The Role of Family Relationships in the Psychological Wellbeing of Internacially Dating Adolescents

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ABSTRACT

This study uses data from the *National Longitudinal Study of Adolescent to Adult Health* (Add Health) to examine the role of family relationships in explaining psychological wellbeing differentials between adolescents who date interracially and adolescents who date same-race partners. We find that interracial daters face significantly higher levels of depressive and anxiety-related symptoms than their peers in same-race relationships, and their lower levels of family support and parent-child closeness and higher levels of parent-child conflict appear to explain a substantial portion of this disadvantage. The findings also suggest that the negative effect of interracial dating on depressive symptoms holds similarly across gender and among White, Black and Hispanic youth, but not among Asian youth. In fact, among Asian daters, those involved in interracial relationships appear to experience significantly lower levels of depressive symptoms. The association between racial composition of relationship and anxiety-related symptoms is not moderated by gender or race/ethnicity.

KEYWORDS: interracial, dating, psychological wellbeing, adolescents, youth, parents

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Introduction

Adolescence is a time when the dynamics of parent-child relationships change and most young people begin developing romantic relationships. Despite the fact that peers increasingly influence the attitudes and behavior of individuals as they age into adolescence, parents continue to strongly influence adolescent dating opportunities, partner selection, and the wellbeing of dating youth. The vast majority of youth have their first romantic experience by their mid to late teens (Brown, 2004; Collins and van Dulme, 2006). While the literature suggests that romantic relationships generally are associated with negative psychological wellbeing outcomes among adolescents (Collins, 2003; Joyner and Udry, 2000), the lowered wellbeing of dating youth appears to be, in part, explained by their less positive parent-child relationships. Moreover, the outcomes of dating youth are protected by having close relationships with supportive parents (Steinberg and Davila, 2008). Conversely, conflict with parents is a risk factor for increased levels of poor mental health among all youth (Dowdy and Kliewer, 1998). An increasing number of adolescents now are dating interracially (Kreager, 2008; Vaquero and Kao, 2005), and these youth tend to experience even more negative psychological wellbeing outcomes than dating youth in general (Miller, 2014). We do not know yet, however, whether parent-child relationship quality helps to explain the differential psychological wellbeing outcomes of adolescents in same-race and interracial relationships.

The present study addresses this gap in the literature by examining the effects of parentchild relationships on adolescents in both same-race and interracial relationships. Using data from the National Longitudinal Study of Adolescent to Adult Health (Add Health), we test several hypotheses derived from a stress process framework (Pearlin et al., 1981). Specifically, this study examines whether: 1) interracial daters face greater risk of depression and anxiety than same-race daters; 2) disparities in the psychological wellbeing of same-race and interracial daters are mediated by differences in parent-child relationships; and 3) the association between couple's racial composition (same-race versus interracial) and psychological wellbeing is conditioned by the individual respondent's race and gender.

Background Adolescent Romantic Relationships

Adolescence is a period in the life course when young adults experience significant changes in their emotions and romantic desires. About half of adolescents become romantically involved by age 15 (Brown, 2004) and three-fourths have dated by age 18 (Collins and van Dulme, 2006). Thus, dating and romantic relationship formation is an important part of adolescent development for most youth (Brown, 2004; Collins and van Dulme, 2006; Joyner and Udry, 2000).

Although most youth engage in same-race relationships with partners who have similar racial backgrounds as themselves (Kreager, 2008; Vaquera and Kao, 2005), a significant percentage of adolescents are crossing racial boundaries and dating interracially. Between 12% and 19% of adolescents have engaged in an interracial romantic relationship (Kreager, 2008; Wang, Kao, and Joyner, 2006), but the prevalence of interracial romance is not uniform across racial groups. White and Black adolescents are the least likely to interracially date, while Asians and Hispanics are the most likely to do so. There also is further variation across the interaction of race and gender, as White females, Asian females, and Black males are more likely to date interracially than their opposite-sex counterparts (Kreager, 2008).

Relatively little is known about the processes through which adolescents select interracial partners, but the racial and gender differences in the likelihood of engaging in interracial romance may be related to the attitudes and beliefs of parents. The partner selection process of adolescents tends to be heavily influenced by their parents, who often work to establish a pool of acceptable romantic partners, boundaries of acceptable dating behavior, and sanctions for their children's involvement with unacceptable partners (Laursen and Jensen-Campbell, 1999). The issue of race remains a salient factor that influences notions of partner acceptability for many parents who restrict their children from dating interracially (Edmonds and Killen, 2009). As a result, many youth may be limited in their ability to date outside their own racial group.

Adolescent Romantic Relationships and Psychological Wellbeing

Although most youth become romantically involved during adolescence, romantic relationships are associated with some negative psychological wellbeing outcomes. For example, romantic involvement during adolescence is significantly related to heightened feelings of anxiety (Glickman and LaGreca, 2004; LaGreca and Mackey, 2007) and elevated levels of stress (Larson, Core, and Wood, 1999). A large body of literature also indicates that romantically involved youth face a greater risk of being depressed and psychologically distressed (Collins, 2003; Davila, 2008; Davila et al., 2004; Joyner and Udry, 2000; Miller, 2014). Thus, engaging in a romantic relationship during adolescence may be a stressor, in and of itself, that adversely affects outcomes of psychological wellbeing.

In addition, limited research suggests that the racial composition of a relationship (samerace vs. interracial relationship) may have an effect on the psychological wellbeing of individuals. Intermarried adults have been found to be more psychologically distressed than those with same-race partners (Bratter and Eschbach, 2006), and Nonblacks with Black partners

are more depressed than Nonblacks with Nonblack partners (Kroeger and Williams, 2011). Similarly, a recent study by Miller (Forthcoming) showed that interracially dating adolescents report significantly higher levels of depressive symptoms than their counterparts in same-race relationships. Collectively, the extant literature suggests that individuals in interracial relationships will have lower psychological wellbeing than those in same-race relationships.

