

Negative Adult Influences and the Protective Effects of Role Models: A Study with Urban Adolescents

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Abstract We investigated whether role models (individuals adolescents look up to) contributed to the resilience of adolescents who were exposed to negative nonparental adult influences. Our sample included 659 African American, ninth-grade adolescents. We found that adolescents' exposure to negative adult behavior was associated with increased externalizing, internalizing, and substance using behaviors, as well as more negative school attitudes and behavior. We found that role models had protective effects on externalizing and internalizing behaviors and compensatory effects on school outcomes. Collectively, our findings indicate that role models can contribute to the resilience of African American adolescents who are exposed to negative nonparental adult behavior.

Keywords Resilience · Adolescents · Role models · Negative adult influences

Introduction

Adults influence the lives of adolescents in a variety of ways. Bandura (1971) suggests that people tend to display

behaviors that are learned either intentionally or inadvertently, through the influence of example. Since identity formation is a central focus during adolescence, adolescents are particularly likely to be influenced by the adults in their environment (Erikson 1968). Adolescents often look to adults in order to determine appropriate and acceptable behavior, as well as to identify models of who they want to be like. Adult influences, however, can be both positive and negative, and some adults may be more influential than others. In this study, we focused on the negative influences that nonparental adults can have on adolescents and explored the relationship between exposure to negative nonparental adult behavior and negative youth outcomes. We also used a resilience framework to investigate if role models protected youth against the negative effects of exposure to negative nonparental adult behavior. Additionally, we explored the significance of having a role model who was the same gender as the adolescent and the significance of having parents as role models.

Researchers have not studied role models in the context of resilience theory. Additionally, researchers have neglected to explore thoroughly the negative influences of nonparental adult behavior on adolescents. This study builds on past research by examining the detrimental effects of exposure to negative nonparental adult behavior and the positive effects role models may have to counteract or protect against these risks. This study also adds to our knowledge about gender-matching for enhancing the effects of role modeling on adolescent outcomes and provides insight into the effects of parental versus nonparental role models.

Resilience Theory

Resilience is a concept that emerged as researchers became interested in understanding why some children who are

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faced with adversity are able to overcome their risks, avoid their negative effects, and thrive and succeed in life. Resilience is defined as “a dynamic process wherein individuals display positive adaptation despite experiences of significant adversity or trauma” (Luthar and Cicchetti 2000, p. 858). Resilience is not a personality trait or an attribute of an individual. It requires both experiencing adversity and having positive adjustment outcomes despite the adverse experience(s) (Fergus and Zimmerman 2005; Luthar and Cicchetti 2000). Various models of resilience have been proposed for the purpose of studying resilience in different contexts (Garmzey et al. 1984; Fergus and Zimmerman 2005; Luthar 2003; Luthar et al. 2000; Masten et al. 1988). The two models most relevant for this study are the compensatory model and the protective model.

A compensatory factor is said to counteract the effects of the risk factor on the outcome of interest (Zimmerman and Arunkumar 1994). A compensatory factor contributes to an outcome in an additive (but opposite) manner with the risk factor to predict an outcome (Garmzey et al. 1984; Masten et al. 1988; Zimmerman et al. 1998). In this manner, the risk factor (e.g., poverty) and compensatory factor (e.g., parental involvement) have opposite, but main (direct) effects on a specific outcome (e.g., school performance). When the risk factor is held constant, the outcome variable differs as a function of the compensatory factor and vice versa.

Protective factors operate in an interactive fashion to buffer an individual from the negative effects of risk exposure. A risk-protective variable interacts with the risk factor to reduce the likelihood of a negative outcome. A risk-protective variable is said to moderate the effects of the risk factor on the outcome variable (Zimmerman and Arunkumar 1994). It is important to note that whether or not something is a risk, compensatory, or protective factor depends on the context, and varies from situation to situation (Luthar and Cicchetti 2000).

Negative Nonparental Adult Influences on Adolescents

Although research devoted to the effects of nonparental adults on adolescent development has grown recently, much of this research has focused on their positive influences, such as supporting, inspiring, and modeling positive behaviors (Beam et al. 2002; Hamilton and Darling 1996; Hirsch et al. 2002; Rhodes et al. 1992). Researchers have given little consideration to the negative influences that nonparental adults may have on adolescents by modeling socially inappropriate or illegal behavior. A notable exception is a study conducted by Greenberger et al. (1998) in which they found that adolescents' perceptions of the negative behavior of a very important nonparental adult were predictive of adolescent misconduct. This finding

suggests that nonparental adults can have a negative influence on adolescents if adolescents consider the nonparental adults to be very important persons in their lives.

Other researchers have suggested that nonparental adults can negatively influence adolescents, even when these adults are not considered very important persons in the adolescents' lives. Anderson (1990) suggests that nonparental adults may exert a negative influence on adolescents by modeling unlawful and destructive behavior. When adults are modeling unlawful or destructive behaviors, it is likely that adolescents will be negatively influenced by these observed behaviors, particularly if the adolescents are exposed to multiple deviant behaviors by several adults in their environment.

Adolescents who live in neighborhoods that are characterized by high levels of crime tend to have an abundance of models for criminal behavior (Shoemaker 1996). Research on juvenile homicide offenders indicates that these youth are more likely to originate from environments where high rates of violence and delinquency exist (Heide 1997). Interviews with incarcerated adolescents suggest that their decisions to engage in criminal behavior were largely influenced by the models in their extremely violent environments (Heide 1997). Yet, researchers have also identified positive adult influences on healthy adolescent development.

