $F(1, 24691) = 378.62$, $p < .001$, and Hispanic males, $R^2 = .004$, $F(1, 4002) = 15.29$, $p < .001$ and females, $R^2 = .007$, $F(1, 3923) = 27.52$, $p < .001$.

Discussion

The current study aimed to explore the relationships between perceptions of peer prejudice in school and academic attendance and performance among a national representative sample of high school adolescents comprised of African American, Caucasian and Hispanic males and females. Given the scarcity of research examining these relationships and the increasing rates of educational under achievement, particularly among African American and Hispanic American adolescents, this study is of particular significance. The findings add to existing literature since none to date have explored such relationships and focused on racial, ethnic and gender differences among this age group.

The current study revealed significant relationships between perceptions of peer prejudice and academic achievement for African American males and females, and Caucasian females. African American males and females reported the lowest levels of perceived peer prejudice of any group in the study, a finding that provides support for two previous studies.^{53,54} In regard to the relationship to peer prejudice, African American adolescents’ academic performance was negatively related to perceptions of peer prejudice in the school setting. Thus, the more perceived prejudice by peers that African American adolescents reported, the higher the overall grades. Although previous studies have focused on the negative impact of perceived prejudice and racism in school on academic achievement among youth,^{33,36,38,40} the present study found that despite perceptions of peer prejudice, positive academic achievement was attained, a finding that has not been previously found. Moreover, when comparing between-group differences, results from the current study revealed a significantly higher negative correlation for African American males than for Caucasian and Hispanic males. Similarly, African American females had a significantly higher negative correlation than for Caucasian and Hispanic females. This finding suggests that perceptions of peer prejudice within the school environment by African American youth may bolster a sense of resilience and a tendency to positively cope

with negative situations such as these, rather than allowing such experiences to diminish one's self-esteem, self-confidence, academic achievement and attainment.²²

In regards to the relationship between perceptions of peer prejudice and academic achievement, although not strong, this finding suggests that perceived peer prejudice may be related to academic achievement but other factors may play a role in accounting for consistent academic underachievement and underperformance by African American youth. For example, Matthew⁵⁵ described differences in academic performance and achievement between African American and Caucasian adolescents based upon different expectations about associated life opportunities and outcomes. While youth in the study by Matthew⁵⁵ did not differ in terms of how relevant they viewed education in their futures, African Americans reported less current and future opportunities at a higher rate than their Caucasian counterparts. Future certainty may play a role in beliefs and ideas about academic achievement more so than perceptions of peer prejudice among African American youth, which are related to societal factor sand previously found in research.⁵⁶ Understanding these potential relationships may have important educational policy and practice implications.

Findings related to the Caucasian students revealed this group to have the highest academic performance with females reporting the best performance. Somewhat surprisingly, Caucasian youth reported the highest levels of perceived peer prejudice as compared to Hispanic and African Americans, respectively. This is a noteworthy finding given that previous studies have consistently shown Caucasian youth to have a positive experience among school peers and academic performance.^{33,42,43} On the other hand, this finding lends support to a recent study where Caucasian students reported higher levels of perceived peer prejudice at school than racial and ethnic minority youth,⁵² a finding that suggests that prejudice may be defined differently among Caucasians compared to racial and ethnic minority adolescents.

Finally, a significant relationship between prejudice and performance for Hispanic males and females was not found in the current study, a notable finding that is contrary to previous literature research.^{19,41} Perhaps even greater differences would be found if subgroups of the Hispanic population were examined which seems to be of relevance given the growing number of diverse Hispanic adolescents throughout the United States. Regarding the relationship between perceived prejudice and school attendance, a positive trend was found among all groups, with the more perceived peer prejudice the more days of school reportedly missed. The findings of our study suggest that perceptions of peer prejudice may be related to increased risk of truancy among youth. Future research would need to examine the predictive validity of such a relationship. However, this finding is of importance because it presents new information regarding the relationship between academic performance and school attendance, which until the present study, has not specifically been examined. Future studies regarding this relationship are of great importance for understanding the connection between racial relationships among adolescents and the impact on school attendance. Such exploration would have a significant impact on school policy making on a local, state, and national level given the high numbers of truancy among youth nationwide.