Past research also indicates that interracial daters are more likely to experience breakups than are same-race daters (Bratter and King, 2008; Wang, Kao, and Joyner, 2006). Romantic breakup during adolescence, in general, is linked to depression-related outcomes (Joyner and Udry, 2000; Miller, 2014; Simon and Barrett, 2010). A recent study by Miller (Forthcoming) found that experiencing a breakup explained the greater risk of depression-related outcomes among adolescent daters, as compared to non-daters, in general. However, breakups did not fully explain the heightened risk of depression-related outcomes among interracial daters, specifically. Therefore, researchers have yet to account for the factors that explain the difference in psychological wellbeing between same-race and interracial daters.

The Stress Process Model and Parental Influence on the Psychological Wellbeing

In order to explore the social mechanisms that may contribute to the differences in the wellbeing of adolescents in same-race and interracial relationships, the current study relies upon the *stress process model*. This model proposes that differences in social position tend to translate into differential exposure to stressful life events and disparate access to resources that can help buffer the adverse effects of stress, which in turn can lead to health disparities (Pearlin, 1989; Pearlin et al., 1981). The utility of this model has been strongly supported by research that has shown that stress exposure accounts for a significant portion of observed differences in depressive symptoms and anxiety disorders (Turner and Lloyd, 1999; Turner and Lloyd, 2004).

The current study conceptualizes *racial composition of the individual's relationship* (same-race vs. interracial) as a unique social position that has yet to be examined in the context of the stress process model. We hypothesize that the racial composition of an individual's romantic relationship will be associated with his or her psychological wellbeing because interracial relationships, as compared to same-race relationships, will tend to translate into greater exposure to stressful experiences, like parent-child conflict, and less access to social resources, like parental support and communication, that might help to buffer adolescent wellbeing from stress.

Examining the role of parent-child relationships is important. During adolescence, most youth become less dependent on their parents as peer and romantic relationships become more salient. However, parents still greatly influence their children's wellbeing. In general, youth who perceive having high levels of emotional support and close, positive relationships with their parents report fewer depressive symptoms than their peers (Gore and Aseltine, 2003; Moon and Rao, 2010; Needham, 2008). Yet, engagement in romantic relationships during adolescence, or the desire to engage in them, can undermine the relationships that some youth have with their parents. Some parents disapprove of their child's dating interest and dating activities, and some altogether restrict participation in romantic relationships (Gray and Steinberg, 1999). As such, it is not surprising that, on average, romantically involved youth tend to experience greater conflict and less close relationships with their parents than do non-daters (Dowdy and Kliewer, 1998; Joyner and Udry, 2000). Adolescent daters, as a result, may be less likely than non-daters to rely on their parents to provide the adequate emotional support needed to successfully cope with the stresses associated with the transition to adulthood and may be at risk for having lower levels psychological wellbeing (Gray and Steinberg, 1999; Steinberg and Davila, 2008).

The issue of race remains a salient factor that influences notions of partner acceptability for many parents who restrict their children from dating interracially (Edmonds and Killen, 2009; Laursen and Jensen-Campbell, 1999). While not all parents disapprove of interracial romance, many parents discourage their children from dating interracially, particularly in cases where a partnership would include one white and one non-white partner (Edmonds and Killen, 2009). Romantic involvement with someone of the "wrong" crowd or social background may generate intensely negative reactions from family (Downey, Bonica, and Rincon, 1999). Consequently, adolescents who date interracially without parental approval may experience elevated levels of parent-child conflict (Downey et al., 1999; McNamara, Tempenis, and Walton et al., 1999), and perceive their family as less supportive and less close (Laursen and Jensen-Campbell, 1999). These poorer parent-child relationships, in turn, could help to explain the lower psychological wellbeing of interracial daters compared to their peers in same-race relationships.

Given the greater disapproval of some particular racial combinations of interracial relationships (Edmonds and Killen, 2009), as well as the differential likelihood of engaging in interracial relationships among youth of various racial and gender backgrounds (Kreager, 2008), the experience of interracial dating may be more stressful for youth from some groups than from others. Yet, we know of no current research that examines the moderating influence of an individual's race and gender on the association between racial composition of relationship and psychological wellbeing outcomes among adolescents.

The Current Study

The present study extends previous research by examining whether or not attributes related to parent-child relationships explain differences in the psychological wellbeing of adolescents in heterosexual same-race and interracial romantic relationships. Using data from the

National Longitudinal Study of Adolescent to Adult Health (Add Health), the current set of analyses examines the following three hypotheses:

Hypothesis 1: Interracially dating adolescents will report higher scores for symptoms of depression and anxiety than same-race daters.

Hypothesis 2: Differences in the psychological wellbeing of same-race and interracial daters will be mediated by attributes of parent-child relationships.

Hypothesis 3: The association between racial composition of the relationship (i.e. same-race vs. interracial) and psychological wellbeing will be conditioned by the respondent's gender and race.

Material and Methods

The National Longitudinal Study of Adolescent to Adult Health (Add Health) is a schoolbased study of a nationally representative sample of adolescents in grades 7-12 in the United States in 1994-1995. The Add Health used a multistage, stratified, school-based, cluster sampling design that involves four waves of data collection and several data collection components. The In-School component, a self-administered questionnaire, was conducted during 1994-1995. At that time, school administrators from each of the participating schools also completed a School Administrator Questionnaire regarding school characteristics, and school enrollment rosters were used to randomly select students from each school to participate in a more extensive Wave I In-Home interview. Additionally, Wave I Parental Questionnaires were completed by one of each participant's parents or guardians, usually a mother. Wave II, conducted in 1996, included inhome interview follow-ups with those students who had completed an in-home interview in Wave I. In-home interview follow-ups were conducted again at Wave III in 2001 and Wave IV

in 2007. See Harris et al. (2009) for more details on the Add Health Study.