Role Models and Resilience

Several researchers have found an association between having a role model and positive outcomes. Werner (1995) found, in her Kauai Longitudinal Study, that role models helped protect high-risk children from several risks they faced. Regardless of the source (e.g., family member, neighbor, school teacher), having an adult who modeled positive behavior was a reoccurring theme for resilient children. Yancey et al. (2002) found that adolescents with an identifiable role model received higher grades, had higher self esteem, and reported stronger ethnic identity than their counterparts who lacked role models. Further, these effects were stronger if adolescents personally knew their role models. Although Yancey and colleagues (2002) found that many of the participants in their study identified parental role models, they did not attempt to control for any parental factors that may have explained the differences they found in adolescent outcomes.

Oman and colleagues (2004) found that having nonparental adult role models protected low-income, inner-city youth against several negative behaviors including involvement in sexual intercourse (Oman et al. 2003; Vesely et al. 2004), participation in violence (Aspy et al. 2004), and substance use (Oman et al. 2004a). In their study, multiple items were used to assess role model

presence, including questions about knowing adults who offer encouragement, having adults and teachers who the adolescent can talk with about personal problems, and knowing adults who are good role models (Oman et al. 2004b). Although the importance of this study's findings cannot be ignored, the items used to assess role model presence were somewhat broad, and appear to tap into other constructs beyond just having a person the adolescent can look up to. Also, these questions did not allow for a quantification of the number of role models that each adolescent had, nor did they allow for an analysis of role model characteristics.

African American Adolescents and Role Models

White (1984) asserts that African American youth may face challenges when attempting to identify appropriate role models because of the dilemma that African American youth face related to their relative exclusion and inclusion in American society. White (1984) suggests that African American youth may be excluded from certain aspects of society because of their race, but included in other areas because of their status as Americans. The confusion and anger that may result from this dilemma may complicate African American youth's ability to identify role models in their environment (Taylor 1989). Yancey et al. (2002) found that adolescents of color were significantly less likely to have role models than White adolescents. Additionally, Taylor (1989) found that inner-city, African American youth lacked role models, in part, because they reported a general "mistrust of others as potential resources for knowledge, skills, and social support" (p. 165).

Previous research with African American adolescents has indicated that adolescents with role models tend to have more positive psychosocial outcomes than adolescents without role models. Bryant and Zimmerman (2003) found that African American male adolescents without male role models engaged in more problem behavior than their counterparts with role models. McMahon et al. (2004) found that having a role model was associated with fewer aggressive behaviors and fewer anxiety and depressive symptoms among African American adolescents. These findings suggest that having a role model can predict more positive psychosocial outcomes among African American youth.

Gender-Matched Role Models

A tenet of social learning theory is that individuals are more likely to focus their attention on models who they perceive as being similar to themselves (Bandura and Walters 1963). As this relates to role modeling, youth may be more inclined to select role models who share their

gender. Researchers have argued that the availability of gender-matched role models is critical for adolescents because it is during the period of adolescence in which individuals are developing their identity and establishing their role in society (Zirkel 2002). For adolescents, having access to role models who share their gender may be especially beneficial.

Furthermore, researchers have suggested that for female youth and youth of historically oppressed and disadvantaged ethnic and racial groups, seeing role models from their same group(s) can provide them with explicit examples of what members of their group(s), and by extension themselves, have the potential to achieve (Zirkel 2002). This concept has been referred to as the *similarity hypothesis* (Bandura 1986). Bryant and Zimmerman's (2003) finding that adolescent males with male role models engaged in less problem behavior than their male counterparts who did not have a male role model is consistent with this hypothesis. In addition, Zirkel (2002) found that race- and gender-matched role models were associated with more positive academic outcomes. These findings seem to suggest that gender-matched role models may be associated with more positive outcomes than non-matched role models. The importance of the role model's gender, however, may depend on the adolescent outcome studied. More research is needed to determine the implications of gender-matched, as opposed to non-matched, role models on various adolescent outcomes.

Parental Role Models

When asked to identify significant persons in their lives, adolescents overwhelmingly name parents and other members of their immediate and extended family (Blyth et al. 1982; Galbo 1983; Hendry et al. 1992; Shade 1983), with females more likely to list their mothers, and males more likely to list their fathers as the most significant adult in their lives (Galbo 1983). Researchers have found that parents have the most influence over their adolescent children in the areas of school, career orientation, and future planning (Meeus 1989; Younnis and Smollar 1985). Hendry et al. (1992) suggest that while adolescents are attempting to form their identities and growing into adults, it is critical for them to have same-sex parental models with whom to identify. Werner (1995), for instance, found that the resilient females in her study had the most powerful role model in their consistently employed mothers.

Coleman and Hendry (1990) have stressed the importance of the function of parents as role models, particularly during the adolescent years. They suggest that adult role models are most needed during adolescence. They also point out that youth are most likely to seek out role modeling in their parents whom they depend on for both

knowledge and example. As Csikszentmihalyi and Larson (1984) noted, adolescents spend more time with their parents (and thus, are more exposed to their parents' values, attitudes, and behaviors) than any other adults in their lives. In light of these findings, it is useful to note that residing with a parent and having a positive parent–child relationship likely increase the probability that a child will identify a parent as a role model. Thus, parental support and household presence may need to be taken into account because these variables can create spuriousness in testing the effects of role models (i.e., they may account for any associations found regardless of the presence of a role model). Nevertheless, researchers have found positive effects of parental role modeling after taking residency status and other parent–child relationship indicators into account (Bryant and Zimmerman 2003).

Few researchers have investigated the significance of having parents as role models or compared the benefits of having parental versus nonparental role models. Although researchers have identified benefits of parents functioning as role models for their adolescent children (Bryant and Zimmerman 2003), the possession of nonparental adult role models may be a reflection of an adolescent's broader social network and ability to relate to adults. Alternatively, adolescents may identify nonparental adult role models because they do not have parents who they look up to and want to emulate. These youth may have to substitute a nonparental adult if they desire a role model. In either case, having a nonparental role model may be an indication of an adolescent's resourcefulness.