While the present study has produced important findings, results of the current study should be contextualized given a few limitations. This study analyzed data from a national longitudinal dataset, which had limited representation of African Americans from a variety of socioeconomic backgrounds. African American youth in the current

study were from high socio-economic backgrounds with the majority consisting of parents holding higher education degrees. Differences may be found in future studies where the socio-economic background was more diverse and including youth from varying economic strata. Another limitation of the study was the limited number of within racial groups of the Hispanic adolescents (i.e., limited number of Mexican Americans). Given the diversity of the Hispanic population, future studies could examine within group differences to determine the way in which perceptions of prejudice and experiences of the school environment are related to youths' overall academic achievement.

This study represents an important contribution to the literature pertaining to perceptions of peer prejudice and academic performance among the adolescent population. Future research examining such variables from a longitudinal standpoint would be an advantageous approach to discover the causal direction of the relationships found in the current study. Additionally future studies should explore dimensions and dynamics of perceived prejudice in an effort to obtain a better understanding of this phenomena experienced among youth and the impact on their development especially as it pertains to academic achievement and future success especially as youth transition into adulthood.

Implications

Education is an essential element among adolescents when considering prevention and interventions efforts and programs aimed to address negative school experiences such as perceptions of peer prejudice and enhance positive ones. Programs aimed at school disengagement such as truancy and academic underachievement might prevent future related and potentially more deleterious delinquent related behaviors. Additionally, an interdisciplinary approach in this process must include an understanding in the way in which important people and figures such as school teachers and staff, along with parents, play in an adolescents' life. Additionally, continued education and training regarding ways in which to elicit positive coping skills in an academic environment among youth is essential in terms of curtailing the impact of perceived prejudice and a negative school environment on subsequent behavior. Interventions should also focus on providing positive coping skill mechanisms to adolescents in an effort to improve the outcome of perceptions or reality of prejudice. The current study furthers the field by providing information regarding racial, ethnic, and gender differences related to adolescents' experience of the school environment, an area with limited research. At a time when there is concern for understanding adolescents' academic successes and failures, difficult race relations, and increased risk of spiraling down a negative pathway of behavior, teachers along with school administration and the community could benefit from increased awareness and intervention in this area.

Acknowledgments

None.

Conflicts of interest

Author declares there are no conflicts of interest.

Funding

None.

