

# **The Relationship between Child and Adolescent Risk and Protective Factors and Racial Microaggression, Ethnic Identity, and Well-Being in Young Adulthood**

Shandra S. Forrest-Bank

University of Denver

Denver, CO

## **Statement of the Research Problem**

Young adulthood, the period that spans the transition between adolescence and adulthood, has changed significantly in the past several decades. Today, it is not uncommon for young people to leave home at an older age, and to rely on full or partial financial support from their parents as they navigate the transition to adulthood. Given the increasing importance of higher education in current economic markets, many young adults have also chosen to delay marriage and parenthood (Arnett, 2000; Fussell & Furstenberg, 2005). While the prospect of adulthood is exciting and fulfilling for most young people, many find it difficult to establish the roles and responsibilities associated with adulthood. Unfortunately, substance abuse, crime, educational failure, unemployment, and mental health problems are far too common among people between the ages of 18 and 30 (Child Trends Data Bank, 2010; Cusick, Courtney, & Havlicek, 2010; National Center for Health Statistics, 2009).

Identifying causal factors that contribute to the individual and social problems experienced by young adults is challenging. A number of investigators have identified child and adolescent risk and protective factors that contribute to the onset of problem behavior and to well-being during adolescence (e.g., Farrington, 1995; Herrenkohl, et al., 2000; Werner, 2005). Less is known, however, about the influence of child and adolescent risk and protective factors on the functioning of young adults. In this regard, life course perspective (Elder & Crosnoe, 2003) is useful in understanding factors that may be related to the significant changes in social roles, personal relationships, and institutional supports experienced by young adults. Life course frameworks highlight the importance of recognizing new and emerging types of risk and protective influences that may not have been present during childhood or adolescence. Clearly, understanding the influence of both childhood and “later” risk and protective factors on young adult behavior is critically important to improving the quality of life for young adults.

Disparities in well-being reported by white and nonwhite young adults also point to the importance of understanding the influence of race and ethnicity on outcomes during young adulthood. Prior studies suggest that racial discrimination has a substantial negative impact on well-being (Williams et al., 2003; Krieger & Sidney, 1996; Smith,

1985). Recent evidence indicates that racial discrimination is frequently subtle and often characterized by displays of unintentional behavior referred to as “racial microaggression” (Sue et al., 2007). The impact of these subtle forms of discrimination on well-being during young adulthood has been only minimally addressed in the research literature.

Conversely, a strong sense of ethnic identity has been shown to reduce the negative effects of discrimination for people from various ethnic groups (Phinney, 1992; Umaña-Taylor & Updegraff, 2007; Utsey, Chae, Brown, & Kelly, 2002). Ethnic identity is defined as that part of an individual’s self-concept that comes from membership with a social group (or groups) combined with the value and emotional significance attached to that membership (Phinney, 1990; Tajfel, 1981). Ethnic identity also involves an exploration and cognitive development of one’s identification as a group member. In addition, there are affective aspects of identity that involves the extent to which a person feels attachment and pride associated with that identification (Phinney, 1990). To date, interactions between the adverse effects of discrimination and the positive aspects of ethnic identity have not been examined extensively among young adults.

In sum, relatively little is known about the way in which early risk and protective factors and exposure to discrimination and levels of ethnic identity during young adulthood affect well-being among young people following adolescence. In the current study, structural equation modeling is applied to a sample of 486 young adult college students to examine the influence of child and adolescent risk and protective factors and perceived acts of racial microaggression and ethnic identity during young adulthood on young adult outcomes of substance abuse, criminal intentions, and academic self-efficacy.

## **Research Questions**

Three specific research questions guided the study:

1. What is the relationship between childhood risk and protective factors for problem behavior and academic self-efficacy among young adult college students?
2. What is the impact of perceived racial microaggression and ethnic identity on well-being of young adults after controlling for the influence of risk and protective factors?
3. Do relationships among childhood risk and protective factors, perceived racial microaggression, ethnic identity, and young adult problem behavior and course self-efficacy differ between racial/ethnic groups?