Current Study

In this study, we investigated whether negative adult influences increased adolescents' risks for negative outcomes and whether role models contributed to the resilience of adolescents who were exposed to negative adult influences. We hypothesized that exposure to negative adult behavior would be associated with negative adolescent outcomes. We also hypothesized that for youth who were exposed to negative adult influences, having at least one role model would both buffer youth from negative psychosocial outcomes (protective effect) and contribute to more positive psychosocial outcomes (compensatory effect). Additionally, we hypothesized that having more than one role model would be even more protective.

Outcome variables in this study included externalizing behavior (violent and nonviolent delinquency), internalizing behavior (anxious and depressive symptoms), polysubstance use (cigarette, marijuana, and alcohol use), and school attitudes and behavior. We expected that youth with role models would report less externalizing and internalizing behaviors, less substance use, and more positive school outcomes. We

also explored whether or not having a role model of the same gender was an important contributing factor to adolescents' resilience, and whether having parental versus nonparental role models affected the role model's ability to serve as a compensatory or protective factor for adolescents exposed to negative adult influences. Although researchers suggest that gender-matched role models and parental role models are beneficial for adolescents, neither of these theories has been studied in a resilience framework. In addition, we controlled for residency status with mothers and fathers, and perceived parental support in all analyses in attempts to isolate the effects of role modeling, particularly among parental role models. We also controlled for socioeconomic status and gender in all analyses given their potential association with our outcome variables.

Methods

Participants

Participants in this study included 659 African-American adolescents (51% female) who were enrolled in ninth grade at the start of the fall in 1994. The average age of participants was 14.6 ($SD = .65$). This sample was selected from 2,000 ninth-grade students attending the four main public high schools in the second largest school district in Michigan. This study was a part of a larger study focusing on factors that may influence youth to drop out of school. Students were selected to participate in the study if they were not developmentally disabled or emotionally impaired and if their eighth grade GPA was 3.0 or below. Nine hundred and twenty-seven adolescents were eligible to participate in this study. Of these 927, 52 left the public school system and 67 were consistently absent from school on several different days when attempts were made to interview them. An additional nine students did not participate in the study because of parental refusal and one student refused to participate. Of the 850 youth remaining, 80% ($n = 681$) were African American, and given the small percentages of other racial and ethnic groups, we elected to use only African American participants in our analyses. Twenty-two of the 681 participants did not report whether or not they had any role models. Given the size of our sample and the small number of participants with missing data, we used listwise deletion to exclude these 22 participants from our analyses, leaving us with our final sample of 659 African American youth.

Procedure

We obtained approval for data collection from the University of Michigan Institutional Review Board as well as

from school staff at the four high schools where we collected data. Participant consent and parental (passive) consent for minors were obtained prior to study participation. Six trained interviewers conducted closed-ended, face-to-face interviews with participants at their schools. Interviewers were African American and White male and female adults from the community. When possible, participants and interviewers were matched by race and gender. Interviewers received intensive training in study protocol and were provided numerous opportunities to practice interview administration both with each other and with a pilot group of youth. Supervisors implemented fidelity checks regularly to ensure that interviewers were adhering to study protocol. Interviews lasted approximately 50–60 min. Upon completion of the interview, participants completed a self-administered questionnaire about personal alcohol and drug use. Upon completion of this questionnaire, participants placed their completed questionnaire in a sealed envelope before submitting it to the interviewer.

Measures

Role Models

Participants were asked to identify one male and one female figure they “look up to.” If the participant did not understand the question, the interviewer used “role model” as a prompt. We used this information to create a variable that indicated if the participant had two role models, one role model, or no role model. We also used this information to create a variable that distinguished between role models who were parents or adults identified by respondents as one of the most important persons who raised them and non-parental/non-guardian role models. We asked about both a male and female role model in order to test our hypothesis regarding the added benefits of having a gender-matched role model.

Adult Negative Behavior

Fourteen items were used to assess negative adult influences. Participants were asked to indicate how many adults (excluding parents or adults living with the participant) they knew who engaged in specific types of negative behavior. The items mainly pertained to the possession of weapons (e.g., guns) and alcohol/drug use and abuse. One item assessed the number of adults known to the respondent who “dropped out of high school.” Response options ranged from 1 (none) to 5 (all) on a Likert scale. The Cronbach alpha for these items was .90. The fourteen items were summed and averaged to yield a negative adult influence score ($M = 1.9$; $SD = .70$).

Externalizing Behavior

Participants were asked about their personal involvement in violent and nonviolent delinquent behavior. Six items were used to assess involvement in violent behavior, and ten items were used to assess involvement in nonviolent delinquent behavior (Bryant and Zimmerman 2003). Examples of items used to assess violent behavior include hurting someone badly enough to need bandages or a doctor, using a weapon to take something from another person, and carrying a gun. Nonviolent delinquent behavior items inquired about getting into trouble with the police, damaging school property, arson, trespassing, selling illegal drugs, and various types of theft. Participants were asked how often they had engaged in the specified behaviors over the past year on a Likert scale from 1 (0 times) to 5 (4 or more times). Items were summed and averaged to yield a violent behavior variable and a non-violent delinquent behavior variable. A principal components analysis (PCA) indicated that these two variables (violent and nonviolent behavior) could be combined to yield one factor that we identified as an externalizing behavior factor (factor loadings exceeded .90). Thus, we only included this one externalizing behavior factor in all subsequent analyses, in which higher scores indicated increased externalizing behavior. Cronbach alpha for the 16 externalizing behavior items was .87. The mean for the sample on externalizing behavior was 1.37 ($SD = .53$).