References

1. Add Health. The National Longitudinal Study of Adolescent to Adult Health. 2008.

2. Leonard J. Using Bronfenbrenner's ecological theory to understand community partnerships: A historical case study of one urban high school. *Urban Education*. 2011;46(5):987–1010.
3. Bronfenbrenner U. Ecology of the family as a context for human development: Research perspectives. *Developmental Psychology*. 1986;22(6):723–742.
4. Benson J, Johnson MK. Adolescent Family Context and Adult Identity Formation. *Journal of Family Issues*. 2009;30(9):1265–1286.
5. Crockett LJ, Silbereisen RK. Social change and adolescent development. In: LJ Crockett & RK Silbereisen (Eds.), *Negotiating adolescence in times of social change*, Cambridge University Press, New York, USA. 2000. p.1–13.
6. Keating DP. Cognitive and brain development in adolescence. *Enfance*. 2012;2012(3):267–279.
7. Preckel F, Niepel C, Schneider M, et al. Self-concept in adolescence: A longitudinal study on reciprocal effects of self-perceptions in academic and social domains. *J Adolesc*. 2013;36(6):1165–1175.
8. Malti T. Adolescent emotions: Development, morality, and adaptation. In: Jossey-Bass (Ed.), *San Francisco, CA, USA*. 2013.
9. Bergevin T, Bukowski W, Miners R. Social development. In: Slater A, Bremner G (Eds.), *An Introduction to Developmental Psychology*, Blackwell, Oxford, UK. 2003. p.388–411.
10. Brown EL, Kanny MA, Johnson B. "I am who I am because of here!": School settings as a mechanism of change in establishing high-risk adolescents' academic identities. *The Journal of Early Adolescence*. 2014;34(2):178–205.
11. Horner CG, Wallace TL. Measuring emotion socialization in schools. *J Sch Health*. 2013;83(10):697–703.
12. McCaul EJ, Donaldson GA, Coladarci T, et al. Personal, social and economic consequences of dropping out of school: Findings from High School and Beyond. *Journal of Educational Research*. 1992;85:198–207.
13. Kiesner J, Maass A, Cadinu M, et al. Risk Factors for Ethnic Prejudice During Early Adolescence. *Social Development*. 2003;12(2):288–308.
14. Kessler RC, Mickelson KD, Williams DR. The prevalence, distribution, and mental health correlates of perceived discrimination in the United States. *J Health Soc Behav*. 1999;40(3):208–230.
15. Sellers R, Morgan L, Brown T. A multidimensional approach to racial identity: Implications for African American children. In: A Neal-Barnett, et al. (Eds.), *Forging links: African American children clinical developmental perspectives* Westport, Praeger Publishers, USA. 2001. p.23–56.
16. Sellers RM, Shelton JN. The role of racial identity in perceived racial discrimination. *J Pers Soc Psychol*. 2003;84(5):1079–1092.
17. Gibbons FX, Gerrard M, Cleveland MJ, et al. Perceived discrimination and substance use in African American parents and their children: A panel study. *J Pers Soc Psychol*. 2004;86(4):517–529.
18. Caldwell CH, Kohn-Wood LP, Schmeelk-Cone KH, et al. Racial Discrimination and Racial Identity as Risk or Protective Factors for Violent Behaviors in African American Young Adults. *American Journal of Community Psychology*. 2004;33(1–2):91–105.
19. Stone S, Han M. Perceived school environments, perceived discrimination, and school performance among children of Mexican immigrants. *Children and Youth Services Review*. 2005;27(1):51–66.
20. Phinney JS, Chavira V. Parental ethnic socialization and adolescent coping with problems related to ethnicity. *Journal of Research on Adolescence*. 1995;5(1):31–54.
21. Mena FJ, Padilla AM, Maldonado M. Acculturative stress and specific coping strategies among immigrant and later generation college students [Special issue]. *Hispanic Journal of Behavioral Sciences*. 1987;9:207–225.
22. Coleman HLK, Casali SB, Wampold BE. Adolescent Strategies for Coping With Cultural Diversity. *Journal of Counseling & Development*. 2001;79(3):356–364.
23. Fisher C B, Jackson J, Villarruel F. The study of African American and Latin American children and youth. In: Lerner RM (Ed.), *Theoretical models of human development, volume I of the handbook of child psychology* (5th edn.), Wiley, New York, USA. 1997. p. 1145–1207.
24. Laosa LM. Ethnic, socioeconomic, and home language influences upon early performance on measures of abilities. *ETS Research Report Series*. 1984;1984(2):1–79.
25. Spencer MB. Social and cultural influences on school adjustment: The application of an identity-focused cultural ecological perspective. *Educational Psychologist*. 1999;34(1):43–57.
26. Triandis H, Kurowski L, Tectiel A, et al. Extracting the emics of cultural diversity. *International Journal of Intercultural Relations*. 1993;17:217–234.
27. Fisher CB, Wallace SA, Fenton RE. Discrimination distress during adolescence. *Journal of Youth and Adolescence*. 2000;29(6):679–695.
28. Monahan KC, VanDerhei S, Bechtold J, et al. From the school yard to the squad car: School discipline, truancy, and arrest. *J Youth Adolescence*. 2014;43(7):1110–1122.
29. Vaughn MG, Maynard BR, Salas-Wright CP, et al. Prevalence and correlates of truancy in the US: Results from a national sample. *Journal of Adolescence*. 2013;36(4):767–776.
30. Estrada JN, Gilreath TD, Astor RA, et al. Gang membership of California middle school students: Behaviors and attitudes as mediators of school violence. *Health Educ Res*. 2013;28(4):626–639.
31. Lehman B. The impacts of friendship groups' racial composition when perceptions of prejudice threaten students' academic self-concept. *Social Psychology of Education*. 2012;15(3):411–425.
32. Martinez CR, DeGarmo DS, Eddy MJ. Promoting academic success among Latino youth. *Hisp J Behav Sci*. 2004;26(2):128–151.
33. Carter C, Rice CL. Acquisition and Manifestation of Prejudice in Children. *Journal of Multicultural Counseling and Development*. 1997;25(3):185–194.
34. Finn, Jeremy D. Withdrawing from School. *Review of Educational Research*. 1989;59(2):117–142.
35. Irving M, Hudley C. Cultural identification and academic achievement among African American males. *Journal of Advanced Academics*. 2008;19(4):676–698.
36. Taylor RD, Caster R, Flickinger SM, et al. Explaining school performance of African-American adolescents. *Journal of Research on Adolescence*. 1994;4(1):21–44.
37. Hope EC, Jagers RJ, Skoog AB. It'll Never Be the White Kids, It'll Always Be Us": Black High School Students' Evolving Critical Analysis of Racial Discrimination and Inequity in Schools. *Journal of Adolescent Research*. 2014;30(1):83–112.
38. Griffin K, Allen W. Mo'moneymo' problems?: High-achieving Black high school students' experience with resources, racial climate, and resilience. *Journal of Negro Education*. 2001;75(3):478–494.
39. Marcus G, Gross S, Seefeldt C. Black and white students' perceptions of teacher treatment. *Journal of Educational Research*. 1991; 84(6):363–367.
40. Tucker CM, Herman KC, Pedersen T, et al. Student-generated solutions to enhance the academic success of African American youth. *Child Study Journal*. 2000;30(3):205–224.