These analyses employ data from the adolescent In-Home interviews during Wave I to predict psychological wellbeing at Wave II. Subsequent waves of data are not used because respondents were adults ages 18 to 26 by Wave III, which is beyond the age of adolescence. The response rate for Wave I is 79% and for Wave II is 88.6%.

The analytical sample was first limited to those adolescents who participated in both the Wave I and Wave II in-home interviews, were in a current or recent heterosexual romantic relationship at Wave I, and self-identified their race/ethnicity as non-Hispanic White, non-Hispanic Black, Hispanic, or Asian. Youth who reported having an "other" or multi-racial background were excluded from the sample, as were those who reported having a same-sex romantic partner. The final weighted sample consists of 4,597 White, 953 Black, 729 Hispanic, and 211 Asian adolescent daters (N = 6,490).

Measures

In order to help address issues related to the temporal ordering of romantic relationship formation and psychological wellbeing outcomes, all independent variables are constructed from Wave I data and all dependent variables are constructed from Wave II data.

Dependent Variables

These analyses examine the outcomes for two dependent variables. *Depressive symptoms* were measured using an index of 11 questions ($\alpha = .84$; see Appendix for specific items included in this index) (Joyner and Udry, 2000) based on the Center for Epidemiology Studies Depressive Symptoms Scale (CES-D) (Radloff, 1977). Values for each original item were ordinal, with responses ranging from 0 (never or rarely experienced a particular symptom in the last week) to 3 (most of the time or all of the time experienced a particular symptom within the last week).

Higher scores indicate more depressive symptoms. *Anxiety symptoms* were measured using an index of 5 questions ($\alpha = .68$; see Appendix). Values for each original item were ordinal, with responses ranging from 0 (never) to 4 (every day). Higher scores indicate more anxiety symptoms.

Independent Variables

Race/ethnicity was measured using the respondent's self-reported information of his or her racial/ethnic background, and each adolescent was placed into one of four mutually exclusive racial/ethnic categories: non-Hispanic White, non-Hispanic Black, Hispanic (of any race), and Asian. *Gender* is a self-reported variable that categorizes respondents as either male (0) or female (1).

Racial Composition of Relationship was determined by the dating respondents' answers

to the question: "What is the race of your romantic partner?" Respondents who reported that their current or most recent romantic partner had the same racial background as themselves were categorized as *same-race daters*. Respondents who reported that their current or most recent romantic partner had a different racial background than their own were categorized as *interracial daters*.

The quality of parent-child relationships was assessed by three measures. *Closeness with parents* is a mean-item index of 6 questions ($\alpha = .86$) that asks about each adolescent's perceptions of how loving his/her parent(s) are, how well he/she communicates with his/her parent(s), and his/her overall level of satisfaction with his/her parent(s) (see Appendix). Original responses were ordinal and ranged from 1 (strongly disagree) to 5 (strongly agree). Higher scores

indicate closer relationships with parents. *Communication with parents* is a mean-item index of 8 questions ($\alpha = .70$) that measures whether each respondent has recently talked with his/her

parent(s) about personal or school related issues (see Appendix). Original responses were dichotomous and coded as either yes (1) or no (0). Higher scores indicate greater communication with parents. *Conflict with parents* is a dichotomous measure (yes/no) that captures whether or not respondents had a serious argument with a resident parent/guardian within the four weeks prior to the interview. *Perceived Emotional Family Support* is a 5-item index ($\alpha = .75$) that

measures respondents' perceptions of the amount of emotional support they receive from their parents and family (see Appendix). Original responses were ordinal and range from 1 (not at all) to 5 (very much). Higher scores indicate greater perceived emotional support. *Control Variables*

Age is measured in years. *Parental education* is based on the respondents' most highly educated parent and is used as a proxy measure of family SES. This variable was dummy coded into four mutually exclusive categories: "less than high school," "GED or high school graduate," "more than high school," and "missing." *Family structure* is dummy coded into four mutually exclusive categories: "two biological parents," "one biological parent and one stepparent," "single-parent," and "other family." *Geographic region* is dummy coded into four mutually exclusive categories: "West," "Midwest," "South," and "Northeast."

Analytical Strategy

First, descriptive statistics are used to compare the characteristics of same-race and interracially dating adolescents. Second, ordinary least squares (OLS) regression analyses are employed to estimate the effects of the independent variables on the depressive and anxiety-related symptoms of adolescent daters. To illustrate our findings for significant interaction terms, we estimated the predicted scores for depressive symptoms by racial composition of relationship and respondent race/ethnicity. Coefficient estimates were adjusted for the complex sampling design of the Add Health by using "svy" commands in Stata SE, version 12 (StataCorp., 2011).

Descriptive Results

Table 1 presents descriptive statistics for the full analytic sample of adolescent daters. The results show that 85% of the sample consists of same-race daters (n = 5489) and 15% are dating interracially (n = 1001). ANOVA tests for difference reveal that, on average, youth in interracial relationships have significantly higher scores for symptoms of depression and anxiety than same-race daters. Comparing background characteristics shows us that Hispanic and Asian youth are disproportionately represented among the interracial daters, whereas non-Hispanic Whites are disproportionately found among the same-race daters. Interracial daters are also slightly younger and more likely found in the West and Northeast regions of the United States, whereas same-race daters are more likely found in the South and Midwest. Additionally, interracial daters are more likely to experience a romantic breakup. As expected, there are also significant differences in the family contexts of romantically involved youth, as interracial daters feel less close to their parents and do not perceive their family to be as emotionally supportive as those in same-race relationships. We see no significant differences across relationship type, however, in terms of parent-child communication and parent-child conflict.