Internalizing Behavior

Items from the Brief Symptom Inventory (Derogatis and Spencer 1982) were used to assess participants' symptoms of anxiety and depression. Participants were asked how frequently (within the past week) they had felt uncomfortable because of various problems (e.g., feeling fearful). Response options on a Likert scale ranged from 1 (not at all) to 5 (extremely). Responses for each scale were summed and averaged to yield an anxiety variable and a depression variable. Again, PCA was used to determine that anxious and depressive symptoms both loaded highly on one factor (factor loadings exceeded .90); that factor was determined to be internalizing behavior and was used in all subsequent analyses. Higher scores on this factor indicated increased internalizing behavior. Cronbach alpha for the 12 internalizing behavior items was .87 and the sample mean for internalizing behavior was 1.63 ($SD = .63$).

School Outcomes

Several different measures were used to assess school-related outcomes; these included students' school-reported

grade point average (GPA) at the end of the school year, students' attachment to school, and students' expectations about graduating high school and attending college. The mean for students' school reported GPAs was 1.5 (SD = .93) on a 4.0 scale. Seven items were used to assess school attachment (Hawkins et al. 1992). These items were statements about school-related feelings (e.g., "I like school," "I like my classes this year.") and a 4-point Likert scale was used to capture students' responses (1 = strongly disagree; 4 = strongly agree). Cronbach alpha for this school attachment scale was .71 and mean rating across the 7 items for the sample was 2.82 (SD = .66). Students were also asked to rate their perceived likelihood of graduating high school and attending trade school or college on a scale of 1 (not at all likely) to 5 (very likely). Mean rating for likelihood of graduating high school was 4.6 (SD = .78) and mean rating for likelihood of attending trade school or college was 4.27 (SD = 1.05). PCA indicated that all of the school-related variables loaded on to one factor (factor loadings ranged from .53 to .76). Responses to the three school-related variables (GPA, school attachment, and school expectations) were standardized, summed, and then averaged. Cronbach alpha for the three standardized items was .67. This school outcomes factor was used in all subsequent analyses (higher scores indicated more positive school outcomes).

Polysubstance Use

Cigarette, alcohol, and marijuana use were assessed by the frequency of use within the past month. Response choices ranged from 1 (not at all) to 7 (two packs or more per day) for cigarette use and from 1 (0 times) to 7 (40 or more times) for alcohol and marijuana use. PCA demonstrated that these 3 items loaded onto one factor (factor loadings exceeded .80), and we used this polysubstance use factor in all analyses. Higher scores on this factor indicated more alcohol and substance use. Cronbach alpha for these three items was .75 and the sample mean for polysubstance use was 1.49 (SD = .89).

Control Variables

Socioeconomic Status (SES)

Parents' occupations were used as indicators of socioeconomic status in this study. Students were asked to identify their parents' occupations. These occupations were given prestige scores based on 20 occupational classifications (Nakao and Treas 1990a, b). When participants indicated that both parents had occupations, the higher of the two prestige scores was used. Scores ranged from 29.28

(private household work) to 64.38 (professional). The mean for the sample was 39.81 (SD = 10.48).

Residence with Mothers and/or Fathers

We assessed whether or not participants were residing with their mothers and fathers. Participants were asked to list the people with whom they live. Two dichotomous variables were created based on this information. One variable indicated whether or not participants lived with their mother (biological, adoptive, or stepmother), and the other variable indicated whether or not they lived with their father (biological, adoptive, or stepfather). Over one-third of the participants ($n = 255$) lived with both parents, and 50% of participants lived with their mother but not their father ($n = 337$).

Parental Support

A five-item measure was used to assess parental support (Procidano and Heller 1983). Items included "I have a deep sharing relationship with my parents," and "I rely on my parents for emotional support." Cronbach alpha for the 5 items was .89. Response options ranged from 1 (not true) to 5 (very true). Answers on the scale were summed and averaged to yield a parental support variable. The mean for the sample was 3.94 (SD = 1.03).

Data Analytic Strategy

First, we conducted missing data analyses and correlational analyses. We conducted correlational analyses to assess for multicollinearity of variables and to determine whether or not we should run separate regression models for each of our outcome variables. Second, we completed hierarchical regressions for each outcome variable (externalizing behavior, internalizing behavior, school outcomes, and polysubstance use) to test whether exposure to negative adult behavior was a risk factor for negative adolescent outcomes, and also to test the compensatory and protective effects of role models. Keeping with resilience approaches (see Fergus and Zimmerman 2005), we entered all control variables in the first step (gender, SES, residency status with mother, residency status with father, and parental support), the risk factor in the second step (number of negative adult influences), the compensatory factor in the third step (presence of one or more role models: 0 = no role models, 1 = one role model, 2 = two role models), and an interaction term (negative adult influences by role model) in the fourth step. All continuous independent variables were centered before computing interaction terms

to help prevent problems of multicollinearity (Aiken and West 1991).

To further test our hypothesis that two role models would be more promotive than one, we excluded participants who did not have a role model and completed the same analyses comparing the compensatory and protective effects of having two role models vs. the compensatory and protective effects of having one role model (0 = 1 role model, 1 = 2 role models).

Third, we assessed the effects of gender-matched role models to test whether role model gender match enhanced positive role model effects. These analyses focused only on those adolescents with one role model. For these analyses we created a dichotomous variable to represent the gender of the adolescent’s role model (0 = male, 1 = female). We then created an interaction term between participant gender and role model gender to test whether gender-matched role models were associated with more positive adolescent outcomes than non-matched role models, and completed regression equations similar to the one previously described for all four of our dependent variables.