## **Methodology**

Participants were undergraduate students enrolled at an urban college in the western United States. The sampling frame included all undergraduate students at the college between the ages of 18 and 35 from the four largest racial and ethnic groups (white, black, Latino/Hispanic, and Asian). Since the proportion of nonwhites was

relatively small, the sampling frame was first stratified by racial and ethnic group membership. An oversampling probability procedure was then used to ensure adequate representation of each racial and ethnic group in the study sample. The final N was 486, representing a response rate of 16 percent. Table 1 presents the sample's demographic data for the sample.

Table 1  
*Sample Demographics (N=486)*

		N	(%)
Age <i>M</i> =24 <i>SD</i> =4.3	18-23	247	(51.6)
	24-29	168	(34.6)
	30-35	61	(12.6)
Sex	Male		(35.8)
	Female		(64.2)
Race/ethnicity	White	145	(30.5)
	Asian	117	(24.6)
	Latino/Hispanic	115	(24.2)
	Black	98	(20.6)
Sexual orientation	Straight	443	(91.7)
	GLBTQ	40	(8.3)
Born in the U.S.?	Student	401	(82.5)
	Mother	295	(61.6)
	Father	294	(61.4)
Year in college	1	81	(16.7)
	2	90	(18.6)
	3	110	(22.7)
	4	87	(17.9)
	5	69	(14.2)
	6	22	(4.5)
	7 or more	26	(5.4)
In an intimate relationship?		259	(53.6)
Who do you live with?	Partner	151	(31.1)
	Mother	199	(40.9)
	Father	151	(31.1)
Number of children	0	403	(82.9)
	1	40	(8.2)
	2	23	(4.7)
	3	14	(2.9)
	4+	6	(1.2)
Hours of work per week in the past month	0	138	(28.5)
	1-29	111	(22.9)
	30-40	90	(18.6)
	More than 40	146	(30.1)

The independent (exogenous) variables used in the analysis included indicators of four childhood risk and protective factors and measures of microaggression and ethnic identity. Child and adolescent risk and protective factors were measured using four scales developed by the Social Development Research Group (SDRG) at the University of Washington (Arthur, Hawkins, Pollard, Catalano, & Baglioni, 2002). The Racial and Ethnic Microaggressions Scale (REMS) (Nadal, 2011) was used to measure respondents' experiences of perceived discrimination. This instrument contains 45 items, consisting of six subscales: Assumptions of Inferiority, Second-Class Citizen and Assumptions of Criminality, Microinvalidations, Exociticism and Assumptions of Similarity, Environmental Microaggressions, and Workplace and School Microaggressions. The Ethnic Identity Achievement subscale of the Multigroup Ethnic Identity Measure (MEIM) (Phinney, 1992) was used to assess the developmental and cognitive components of ethnic identity search.

Three dependent (endogenous) constructs, academic self-efficacy, substance abuse, and criminal intentions, were measured. Academic self-efficacy was assessed using the *course self-efficacy* subscale of the *College Self-Efficacy Instrument* (Solberg et al., 1993). This instrument measures college students' confidence in managing tasks related to course completion that are integral to college participation. Substance abuse was measured with the *CRAFFT* (Knight et al., 1999), a 6-item instrument used to assess problem alcohol and/or drug use in adolescents and young adults. Criminal intentions were assessed with the 7-item *Criminal Intent* scale, developed from items drawn from the Measures of Criminal Attitudes and Associates (MCAA) survey (Backstrom & Bjorklund, 2008). This scale measured antisocial attitudes and criminal thinking that have been demonstrated to predict criminal behavior and recidivism (Mills, Anderson, Kroner, 2006).

Structural equation modeling (SEM) in Mplus (Version 6; Muthén and Muthén 2007) was used as the primary analytic method. Confirmatory Factor Analysis (CFA) was first conducted to examine measurement models for each of the latent constructs. A second phase in SEM involved testing the hypothesized relationships between variables specified in the model. In this regard, a series of structural models were systematically tested to directly address each study question. Subsamples of racial groups were of insufficient size to examine differences in model fit by race or ethnicity. Thus, one-way analysis of variance tests were conducted to examine mean score differences on measures of microaggression and ethnic identify by race and ethnicity.