	Same-Race Daters $n = 5,489$		Interracial Daters $n = 1,001$	
	% / Mean	SD	% / Mean	SD
Depressive Symptoms*	6.29	4.95	7.56	5.38
Anxiety Symptoms*	5.37	3.05	6.03	3.12
Race/ethnicity*				
White	75	.43	48	.50
Black	15	.36	13	.34
Hispanic	8	.27	29	.45
Asian	2	.14	10	.30
Gender				
Male	49	.50	49	.50
Female	51	.50	51	.50
Age*	15.91	1.54	15.79	1.58
Family Structure				
Two Biological Parents	53	.50	47	.50
Single Parent	24	.43	28	.45
Step-Parent	19	.39	22	.41
Other Family	4	.19	4	.18
Parental Education	т	.17	Т	.10
Less than High School	9	.29	9	.29
GED/High School	22	.42	20	.40
More than High School	56	.50	57	.50
Missing	12	.33	14	.35
Geographic Region*				
South	41	.49	26	.44
Northeast	12	.33	18	.38
Midwest	35	.48	27	.45
West	12	.33	29	.45
Romantic breakup*	0.68	0.47	0.73	0.44
Emotional Family Support*	3.89	.69	3.80	.71
Parent-Child Relationships				
Closeness *	4.13	.77	4.06	.81
Communication	.50	.29	.49	.29
Conflict	.44	.50	.47	.50

Table 1. Weighted Means and Percentages of Socio-demographic Background Characteristics, Family Context, and Wellbeing Indicators, by Racial Composition of Relationship (N = 6,490).

(p < .05). Some percentages do not total 100 due to rounding.

Multivariate Results

The findings for analyses of the depressive symptoms of adolescent daters are presented in Table 2. In support of our first research hypothesis, Model 1 reveals that interracially dating youth report significantly higher depressive symptom scores than do those with same-race partners (0.97, p<.01). Specifically, the average interracial dater reports approximately 1 more symptom of depression than does the average adolescent in a same-race relationship. The interracial dater coefficient is reduced to 0.77 (p<.01) in Model 2, indicating that sociodemographic background characteristics and experiencing a romantic breakup explain 20% of the differences in depressive symptom between same-race and interracial daters (MacKinnon et al. 1995). In terms of direct effects, respondent race/ethnicity, gender, age, parental education, and family structure are significant socio-demographic predictors of depressive symptoms. Of particular relevance to explaining the more negative outcomes of interracial daters, we find that Asian and Hispanic youth report significantly higher depressive symptoms scores than White youth.

Emotional family support was added to Model 3 and was found to be inversely associated with the depressive symptom scores of adolescent daters (-1.97, p<.01). Net of controls, emotional family support mediates 21% percent of the variation in depressive symptoms observed between youth in interracial and same-race relationships. Model 4 shows that adolescent daters who have close relationships with their parents report lower depressive symptom scores (-1.22, p<.01), but those who have more conflict with their parents are also at greater risk of being depressed (0.97, p<.01). Communication with parents, however, is not significantly associated with the depressive symptoms of adolescent daters. Accounting for these three attributes of parent-child relationships mediates 18% of the differences in depressive

symptoms between same-race and interracially dating youth. Exploring the combined effects of family support and parent-child relationships in Model 5 indicates these factors mediate 25% of the differences in depressive symptom scores between same-race and interracially dating youth, which supports our second research hypothesis. These attributes also explain the observed effect of experiencing a breakup on adolescent depression.

The results presented in Model 6 indicate that the association between the racial composition of the relationship and depressive symptoms is conditioned by the individual's race/ethnicity, but not their gender. Figure 1 graphically illustrates the results from our fully adjusted model, showing the racial/ethnic differences in predicted depressive symptom scores. This graphical illustration demonstrates that interracially dating adolescents generally report higher depressive symptom scores than those in same-race relationships. The one exception is found among interracially dating Asian youth, who have significantly *lower* depressive symptom scores (predicted score of 5.69) than their counterparts with same-race partners (predicted score of 6.61, p < .10). In fact among interracially dating adolescents, Asians and Whites have the lowest risks of depression, while Blacks and Hispanics have the highest risks.

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Interracial	0.97**	0.77**	0.61**	0.63**	0.58*	0.80*
	(4.26)	(3.28)	(2.64)	(2.74)	(2.47)	(2.25)
Race/ethnicity			`			
Black		0.80**	0.82**	0.89**	0.88**	0.88**
		(3.27)	(3.53)	(3.73)	(3.80)	(3.37)
Hispanic		1.14**	1.18**	1.10 **	1.16 **	1.27**
-		(4.17)	(4.13)	(4.06)	(4.15)	(3.30)
Asian		1.06*	0.95 +	1.05*	1.00 +	1.66**
		(2.17)	(1.86)	(2.04)	(1.96)	(2.87)
Female		2.04**	1.82**	1.74**	1.70**	1.71**
		(11.52)	(11.41)	(10.25)	(10.51)	(9.21)
Age		0.28**	0.12**	0.20**	0.12**	0.12**
		(5.64)	(2.67)	(3.96)	(2.55)	(2.57)
Geographic Region						
West		0.04	-0.15	-0.09	-0.18	-0.25
		(0.16)	(0.68)	(0.39)	(0.83)	(1.11)
Midwest		-0.08	-0.25	-0.15	-0.26	-0.26
		(0.38)	(1.19)	(0.74)	(1.25)	(1.25)
Northeast		0.04	0.04	-0.02	-0.00	-0.00
		(0.20)	(0.19)	(0.07)	(0.01)	(0.00)
Parental Education						
Less than HS		1.12**	1.08**	1.03**	1.07**	1.06**
		(3.36)	(3.07)	(3.14)	(3.09)	(2.95)
More than HS		-0.23	-0.24	-0.20	-0.24	-0.24
		(1.01)	(1.10)	(0.94)	(1.11)	(1.12)
Missing		0.06	0.02	0.10	0.06	0.05
		(0.19)	(0.08)	(0.36)	(0.21)	(0.16)

Table 2. OLS Regression Coefficients of Depressive Symptoms Regressed on Racial Composition of Relationship, Socio-demographic Background Characteristics and Family Context among Romantically Involved Youth (N=6,490)