Fourth, we compared the protective effects of parental versus nonparental role models to test the hypothesis that the effects of role modeling may be enhanced if the role model is a parent. In these analyses, we only used data from participants who reported having two role models. We created two dummy variables to represent the following three categories: both role models are parents or persons who raised the adolescent, only one of the two role models is a parent or a person who raised the adolescent, and neither of the two role models are parents or persons who raised the adolescent. We then conducted four hierarchical linear regression models as noted above and compared the compensatory and protective effects of the type of role model (i.e., both parents, one parent, neither parents).

Results

Missing Data and Correlational Analyses

We did not find any differences between participants with missing role model data and those included in our study on gender ($\chi^2_{[1]} = .01$; ns), SES ($t_{[620]} = -.81$; ns), externalizing behavior ($t_{[674]} = .59$; ns), internalizing behavior ($t_{[674]} = 1.28$; ns), school outcomes ($t_{[626]} = .34$; ns), or polysubstance use ($t_{[621]} = .24$; ns). We found low to moderate correlations among several of our study variables (Table 1). All significant correlations were in the expected direction. Given that the correlations among our outcome variables were all below .50, we decided to run separate analyses to specifically test our resilience model with each outcome variable.

Role Model Identification

Five hundred thirteen participants (78% of the sample) reported having two role models, 121 reported having only one role model, and 25 reported having no role model. Female role models comprised primarily family members: mothers/step-mothers (56%), sisters (11%), grandmothers (9%), aunts (8%), and cousins (3%). Male role models also comprised primarily family members: 37% of male role models were fathers/step-fathers, 14% brothers, 13% uncles, 8% grandfathers, and 3% cousins. Other role models included famous persons, friends, godparents, and family members’ significant others (e.g., brother’s girlfriend).

Regression Analyses

Table 2 includes unstandardized coefficients, *F*-changes, *R*²s, and changes in *R*² from our regression analyses on the effects of negative nonparental adult behavior and role

Table 1 Correlations among study variables for males (above the diagonal) and females (below the diagonal)

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|----------------------------|------|------|------|-------|-------|-------|-------|-------|-------|-------|
| 1. SES | | -.06 | .05 | .01 | -.10 | -.05 | .02 | -.04 | .09 | .01 |
| 2. Live with mom | .06 | | .07 | .17* | -.07 | -.03 | -.16* | -.07 | .16* | -.01 |
| 3. Live with dad | .09 | .15* | | .15* | -.18* | .16* | -.13* | -.06 | .09 | -.16* |
| 4. Parental support | -.07 | .02 | -.01 | | -.28* | .32* | -.28* | -.14* | .30* | -.16* |
| 5. Adult negative behavior | -.10 | .00 | -.09 | -.22* | | -.14* | .49* | .34* | -.31* | .36* |
| 6. # of role models | -.05 | .01 | .01 | .20* | .04 | | -.19* | -.05 | .23* | -.19* |
| 7. Externalizing behavior | -.07 | -.01 | -.02 | -.19* | .47* | -.24* | | .23* | -.43* | .49* |
| 8. Internalizing behavior | -.11 | -.07 | -.07 | -.22* | .41* | -.06 | .42* | | -.25* | .13* |
| 9. School outcomes | .02 | .09 | .10 | .19* | -.26* | .15* | -.23* | -.28* | | -.45* |
| 10. Polysubstance use | -.05 | -.07 | -.07 | -.13* | .38* | -.04 | .46* | .30* | -.20* | |

* *P* < .05

Table 2 Results of hierarchical regression analyses on the effects of negative adult behavior and role models on adolescent outcomes

| | Externalizing behavior | | | | Internalizing behavior | | | | School attitudes and behavior | | | | Polysubstance use | | | |
|-------------------------------|------------------------|---------|---------|---------|------------------------|--------|--------|--------|-------------------------------|---------|---------|---------|-------------------|--------|--------|--------|
| | Step 1 | Step 2 | Step 3 | Step 4 | Step 1 | Step 2 | Step 3 | Step 4 | Step 1 | Step 2 | Step 3 | Step 4 | Step 1 | Step 2 | Step 3 | Step 4 |
| Female | -.371** | -.352** | -.369** | -.360** | .341** | .354** | .348** | .357** | .295** | .291** | .324** | .317** | -.136 | -.113 | -.120 | -.119 |
| SES | -.001 | .004 | .004 | .004 | -.006 | -.003 | -.003 | -.003 | .006 | .004 | .004 | .004 | -.002 | .002 | .002 | .002 |
| Reside mother | -.293* | -.268* | -.279* | -.255* | -.168 | -.146 | -.150 | -.130 | .273* | .266* | .277* | .262* | -.045 | -.053 | -.057 | -.056 |
| Reside father | -.147 | -.064 | -.053 | -.054 | -.028 | .026 | .029 | .029 | .074 | .025 | .012 | .013 | -.202* | -.139 | -.136 | -.136 |
| Parental support | -.253** | -.095* | -.074 | -.065 | -.155** | -.048 | -.041 | -.034 | .219** | .149** | .113** | .110* | -.189* | -.086 | -.077 | -.077 |
| Negative Adult Behavior (NAB) | | .752** | .755** | .749** | | .525** | .526** | .520** | | -.350** | -.359** | -.355** | | .493** | .495** | .495** |
| Role Model (RM) | | | -.170* | -.160* | | -.053 | -.053 | -.046 | | .295** | .293** | .293** | | -.069 | -.069 | -.069 |
| NAB x RM | | | | -.247* | | -.206* | -.206* | -.206* | | | | .111 | | | | -.013 |
| F-change | 12.1** | 176.1** | 4.8* | 6.3** | 8.9** | 84.5** | .46 | 4.3* | 9.0** | 30.8** | 12.1** | 1.0 | .05** | 59.8** | .61 | .01 |
| R ² | .099 | .317 | .323 | .331 | .074 | .197 | .198 | .204 | .082 | .135 | .156 | .157 | .048 | .148 | .149 | .149 |
| R ² change | — | .219 | .006 | .008 | — | .123 | .001 | .006 | — | .053 | .020 | .002 | — | .100 | .001 | .000 |

* $P < .05$, ** $P < .01$

models on externalizing behavior, internalizing behavior, school outcomes, and polysubstance use.