## Results

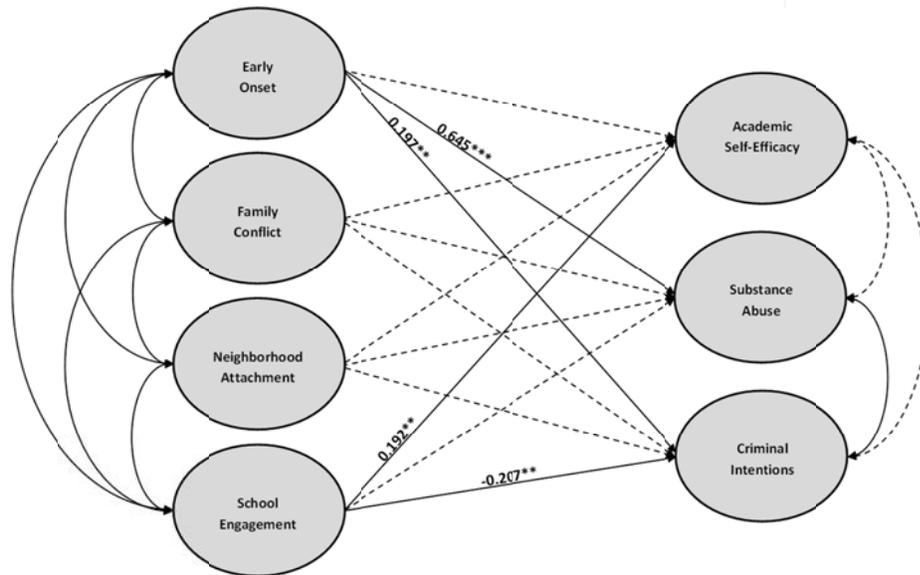
### Impact of Child and Adolescent Risk and Protective Factors on Young Adult Outcomes

The first model we tested examined relationships between the child and adolescent risk and protective factors (e.g., early onset of problem behavior, family conflict, commitment to school, and neighborhood attachment) and the three outcome variables of academic efficacy, substance abuse, and criminal intentions. As shown in Figure 1, early onset of problem behavior was significantly related to substance abuse ( $\beta=0.665, p < .001$ ) and criminal intentions ( $\beta=0.071, p < .01$ ) in young adulthood. In addition, childhood school engagement was significantly related to both academic self-efficacy ( $\beta=0.159, p < .01$ ) and criminal intentions ( $\beta=-0.072, p < .01$ ).

Consistent with the study's hypothesis, as childhood school engagement increased, so did the participants' level of competence in managing coursework. Childhood school engagement was negatively related to criminal intentions.

Family conflict and neighborhood attachment variables were not significantly related to any of the three outcome variables. The fit indices suggest adequate model fit (RMSEA=0.038, CFI=0.977, TLI=0.975). The R-square values for the outcome variables indicate that this model accounted for a small, yet statistically significant portion of the variance in academic self-efficacy (5.2%) and criminal intentions (11.6%). A considerably greater portion of the variability (45.8%) in substance abuse was explained by the model. Table 2 presents the factor loadings and  $R^2$  for each of the models.

Figure 1. Results of Model 1 Risk and Protective Factors, Academic Self-Efficacy, Substance Abuse, and Criminal Intentions



Fit Indices

X <sup>2</sup> (df)	RMSEA	CFI	TLI	WRMR
1088.899 (642)***	1.038	0.977	0.975	1.183

\* = p ≤ .05      \*\* = p ≤ .01      \*\*\* = p ≤ .001  
 Non-significant paths are indicated by dashed lines.