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Family Structure						
Single Parent		0.67**	0.45*	0.68**	0.46*	0.46*
		(3.56)	(2.41)	(3.83)	(2.53)	(2.54)
Stepparents		.65**	0.35	0.43+	0.30	0.30
		(2.91)	(1.56)	(1.93)	(1.34)	(1.33)
Other Family		0.65	0.45	0.79 +	0.56	0.56
		(1.54)	(1.14)	(1.89)	(1.41)	(1.42)
Breakup		0.34 +	0.30+	0.29 +	0.28	0.27
		(1.91)	(1.71)	(1.66)	(1.58)	(1.54)
Emotional Family			-1.97**		-1.57**	-1.58**
Support						
			(15.39)		(9.58)	(9.73)
Closeness				-1.22**	-0.47**	-0.47**
				(10.59)	(3.58)	3.59)
Communication				-0.04	0.38	0.40
				(0.12)	(1.19)	(1.26)
Conflict				0.97**	0.73**	0.73**
				(6.14)	(4.67)	(4.64)
Black*Interracial Dater						-0.03
						(0.05)
Hispanic*Interracial						-0.41
Dater						
						(0.64)
Asian*Interracial Dater						-1.72+
						(1.96)
Female*Interracial						-0.04
Dater						
		0.00	10 50.0	C 10 July		(0.10)
Constant	6.30**	0.03	10.59**	6.12**	10.55**	10.57
\mathbf{p}^2	(59.82)	(0.04)	(10.25)	(5.42)	(9.48)	(9.66)
$\frac{R^2}{R^2}$	0.00	0.08	0.15	0.13	0.15	0.16

Table 2. Continued

Note: * p < .05, ** p < .01, and *** p < .001 (standard errors in parentheses)

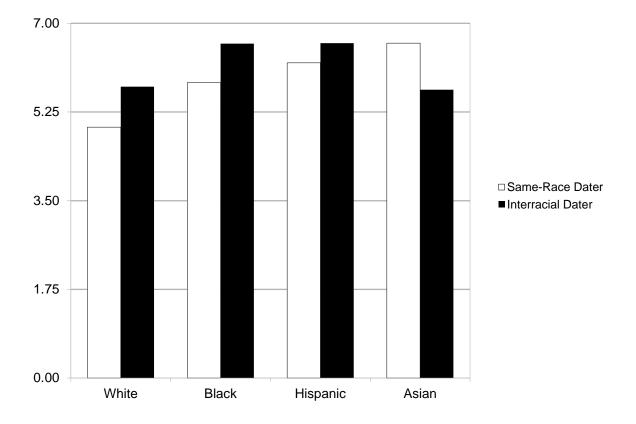


Figure 1: Predicted Scores for Depressive Symptoms, by Race and Racial Composition of Relationship

Table 3 presents the results for the anxiety symptoms analysis. Model 1 shows that interracially dating adolescents have significantly higher anxiety symptom scores than youth in same-race relationships (0.66, p<.01), which further supports the first research hypothesis. On average, interracial daters report 0.66 more symptoms than do same-race daters. The differences in anxiety between same-race and interracial daters remain consistent even after controlling for socio-demographic background characteristics and relationship breakups in Model 2. These findings suggest that background characteristics do not play a significant role in explaining the

heightened levels of anxiety among interracial daters. The magnitude of the coefficient for interracial daters is reduced, however, to 0.56 (p<.01) in Model 3, indicating that emotional family support explains about 14% of the difference in anxiety scores between same-race and interracially dating youth. Similarly, accounting for the quality of parent-child relationships in Model 4 mediates about 12% of the disparity in anxiety scores. As with depressive symptom scores, parent-child closeness and parent-child conflict are significant predictors of the outcome, but parent-child communication is not.

Exploring the additive effects of family support and parent-child relationships in Model 5 shows that together these factors mediate 17% of the differences in anxiety scores between youth in same-race and interracial relationships, further supporting our second research hypothesis. Finally, contrary to the third hypothesis, the results presented in Model 6 indicate that the association between the racial composition of the relationship and anxiety symptom scores is not moderated by either race/ethnicity or gender. Thus, regardless of race, ethnicity, or gender romantically involved adolescents experience higher levels of anxiety-related symptoms when they date interracially.

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Interracial	0.66**	0.65**	0.56**	0.57**	0.54**	0.64**
	(5.15)	(4.97)	(4.24)	(4.37)	(4.07)	(2.91)
Race/ethnicity						
Black		-0.43**	-0.41**	-0.37**	-0.37**	-0.38**
		(3.24)	(3.24)	(2.77)	(2.85)	(2.70)
Hispanic		-0.19	-0.17	-0.21	-0.18	-0.26
-		(1.13)	(1.07)	(1.33)	(1.13)	(1.53)
Asian		-0.62**	-0.68**	-0.61**	-0.64**	-0.39**
		(3.28)	(3.42)	(3.12)	(3.21)	(1.47)
Female		1.07**	0.95**	0.89**	0.87**	0.90**
		(10.79)	(10.90)	(9.01)	(9.45)	(8.21)
Age		0.08*	-0.00	0.04	-0.01	-0.01
-		(2.47)	(0.15)	(1.12)	(0.21)	(0.25)
Geographic Region						
West		0.44**	0.33*	0.36*	0.31*	0.29 +
		(2.77)	(2.23)	(2.33)	(2.08)	(1.95)
Midwest		0.36*	0.27	0.31+	0.26	0.25
		(2.10)	(1.60)	(1.79)	(1.50)	(1.46)
Northeast		0.27	0.27	0.23	0.23	0.23
		(1.61)	(1.54)	(1.34)	(1.35)	(1.31)
Parental Education		. ,				. ,
Less than HS		0.17	0.15	0.13	0.15	0.17
		(0.84)	(0.76)	(0.65)	(0.73)	(0.84)
More than HS		0.09	0.09	0.10	0.08	0.08
		(0.71)	(0.66)	(0.79)	(0.65)	(0.67)
Missing		-0.12	-0.14	-0.09	-0.12	-0.11
C		(0.66)	(0.77)	(0.49)	(0.62)	(0.60)