Negative Nonparental Adult Behavior

We found main effects of negative nonparental adult behavior for predicting externalizing behavior, internalizing behavior, school outcomes, and polysubstance use, after controlling for gender, socioeconomic status, residency status with mother, residency status with father, and parental support.

Presence of Role Models

The interaction between the presence of role models and negative nonparental adult behavior explained additional variance in the externalizing behavior model. Additionally, an interaction effect between the presence of role models and negative nonparental adult behavior was found for internalizing behavior. Figures 1 and 2 depict the interaction plots for externalizing behavior and internalizing behavior, respectively (Aiken and West 1991). Post hoc tests of the significance of the simple slopes indicated that the effect of adult negative behavior on externalizing behavior was the most pronounced for adolescents with no role model ($B = .88$; $P < .01$) followed by adolescents with one role model ($B = .57$; $P < .05$). Among adolescents with two role models, exposure to negative adult behavior was not predictive of externalizing behavior ($B = .48$; ns). *T*-test results indicated that all of the slopes were significantly different from each other ($t_{[1]} = 14.3$; $P < .05$ and $t_{[1]} = 15.6$; $P < .05$ for no role model vs. one role model comparison and one role model vs. two role model comparison, respectively).

Analyses of the simple slopes plotted in Fig. 2 yielded similar outcomes. Among adolescents with no role model

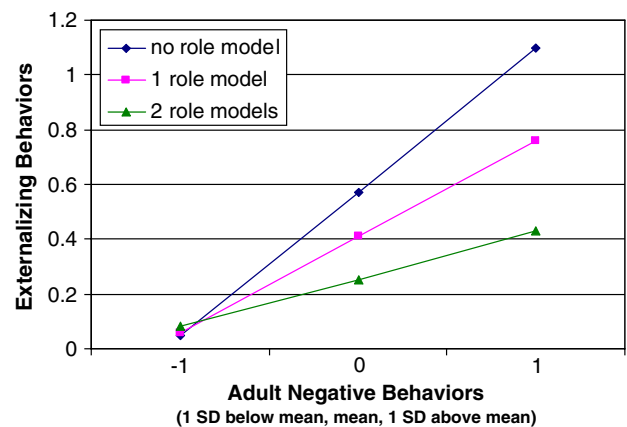


Fig. 1 Interaction effects between role models and adult negative behavior on externalizing behaviors

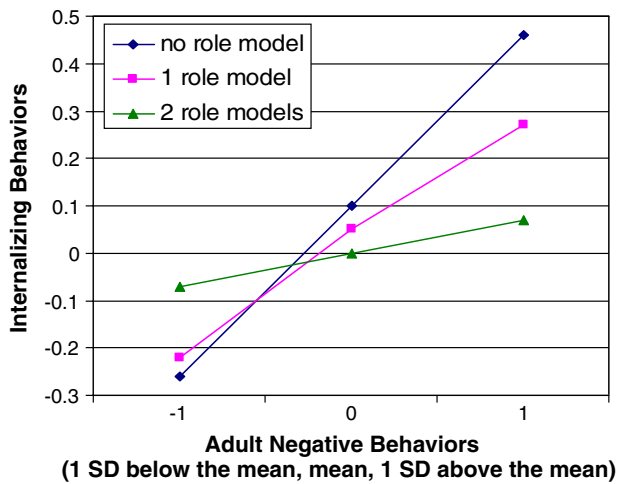


Fig. 2 Interaction effects between role models and adult negative behavior on internalizing behaviors

($B = .91$; $P < .01$) and adolescents with one role model ($B = .68$; $P < .01$), exposure to negative adult behavior was predictive of internalizing behavior problems. This relationship between exposure to adult negative behavior and internalizing behavior, however, was not present among adolescents with two role models ($B = .11$; ns). Again, t -test results revealed that the slopes were significantly different from each other ($t_{[1]} = 13.4$; $P < .05$ for no role model vs. one role model comparison, and $t_{[1]} = 17.8$; $P < .05$ for one role model vs. two role model comparison).

When we conducted our analysis with school outcomes as the dependent variable, we found a main effect for the presence of role models when negative nonparental adult behavior was included in the model, however, we found no interaction effect between role models and negative adult behavior. Our last regression equation revealed that having role models did not fit the compensatory or the protective model of resilience for polysubstance use (i.e., alcohol, marijuana, and tobacco use).

Presence of 1 vs. 2 Role Models

Entirely consistent with the previously reviewed findings, the results of our analyses comparing the promotive effects of two versus one role model demonstrated that having two role models was associated with more promotive effects than having one role model. These analyses yielded findings for all outcome variables that mirrored the findings discussed above (i.e., protective effects for externalizing and internalizing behavior and compensatory effects for school outcomes).