Table 2. Factor Loadings for Each Predicted Pathway and Coefficient of Determination (R<sup>2</sup>) for Each Outcome Variable

IV → DV	MODEL 1 Risk and Protective Factors predicting ASE, SA, and CI			MODEL 2 Microaggression and Ethnic Identity predicting ASE, SA, and CI			MODEL 3 Risk and Protective Factors and Microaggression and Ethnic Identity predicting ASE, SA, and CI		
	β	B	SE	β	B	SE	β	B	SE
Onset → ASE	0.128	0.110	0.074				0.122	0.107	0.073
Family Conflict → ASE	0.023	0.017	0.069				0.057	0.044	0.070
Neighborhood Attachment → ASE	0.117	0.096	0.065				0.108	0.089	0.064
School Engagement → ASE	0.192**	0.159**	0.063				0.166**	0.139**	0.065
Microaggression → ASE				-0.196**	-0.220**	0.073	-0.196**	-0.218**	0.075
Ethnic Identity → ASE				0.199**	0.206**	0.070	0.148*	0.149**	0.074
ASE R <sup>2</sup>	0.052*			0.044			0.084*		
Onset → SA	0.630***	0.672**	0.052				0.668***	0.724***	0.054
Family Conflict → SA	0.097	0.091	0.063				0.108	0.102	0.063
Neighborhood Attachment → SA	0.113	0.115	0.062				0.117	0.119	0.062
School Engagement → SA	-0.062	-0.063	0.058				0.060	-0.025	0.059
Microaggression → SA				0.036	0.041	0.081	-0.089	-0.122	0.075
Ethnic ID → SA				-0.103	-0.108	0.077	-0.127	-0.157	0.069
SA R <sup>2</sup>	0.458***			0.009			0.483***		
Onset → CI	0.197**	0.071**	0.064				0.232**	0.083**	0.065
Family Conflict → CI	0.050	0.016	0.060				0.048	0.015	0.061
Neighborhood Attachment → CI	0.067	0.023	0.055				0.072	0.024	0.054
School Engagement → CI	-0.207**	-0.072**	0.055				-0.025**	-0.059**	0.056
Microaggression → CI				0.049	0.020	0.071	-0.010	-0.004	0.068
Ethnic Identity → CI				-0.145	-0.054	0.071	-0.121	-0.050	0.071
CI R <sup>2</sup>	0.116***			0.017			0.132***		

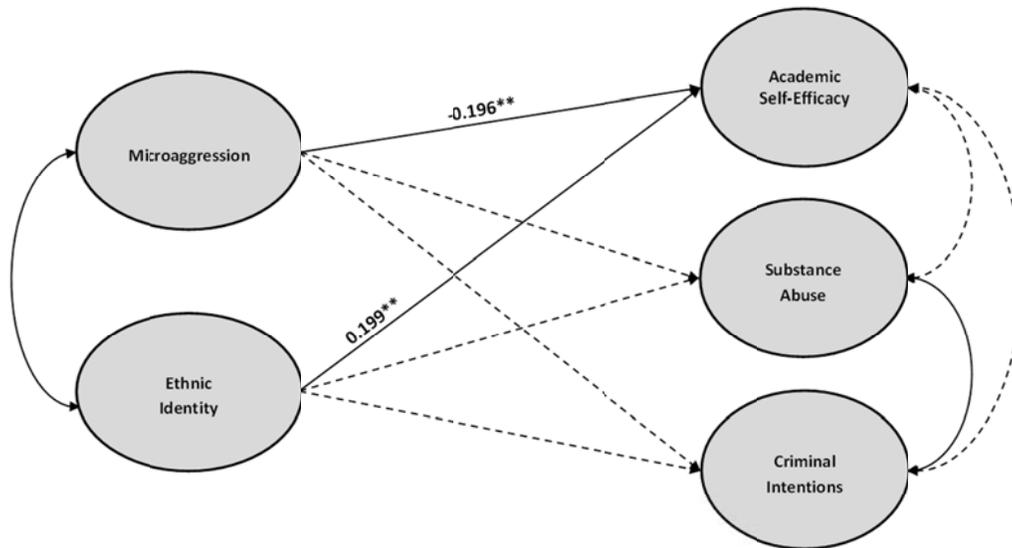
\*p ≤ .05      \*\*p ≤ .01      \*\*\*p ≤ .001