Table 3. OLS Regression Coefficients of Anxiety Symptoms Regressed on Racial Composition of Relationship, Socio-demographic Background Characteristics and Family Context among Romantically Involved Youth (N=6,490)

		1 4010 5. 00	Jinnaea			
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Family Structure						
Single Parent		0.35*	0.23	0.34**	0.22	0.22
		(2.53)	(1.64)	(2.62)	(1.62)	(1.63)
Stepparents		0.25 +	0.09	0.12	0.05	0.05
		(1.98)	(0.69)	(0.96)	(0.40)	(0.41)
Other Family		0.22	0.11	0.31	0.18	0.18
		(0.75)	(0.38)	(1.02)	(0.60)	(0.60)
Breakup		0.23*	0.21 +	0.20 +	0.19 +	0.20 +
-		(2.05)	(1.89)	(1.80)	(1.75)	(1.77)
Emotional Family			-1.09**		-0.85**	-0.85**
Support						
			(16.27)		(9.56)	(9.63)
Closeness				-0.68**	-0.27**	-0.28**
				(9.34)	(3.15)	(3.19)
Communication				0.13	0.36*	0.37*
				(0.72)	(2.01)	(2.06)
Conflict				0.65**	0.52**	0.52**
				(6.91)	(5.45)	(5.41)
Black*Interracial Dater						0.00
						(0.01)
Hispanic*Interracial Dater						0.22
Duiter						0.63)
Asian*Interracial Dater						-0.62
- Interfactur Dutor						(1.35)
Female*Interracial Dater						-0.21
						(0.72)
Constant	5.35**	3.04**	8.85**	6.35**	8.75**	8.76**
	(76.94)	(5.30)	(13.20)	(9.16)	(12.57)	(12.61)
\mathbb{R}^2	0.01	0.05	0.10	0.10	0.12	0.12
		5.00			=	

Table 3. Continued

Note: * p < .05, ** p < .01, and *** p < .001 (standard errors in parentheses)

Discussion

Drawing on the theoretical framework of the stress process model, the goal of the present study was to explore whether or not the context of parent-child relationships explained disparities in the psychological wellbeing between adolescents romantically involved in samerace and interracial romantic relationships. Using data from the National Longitudinal Study of Adolescent to Adult Health (Add Health), we demonstrate that interracial daters face significantly higher levels of depressive and anxiety-related symptoms than their peers in samerace relationships. These findings are in line with previous studies that show interracial romance is associated with lower levels of psychological wellbeing (Bratter and Eschbach, 2006; Kroeger and Williams, 2011; Miller, 2014).

The current study extends the literature on the health effects of interracial romance and is the first study to examine factors that mediate the mental health disparities between people in same-race and interracial relationships. Our findings reveal that the context of parent-child relationships mediates about 25% and 17% of the difference between same-race and interracially dating adolescents' scores for symptoms of depression and anxiety, respectively. Specifically, adolescents in same-race relationships typically report higher levels of family emotional support and parent-child closeness and lower levels of parent-child conflict than their interracially dating peers. In turn, these more positive family dynamics are associated with fewer symptoms of depression and anxiety. These findings support previous research showing that emotional support protects an adolescent's psychological wellbeing (Gray and Steinberg, 1999; Steinberg and Davila, 2008) and suggest that youth involved in interracial romance, on average, suffer from reduced access to that support. We also find that the adverse effects of experiencing a romantic breakup on depression (Joyner and Udry, 2000; Miller, 2014; Simon and Barrett, 2010) are

explained away when parent-child context is taken into account. Thus, our study reveals the importance of parent-child relationships in affecting the psychological wellbeing of romantically involved adolescents, while providing new evidence that interracial daters tend to experience even less positive, and potentially more stressful, family dynamics than do same-race daters.

The findings of this study also suggest that the negative effect of interracial dating on depressive symptoms holds among White, Black and Hispanic youth, but not among Asian youth. In fact, among Asian daters, those involved in interracial relationships appear to have an advantage in terms of their experience with depressive symptoms. This advantage holds in the face of controls for socio-demographic background characteristics, as well as family and parentchild relationships. It may be that Asian youth, on average, perceive fewer negative reactions or social barriers to participation in interracial dating than do other youth. In fact, given the relatively high predicted depressive symptom scores for same-race dating Asians (refer to Figure 1), it may be that Asian youth actually are encouraged to date interracially in order to better assimilate into mainstream U.S. society. Again this suggests the need to consider the importance of social contexts outside of the family. Asian youth may be receiving from peers, community members and even strangers, different and more positive messages about the appropriateness of their own group's participation in interracial dating than are youth from other racial/ethnic backgrounds. As a result, interracial dating may not lead to more stressful experiences for members of this group.

While this study pushes us forward in our understanding of adolescent romantic relationships and their association with psychological wellbeing, we must make note of the fact that we are unable to fully examine the impact of the selection processes such as those noted above. It also has been suggested that youth may select into romantic relationships to escape

from parent-child conflict or that adolescent romance may serve to perpetuate pre-existing parent-child conflict (Furman and Shaffer, 2003). This may be particularly true of interracial romantic relationships. Similarly, poorer quality parent-child relationships, lower levels of emotional family support, and poorer psychological wellbeing may predate movement into dating relationships and may influence the type of romantic relationship in which an adolescent chooses to engage. Unfortunately, the Add Health only includes two waves of data collection that took place during the respondents' adolescent years. This makes it impossible to control for

individual or family-level characteristics that predate the respondents' engagement in adolescent romantic relationships. In the future, researchers should work to collect longitudinal data that would allow us to further examine the social selection-social causation process of adolescent romantic relationship formation.