41. Valenzuela A (1999) Subtractive schooling: U.S. – Mexican youth and the politics of caring. Albany: State University of New York Press.
42. DuBois DL, Felner RD, Brand S, Adan AM, Evans EG (1992) A prospective study of life stress, social support, and adaptation in early adolescence. *Child Dev* 63(3): 542-557.
43. Kuperminc GP, Blatt SJ, Shahar G, Henrich C, Leadbeater BJ (2004) Cultural equivalence and cultural variance in longitudinal associations of young adolescent self-definition and interpersonal relatedness to psychological and school adjustment. *Journal of Youth & Adolescence* 33(1): 13-30.
44. Fox MA, Connolly BA, Snyder T (2005) Youth Indicators: Trends in the Well-Being of American Youth. National Center for Education Statistics.
45. National Center for Education Statistics (NCES) 2013; 2005.
46. Respress BN, Small E, Francis SA, et al. The role of perceived peer prejudice and teacher discrimination on adolescent substance use: A social determinants approach. *J Ethn Subst Abuse*. 2013;12(4):279–299.
47. Udry JR, Bearman PS, Harris KM, et al. The National longitudinal study of adolescent health, study design. *Add Health*. 2007.
48. Bearman Peter, Jones Jo, Udry J Richard. The National Longitudinal Study of Adolescent Health: Research Design. Chapel Hill: Carolina Population Center, University of North Carolina at Chapel Hill, USA. 1997.
49. Schwartz JA, Beaver KM. Evidence of a gene × environment interaction between perceived prejudice and MAOA genotype in the prediction of criminal arrests. *Journal of Criminal Justice*. 2011;39(5):378–384.
50. Rao CR. Advanced Statistical Methods in Biometric Research. MacMillan: New York, USA. 1970.
51. Dunn OJ, Clark VA. Correlation coefficients measured on the same individuals. *Journal of the American Statistical Association*. 1969;64(325):366–377.
52. Hittner JB, May K, Silver NC. A Monte Carlo evaluation of tests for comparing dependent correlations. *J Gen Psychol*. 2003;130(2):149–168.
53. Benner AD, Crosnoe R, Eccles JS. Schools, peers, and prejudice in adolescence. *Journal of Research on Adolescents*. 2014;1–16.
54. Rosenbloom SR, Way N. Experiences of discrimination among African American, Asian American, and Latino adolescents in an urban high school. *Youth and Society*. 2004;35(4):420–451.
55. Matthew E. Effort optimism in the classroom: Attitudes of black and white students on education, social structure, and causes of life opportunities. *Sociology of Education*. 2011;84(3):225–245.
56. Caldwell RM, Wiebe R, Cleveland HH. The influence of future certainty and contextual factors on delinquent behavior and school adjustment among African American adolescents. *Journal of Youth and Adolescence*. 2006;35(4):587–598.