ASE = Academic Self-Efficacy, SA = Substance Abuse, CI = Criminal Intentions

### Impact of Racial Microaggression and Ethnic Identity on Young Adult Outcomes

The impact of perceived racial microaggression and ethnic identity on the three study outcomes was examined after controlling for the influence of risk and protective factors. This analysis was conducted to determine whether the previously noted relationships between risk and protective factors and outcomes changed after variables assessing microaggression and ethnicity were added to the model. As shown in Figure 2, racial and ethnic microaggression was inversely and significantly related to course self-efficacy ( $\beta = -.0220, p < .01$ ). Conversely, ethnic identity was positively related to self-efficacy ( $\beta = 0.206, p < .01$ ). Neither of the exogenous variables was significantly related to substance abuse or criminal intentions. The fit indices revealed adequate model fit (RMSEA=0.027, CFI=0.963, TLI=0.961). The R-square values for the outcome variables were not statistically significant. The R-square for substance abuse was .9%; 4.4% of the variance was explained for academic self-efficacy and 1.7% for criminal intentions.

Figure 2. Results of Model 2 Microaggression and Ethnic Identity with Academic Self-Efficacy, Substance Abuse, and Criminal Intentions



Fit Indices				
$\chi^2$ (df)	RMSEA	CFI	TLI	WRMR
2915.394 (2253)***	0.027	0.963	0.961	1.146

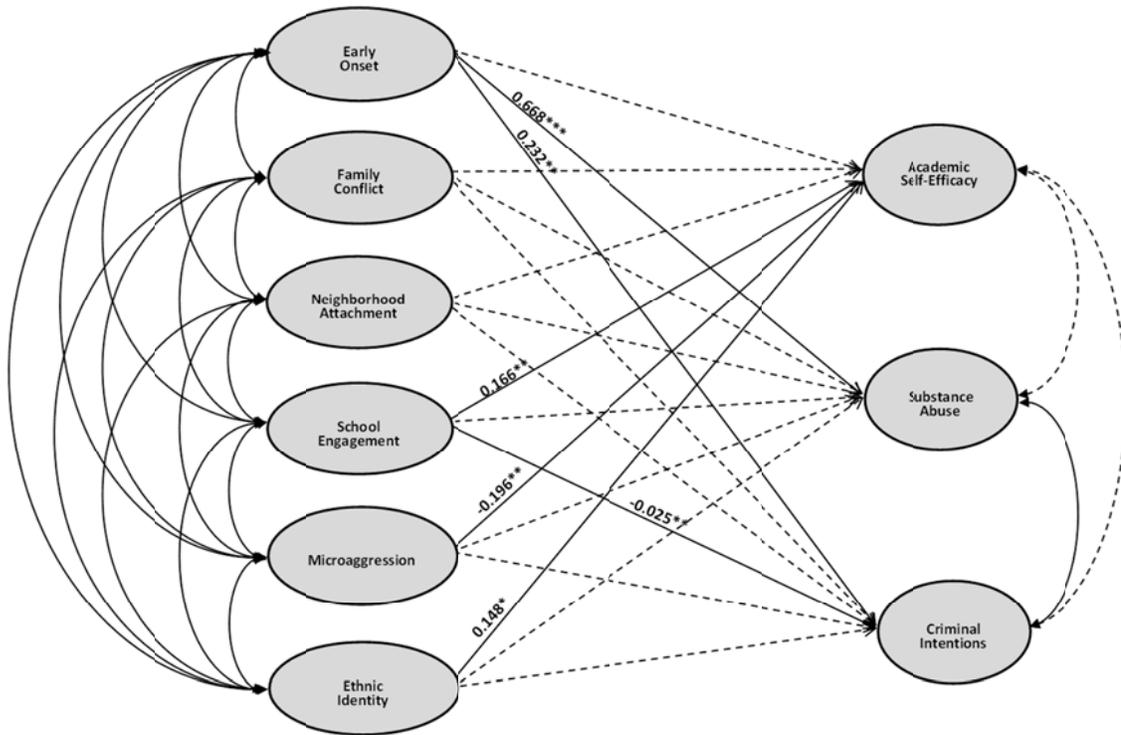
\* =  $p \leq .05$       \*\* =  $p \leq .01$       \*\*\* =  $p \leq .001$   
 Non-significant paths are indicated by dashed lines.