The overall findings of this study are particularly important because adolescent dating patterns and psychological wellbeing are predictive of relationship formation patterns and psychological wellbeing in adulthood. Exploring the prevalence of interracial romance and its impact on adolescent psychological health can give researchers a glimpse into how these issues may also play out among adult populations. For example, the prevalence of interracial romance during adolescence (Kreager, 2008; Wang et al., 2006) mirrors that found among adults (Passel, Wang, and Taylor, 2010). We also know that individuals who experience depression during adolescence face greater risk of being afflicted with depression or another mental disorder in adulthood (Angold and Costello, 1993; Lewinsohn, 2003). Thus, it is imperative to identify how interracial romance affects young people, as well as the social mechanisms through which it does so. Meanwhile, this research underscores the importance of educating parents about the

potentially detrimental mental health effects associated with withholding emotional support from their children, especially children who are engaging in romantic relationships across racial boundaries. These issues will become increasingly salient as our society continues to grow more racially/ethnically diverse and interracial romance continues to become more common.

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References

- Angold, Adrian, and E. Jane Costello. 1993. "Depressive comorbidity in children and adolescents: empirical, theoretical, and methodological issues." *American Journal of Psychiatry* 150: 1779-1791.
- Bratter, Jenifer L., and Karl Eschbach. 2006. "What about the couple? Interracial marriage and psychological distress." *Social Science Research* 35:1025-1047.
- Bratter, Jenifer L., and Valerie King 2008. "But will it last?: Marital instability among interracial and same-race couples." *Family Relations* 57(2): 160-171.
- Brown, B. Bradford. 2004. "Adolescents' relationships with peers." Pp. 363-394. Handbook of Adolescent Psychology, 2nd edition. Richard M. Lerner and Laurence Steinberg, editors. Wiley.
- Collins, W. Andrew. 2003. "More than myth: The developmental significance of romantic relationships in adolescence." *Journal of Research on Adolescence* 13(1):1-24.
- Collins, W. Andrew., and Van Dulmen, Manfred. 2006. "The course of true love(s). . .": Origins and pathways in the development of romantic relationships. Pp. 63-86. *Romance and sex in adolescence and emerging adulthood: Risks and opportunities*. Ann Crouter and Alan Booth, editors. Lawrence Erlbaum Associates.
- Davila, Joanne. 2008. "Depressive symptoms and adolescent romance: Theory, research and implications." *Child Development Perspectives* 2(1): 26-31.
- Davila, Joanne, Sara Steinberg, Lorig Kachadourian, Rebecca Cobb, and Frank Fincham. 2004. "Romantic involvement and depressive symptoms in early and late adolescence: The role of preoccupied relational style." *Personal Relationships* 11:161-178.
- Dowdy, Bonnie, and Wendy Kliewer. 1998. "Dating, Parent-Adolescent Conflict, and Behavioral Autonomy." *Journal of Youth and Adolescence* 27(4):473-492.
- Downey, Geraldine, Cheryl Bonica, and Claudia Rincon. 1999. "Rejection Sensitivity and Adolescent Romantic Relationships." Pp. 148-174. *The Development of Romantic Relationships in Adolescence*. Wyndol Furman, B. Bradford Brown, and Candice Feiring, editors. Cambridge University Press.
- Edmonds, Christina, and Melanie Killen, 2009. "Do adolescents' perceptions of parental racial attitudes relate to their intergroup contact and cross-race relationships?" *Group Processes & Intergroup Relations* 12(1): 5-21.
- Furman, Wyndol, and Laura Shaffer. 2003. "The role of romantic relationships in adolescent development." Pp. 1-20. Adolescent romantic relationships and sexual behavior: Theory, research, and practical implications. Paul Florsheim, editor. Mahwah, NJ: Erlbaum.

- Glickman, A. R., and Annette M. LaGreca, 2004. "The dating anxiety scale for adolescents: Scale development and associations with adolescent functioning." *Journal of Clinical Child and Adolescent Psychology* 33(3): 566-578.
- Gore, Susan, and Robert Aseltine Jr. 2003. "Race and Ethnic Differences in Depressed Mood Following the Transition from High School." *Journal of Health and Social Behavior* 44: 370-389.
- Gray, Marjory Roberts, and Laurence Steinberg. 1999. "Adolescent romance and the parentchild relationship: A contextual perspective. Pp. 235-265. *The Development of Romantic Relationships in Adolescence*. Wyndol Furman, B. Bradford Brown, and Candice Feiring, editors. Cambridge University Press.
- Harris, K.M., C.T. Halpern, E. Whitsel, J. Hussey, J. Tabor, P. Entzel, and J.R. Udry. 2009. The National Longitudinal Study of Adolescent to Adult Health: Research Design [WWW document]. URL: http://www.cpc.unc.edu/projects/addhealth/design.
- Joyner, Kara, and Richard J. Udry. 2000. "You don't bring me anything but down: Adolescent romance and depression." *Journal of Health and Social and Behavior* 41:369-391.
- Kreager, Derek. 2008. "Guarded borders: Adolescent interracial romance and peer trouble at school." *Social Forces* 87(2): 887-910.
- Kroeger, Rhiannon, and Kristi Williams. 2011. "Consequences of Black exceptionalism? Interracial unions with Blacks, depressive symptoms, and relationship satisfaction." *The Sociological Quarterly* 52: 400-420.
- LaGreca, Annette M., and Eleanor Race Mackey, 2007. "Adolescents' anxiety in dating situations: The potential role of friends and romantic partners." *Journal of Clinical Child and Adolescent Psychology* 36(4): 522-533.
- Larson, Reed, Gerald Clore, and Gretchen Wood. 1999. "The Emotions of Romantic Relationships: Do They Wreak Havoc on Adolescents?" Pp. 19-49. *The Development of Romantic Relationships in Adolescence*. Wyndol Furman, B. Bradford Brown, and Candice Feiring, editors. Cambridge University Press.
- Laursen, Brett, and Lauri Jensen-Campbell. 1999. "The Nature and Functions of Social Exchange in Adolescent Romantic Relationships. Pp. 50-74. *The Development of Romantic Relationships in Adolescence*. Wyndol Furman, B. Bradford Brown, and Candice Feiring, editors. Cambridge University Press.
- McNamara, Robert P., Maria Tempenis, and Beth Walton. 1999. *Crossing the line: interracial couples in the South*. Greenwood Publishing Group.