Gender-Matched Role Models

Our analyses of gender-matched role models (among the 121 adolescents who reported only having one role model)

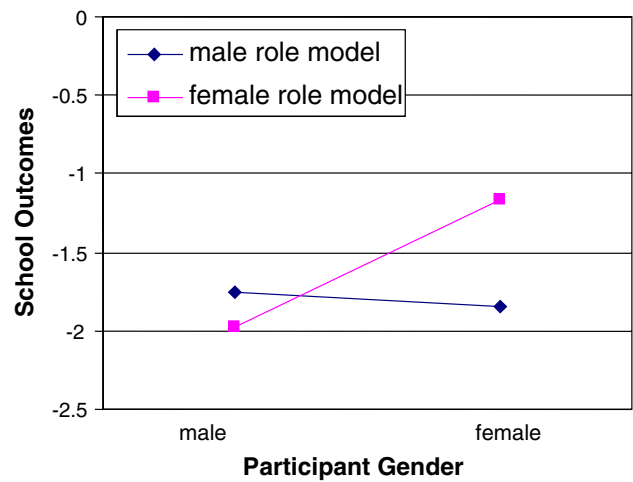


Fig. 3 Interaction effects between participant gender and role model gender on school outcomes

indicated only an interaction between adolescent gender and role model gender for school outcomes ($F_{[1,90]} = 3.87$; $P = .05$). This interaction was in the expected direction and the plot of this interaction (Fig. 3) indicates that female adolescents had more positive school outcomes if they had a female role model, but role model gender was not related to school outcomes for male adolescents. No other main or interaction effects were found.

Parental Role Models

Our analyses of parental versus nonparental role models were conducted with the 513 adolescents who reported having two role models. We did not find compensatory or protective effects specific to parental role models for externalizing behavior. Similarly, no compensatory or protective effects were found for internalizing behavior. We did find, however, that having 2 parental role models was associated with more positive school outcomes than having 2 nonparental role models ($F_{[2,386]} = 3.74$; $P < .05$).

Discussion

Overall, our findings indicate that the possession of role models was associated with more positive adolescent outcomes. Although we found that exposure to negative nonparental adult behavior was associated with negative youth outcomes, adolescents who had role models may have been able to avoid the negative outcomes associated with exposure to negative adult behavior. Specifically, we found that having a role model had protective effects on adolescents' externalizing behavior (i.e., diminished the relationship between negative adult behavior and externalizing behavior). Furthermore, among adolescents with

two role models, exposure to negative nonparental adult behavior was not related to adolescents' externalizing behavior. We also found support for a protective model of resilience for having a role model when the outcome variable was internalizing behavior. Among participants with two role models, no effect of exposure to adult negative behavior on adolescent internalizing behavior was found. Having role models also contributed to more positive school outcomes for adolescents when exposure to negative adult behavior was included in the model. This finding supports the compensatory model of resilience for school outcomes.

Our findings are consistent with past research indicating the potential beneficial effects of role models on adolescent outcomes, such as reduced risk behavior (Oman et al. 2004a; Vesely et al. 2004), more positive academic outcomes (Yancey et al. 2002), decreased aggressive behavior (Aspy et al. 2004), and decreased anxiety and depression (McMahon et al. 2004). Our study adds to this body of work by examining role models within a resilience framework and counteracting the noxious effects of negative adult influences.

In contrast to the findings reported in past research (Taylor 1989), most of the adolescents in our study reported having at least one role model. Interestingly, many of these role models were parents or other family members, and only a small percentage of adolescents identified famous persons as role models. This finding suggests that adolescents may be more inclined to look up to adults in their everyday life with whom they have some regular contact with (e.g., parents), and not distant strangers with whom they have little or no contact (Bryant and Zimmerman 2003). Future research that includes more in-depth information about the adolescent-role model relationship would be a useful next step. This research could explore factors such as contact hours, how and why the role model was identified by the adolescent, and whether or not the role model provides the adolescent with any form of support (e.g., material, emotional, cognitive).

One explanation for our results could be that because many respondents indicated parents as role models, our findings are simply evidence of the positive effects of parental support. Yet, we controlled for both residency status with mother and father and parental support in all of our analyses. Thus, our findings suggest that looking up to a parent as a role model is distinct from residing with or receiving support from a parent. Our results also suggest that adolescents may benefit from being able to look up to their parents above and beyond the benefits associated with more traditional measures of parental contributions (e.g., support, monitoring).

We found that having both a male and a female role model was associated with more positive outcomes than

having just one role model, however, we do not know if there are equal benefits to having role models of either gender, or if there is specific value in having the combination of both a male and a female role model for adolescents. Future research that asks adolescents about their total number of role models and these role models' gender may help tease apart the effects of role model quantity and role model gender on adolescent outcomes.

We did not find compensatory or protective effects of having role models for a composite measure of substance use. Although this finding was unexpected, it may be due to role models' unintentional modeling of substance using behaviors, such as cigarette smoking or alcohol consumption (DuBois and Silverthorn 2005). Unfortunately, we did not ask participants about the behaviors of their role models, so it is possible that the role models engaged in alcohol and drug use in the presence of the adolescents. Alcohol use is ubiquitous in our society, and cigarette use, while increasingly marginalized, is not uncommon. Thus, having a role model may not be a compensatory or protective factor for polysubstance use because many forms of substance use are considered socially acceptable and legal for adults.

Through our analyses of gender-matched role models, we found that gender-matched role models were associated with more positive school outcomes than non-matched role models for female adolescents. This finding supports Bandura's (1986) *similarity hypothesis*. For females, having a role model of the same gender may be related to academic achievement in that being able to see someone of the same gender doing well academically or pursuing a career the adolescent desires may inspire the female adolescent to perform better academically (Lockwood 2006; Zirkel 2002). Given the presence of conflicting gender norms in our society and limited female representation in a variety of careers (Lockwood 2006), for adolescent girls, having a female role model may be inspiring and accordingly, linked to greater academic achievement. Yet, this finding was not consistent for externalizing and internalizing behaviors. Although previous researchers have found more positive outcomes associated with gender-matched role models (Bryant and Zimmerman 2003), few have specifically analyzed gender-matched role models using a resilience framework. Our findings indicate that the significance of having a gender-matched role model depends on the outcome of interest. More research is needed to determine how gender-matched role models differ in their influence on various adolescent outcomes.