### **Impact of Child and Adolescent Risk and Protective Factors, Racial Microaggression, and Ethnic Identity on Young Adult Outcomes**

A final model included all risk, protection, racial microaggression, and ethnic identity variables. As shown in Figure 3, factor loadings reveal that none of the earlier reported relationships between variables changed when previous models were combined. Congruent with the first model, statistically significant positive relationships were found between early onset of problem behavior and substance abuse ( $\beta=0.724, p < .001$ ) and criminal intentions ( $\beta=0.083, p < .01$ ) in young adulthood. In addition, childhood school engagement was positively and significantly related to academic self-efficacy ( $\beta = 0.139, p < .01$ ), and negatively and significantly related to criminal intentions ( $\beta=-0.059, p < .01$ ). Furthermore, the family conflict and neighborhood attachment variables were not significantly related to any of the outcome variables.

There was a significant and inverse relationship between microaggression and academic self-efficacy ( $\beta=-.0218, p < .01$ ). In addition, ethnic identity was positively related to academic self-efficacy ( $\beta=0.149, p < .05$ ). There was an observable reduction in the factor loading from ethnic identity to academic self-efficacy when compared to the second model in which there were no childhood risk and protective factors included in the model (from 0.206,  $p < .01$  to 0.149,  $p < .05$ ). Neither microaggression nor ethnic identity was significantly related to substance abuse or criminal intentions in the full model. The fit indices revealed adequate fit when all study variables were included in the model (RMSEA=0.022, CFI=0.963, TLI=0.962). The R-square values for the outcome variables indicate that racial and ethnic microaggression and ethnic identity added to the variance accounted for by the initial model that included only risk and protective factors. Variables in the full model accounted for 48% of the variance in substance abuse, and 13.2% and 8.4% of the variance in criminal intentions and academic self-efficacy respectively.

Figure 3. Results of Model 3 Whole Structural Model with Child Risk and Protective Factors, Microaggression and Ethnic Identity, and Academic Self-Efficacy, Substance Abuse, and Criminal Intentions



**Fit Indices**

$\chi^2$ (df)	RMSEA	CFI	TLI	WRMR
4576.411 (3690)***	0.022	0.963	0.962	1.169

\* =  $p \leq .05$       \*\* =  $p \leq .01$       \*\*\* =  $p \leq .001$   
 Non-significant paths are indicated by dashed lines.

## **Utility for Social Work Practice**

Study findings indicate that child and adolescent risk and protective factors and experiences of racial and ethnic microaggression and ethnic identity during young adulthood are important factors in shaping behavior among young adults. Early onset of antisocial behavior and levels of school engagement during childhood were significantly associated with outcomes in young adulthood. These findings point to the importance of universal and targeted prevention programs during childhood. Given the current emphasis on post-secondary educational success in the U.S, the finding that childhood school engagement promotes academic self-efficacy in college is particularly important.

Racial and ethnic microaggression and ethnic identity were identified as important influences during young adulthood. These findings suggest that academic programs and interventions aimed at reducing the negative effects of discrimination and promoting the positive aspects of ethnic identity should be implemented in college and university settings. Finally, study findings raise important questions about the way in which people of color experience and are impacted by acts of racial discrimination. Additional studies with larger samples are needed to more effectively study questions associated with racial and ethnic group differences in microaggression. Social work students, practitioners, and policy makers should be trained to recognize and understand ways in which early individual and social risk and protective factors and perceptions of discrimination and ethnic identity during young adulthood affect people during the transitory stage following adolescence.