- Miller, Byron. 2014. "What are the odds: An examination of adolescent interracial romance and risk for depression." *Youth & Society*. doi:10.1177/0044118X14531150
- Moon, Sung S., and Uma Rao. 2010. "Youth-Family, Youth-School Relationship, and Depression." *Child Adolescent Social Work Journal* 27:115-131.
- Needham, Belinda L. 2008. "Reciprocal relationships between symptoms of depression and parental support during the transition from adolescence to young adulthood." *Journal of Youth and Adolescence* 37(8): 893-905.
- Pearlin, Leonard I. 1989. "The sociological study of stress." *Journal of Health and Social Behavior* 30:241-256.
- Pearlin, Leonard I., Morton Lieberman, Elizabeth Menaghan, and Joseph Mullan. 1981. "The stress process." *Journal of Health and Social Behavior* 22:337-56.
- Radloff, Lenore S. 1977. "The CES-D Scale: A self report depression scale for research in the general population." *Applied Psychological Measurement* 1:385-401.
- Simon, Robin W., and Anne E. Barrett. 2010. "Nonmarital romantic relationships and mental health in early adulthood: Does the association differ for women and men?" *Journal of Health and Social Behavior* 51(2): 168-182.
- StataCorp. 2011. "Stata Statistical Software: Release 12." College Station, TX: StataCorp LP.
- Steinberg, Sara, and Joanne Davila. 2008. "Romantic functioning and depressive symptoms among early adolescent girls: The moderating role of parental emotional availability." *Journal of Clinical Child & Adolescent Psychology* 37(2):350-362.
- Jeffrey Passel, Wendy Wang, and Paul Taylor. 2010. "Marrying out: One-in-seven new U.S. marriages is interracial or interethnic." Pew Research Center's Social & Demographic Trends Project.
- Turner, R. Jay, and Don A. Lloyd. 1999. "The stress process and the social distribution of depression." *Journal of Health and Social Behavior* 40(4): 374-404.
- Turner, R. Jay, and Don A. Lloyd. 2004. "Stress burden and the lifetime incidence of psychiatric disorder in young adults – Racial and ethnic contrasts." *Archives of General Psychiatry* 61(5): 481-488.
- Vaquera, Elizabeth, and Grace Kao. 2005. "Private and Public Displays of Affection Among Interracial and Intra-Racial Adolescent Couples." *Social Science Quarterly* 86(2): 484-509.
- Wang, Hongyu, Grace Kao, and Kara Joyner. 2006. "Stability of interracial and intraracial romantic relationships among adolescents." *Social Science Research* 35: 435-453.

Appendix

A.1. Depressive Symptoms (Wave II in-home, $\alpha = .84$)

How often was each of the following things true during the past seven days? (0 = "never or rarely"; 1 = "sometimes"; 2 = "a lot of times"; 3 = "most of the time or all of the time")

1. You were bothered by things that usually don't bother you.

- 2. You didn't feel like eating, your appetite was poor.
- 3. You felt that you could not shake off the blues, even with help from your family and friends.
- 4. You had trouble keeping your mind on what you were doing.
- 5. You felt depressed.
- 6. You felt that you were too tired to do things.
- 7. You felt fearful.
- 8. You talked less than usual.
- 9. You felt lonely.
- 10. You felt sad.
- 11. It was hard to get started doing things.

A.2. Anxiety Symptoms (Wave II in-home, $\alpha = .68$)

In the past 12 months, how often have you... (0 = "never"; 1 = "just a few times"; 2 = "about once a week"; 3 = "almost every day"; 4 = "every day")

- 1. Felt very tired, for no reason?
- 2. Had aches, pains, or soreness in your muscles or joints?
- 3. Had trouble falling asleep or staying asleep?
- 4. Had trouble relaxing?
- 5. Been moody?

A.3. Perceived Emotional Family Support (Wave I in-home, $\alpha = .75$) (1= "not at all"; 2 = "very little"; 3 = "somewhat"; 4 = "quite a bit"; 5 = "very much")

- 1. How much do you feel that your parents care about you?
- 2. How much do you feel that people in your family understand you?
- 3. How much do you feel that you want to leave home? (reverse coded)
- 4. How much do you feel that you and your family have fun together?
- 5. How much do you feel that your family pays attention to you?

A.4. Closeness with Parents (Wave I in-home, $\alpha = .86$)

Please tell me whether you agree or disagree with each of the following statements. (1 ="strongly disagree"; 2 = "disagree"; 3 = "neither agree nor disagree"; 4 = "agree"; 5 = "strongly agree")

- 1. Most of the time, your mother is warm and loving toward you.
- 2. You are satisfied with the way your mother and you communicate with each other.
- 3. Overall, you are satisfied with your relationship with your mother.
- 4. Most of the time, your father is warm and loving toward you.
- 5. You are satisfied with the way your father and you communicate with each other.
- 6. Overall, you are satisfied with your relationship with your father.

A.5. Communication with Parents (Wave I in-home, $\alpha = .70$)

Which of the things listed on this card have you done with your {mother/adoptive mother/stepmother/foster mother/etc} in the past 4 weeks? (0 = no; 1 = yes)

- 1. Talked about someone you're dating, or a party you went to
- 2. Had a talk about a personal problem you were having
- 3. Talked about your school work or grades
- 4. Talked about other things you're doing in school

Which of the things listed on this card have you done with your {father/adoptive father/stepfather/foster father/etc} in the past 4 weeks? (0 = no; 1 = yes)

- 5. Talked about someone you're dating, or a party you went to
- 6. Had a talk about a personal problem you were having
- 7. Talked about your school work or grades
- 8. Talked about other things you're doing in school