Surprisingly, we only found a difference between parental and nonparental role models for school outcomes. We found that having parental role models was associated with more positive school outcomes than having nonparental role models. This finding is consistent with

research that indicates parents have the most influence on their adolescent children's decisions about school and career plans (Meeus 1989; Younnis and Smollar 1985). One explanation for why parental role models may be more influential than nonparental role models for academic outcomes may be that parents are more involved in the daily lives of their children, and therefore are better able to monitor their school-related activities. Parents may play more of an active role in their children's school performance through, for example, homework monitoring, parent–teacher conferences, and report card reviewing. Thus, parental role models may have more opportunities than nonparental role models to influence adolescents' school outcomes. The nonparental role models identified in this study were not teachers or school staff and may have been, more generally, adults who modeled socially acceptable behavior but were not specifically academic role models.

Limitations

Several limitations of our study should be noted. First, the cross-sectional nature of the study limits our ability to make inferences about causality. We cannot be sure if the possession of role models was causing adolescents to have more positive psychosocial outcomes, or if adolescents who were doing well psychosocially were more likely to select role models. Nevertheless, we did control for several potentially spurious variables (gender, socioeconomic status, residency status with mother and father, and parental support) that helped to isolate the relationship between role models and adolescent outcomes. Future research studies that use longitudinal designs will help address this issue.

Another limitation of our study is that our sample included African American adolescents with eighth grade GPAs below 3.0. Therefore, we must be cautious in generalizing our results to African American adolescents more generally. Although this may limit the generalizability of our findings, we studied a subgroup of adolescents who have received relatively little research attention. This group of adolescents can be considered academically at-risk, and poor academic performance has been linked to externalizing and internalizing behaviors and substance use (Zimmerman and Arunkumar 1994). Thus, research that focuses specifically on this population may be especially important in order to inform policies and programs designed to address adolescent psychopathology and problem behavior.

A third limitation of our study is that our role model measure did not provide more detailed information about the role model-adolescent relationship. Additional information on the duration, nature, or quality of the relationship participants had with the identified role models would help provide a clearer picture of how role models may influence

youth development. This information would allow us to study the potential effects of role model qualities and frequency of contact with the role model. Nevertheless, our study suggests that role models have a powerful influence on adolescent development and that continued research to further understand this relationship is warranted.

Another important aspect of the role model that we did not ask about is the role model's behavior. Our results seem to imply that the identified role models were likely modeling positive behavior because they appeared to be contributing to positive adolescent outcomes, however, we cannot be sure of the behavior being modeled by the role models in our study because we did not assess their behavior. The type of behavior being modeled could have an important effect on adolescent outcomes. If role models are modeling negative behavior, we would not expect them to contribute to positive adolescent outcomes. This may be why we did not find an association between having a role model and adolescent alcohol and substance use. Despite our limited measure of role model, our findings do suggest that having someone to look up to can protect adolescents from negative outcomes associated with exposure to negative nonparental adult behavior.

Another study limitation is our reliance on self-report data. Other than school-reported GPAs, all of the data collected in this study were from adolescents' self report. It is possible that adolescents may have underreported some of their externalizing and/or internalizing behaviors due to the interview format in which these data were collected. Nevertheless, this underreporting would likely only serve to reduce the variance in our outcome variables, thus making it more difficult to detect the effects of role models on these variables. Furthermore, we have no reason to believe that social desirability effects would have been any different for participants with role models and those without, suggesting that social desirability likely did not differentially affect our results.

Finally, the effect sizes of role model possession and the effect sizes of our role model-by-negative adult behavior interaction terms were somewhat small for each outcome variable. This raises the question of the meaningfulness of the role model effects on adolescent development. McClelland and Judd (1993), however, point out that finding any interaction effects in non-experimental research, especially after controlling for many variables (including the interacting ones) in prior steps in the regression analysis, is noteworthy. The fact that we found interaction effects between role models and negative adult influences for two different outcome variables (i.e., externalizing and internalizing behaviors) suggests our findings may not be explained away as chance and may further strengthen the meaningfulness of our findings. The fact that externalizing and internalizing behaviors are not easily influenced also

suggests that any effect on them may be meaningful (Prentice and Miller 1992).

Conclusion

Our results provide vital insights into intergenerational effects on adolescent development. Our study adds to the body of research on role models and resilience by focusing on a wide range of adolescent outcomes in a large sample of African American adolescents. Collectively, our findings indicate that role models can help adolescents overcome the risk they face by being exposed to negative nonparental adult behavior. Although role models played different roles for different adolescent psychosocial outcomes, overall, the results support resilience theory. Having someone to look up to appears to be an asset for adolescents, but this asset may not be universally applicable to all adolescent outcomes. Our findings are consistent with the notion that role models may be vital resources to help protect youth from the noxious effects of risk they face (Fergus and Zimmerman 2005).

Our findings also suggest efforts to develop or improve adolescent–adult relationships may be beneficial. Considering that most adolescents in our study identified at least one person who they look up to and that these role models were mostly adult relatives, it is vital that parents and family members model prosocial behavior for their adolescent children (Hartos and Simons-Morton 2002; Simons-Morton et al. 2004). They can also help encourage their adolescent children to identify positive role models both within and outside of the family. Our results suggest that interventions that help adolescents understand how adult relationships can be helpful to them and provide them with strategies for developing such relationships may be warranted. Providing youth with skills for selecting positive adult role models may be an effective strategy for positive youth development and help youth avoid the adverse effects of negative nonparental adult influences they may experience.

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