## References

- Arnett, J. J. (2000). Emerging adulthood: A theory of development from the late teens through the twenties. *American Psychologist*, 55(5), 469–480.
- Arthur, M. W., Hawkins, J. D., Pollard, J. A., Catalano, R. F., & Baglioni, A. J. (2002). Measuring risk and protective factors for substance use, delinquency, and other adolescent problem behaviors: The communities that care youth survey. *Evaluation Review*.
- Backstrom, M., & Bjorklund, F. (2008). The measures of criminal attitudes and associations (MCAA): further testing of structural and criterion-related validity. *Criminal Justice and Behavior*, 35, 1398.
- Child Trends. (2010). *Young Adult Depression*. Retrieved from [www.childtrendsdatabank.org/?q=node/325](http://www.childtrendsdatabank.org/?q=node/325).
- Cusick, G. R., Courtney, M. E., & Havlicek, N. H. (2010). Crime during the transition to adulthood: How youth fare as they leave out-of-home care, executive summary. U.S. Department of Justice. [www.ncjrs.gov/pdffiles1/nij/grants/229666.pdf](http://www.ncjrs.gov/pdffiles1/nij/grants/229666.pdf).
- Elder, G. H., Johnson, M. K., & Crosnoe, R. (2003). The emergence and development of life course theory. In J. T. Mortimer & M. J. Shanahan (Eds.), *Handbook of the life course*. New York: Kluwer, pp. 3–22.
- Farrington, D. P. (1995). The development of offending and antisocial behaviour from childhood: Key findings from the Cambridge study in delinquent development. *Journal of Child Psychology and Psychiatry*, 36, 929–964.
- Fussell, E., & Furstenberg, F. F. (2005). The transition to adulthood during the twentieth century. In R. A. Settersten, F. F. Furstenberg, & R. G. Rumbaut (Eds.), *On the frontier of adulthood*. Chicago: University of Chicago Press.
- Herrenkohl, T. I., Maguin, E., Hill, K. G., Hawkins, J. D., Abbott, R. D., & Catalano, R. (2000). Developmental risk factors for youth violence. *Journal of Adolescent Health*, 26 (3), 176–186.
- Knight, J., Shrier, L., Bravender, T., Farrell, M., VanderBilt, J., & Shaffer, H. (1999). A new brief screen for adolescent substance abuse. *Arch Pediatric Adolescent Medicine*, 153:591–596.
- Krieger, N., & Sidney, S. (1996). Racial discrimination and blood pressure: The CARDIA study of young black and white adults. *American Journal of Public Health*, 86, 1370–1378.
- National Center for Health Statistics Health, United States. (2008). With Chartbook Hyattsville, MD: 2009.
- Phinney, J. S. (1990). Ethnic identity in adolescents and adults: Review of research. *Psychological Bulletin*, 108, 499–514.
- Phinney, J. S. (1992). The multigroup ethnic identity measure: A new scale for use with diverse groups. *Journal of Adolescent Research*, 7(2) (April): 156–176.

Smith, E.M.J. (1985). Ethnic minorities: Life stress, social support, and mental health issues. *Counseling Psychologist, 13*, 537.

Sue, D. W., Bucciari, J. M., Lin, A. I., Nadal, K. L., & Torino, G. C. (2007). Racial microaggressions and the Asian-American experience. *Cultural Diversity & Ethnic Minority Psychology, 13*, 72–81.

Tajfel, H. (1981). *Human groups and social categories*. Cambridge, UK: Cambridge University Press.

Umaña-Taylor, A. J., & Updegraff, K. A. (2007). Latino adolescents' mental health: Exploring the interrelations among discrimination, ethnic identity, cultural orientation, self-esteem, and depressive symptoms. *Journal of Adolescence, 30*, 549–567.

Utsey, S. O., Chae, M. H., Brown, C. F., & Kelly, D. (2002). Effect of ethnic group membership on ethnic identity, race-related stress, and quality of life. *Cultural Diversity Ethnic Minor Psychology, 8*, 366–77.

Werner, E. E. (2005). What can we learn about resilience from large-scale longitudinal studies? In Goldstein & Brooks (Eds.), *Handbook of resilience in children*. New York: Kluwer Academic/Plenum Publishers, pp. 91–105

Williams, D. R., Neighbors, H. W., & Jackson, J. S. (2003). Racial and ethnic discrimination and health: Findings from community health studies. *American Journal Public Health, 93*, 200–208.