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**LINKS BETWEEN SIBLING RELATIONSHIPS AND POSITIVE YOUTH
DEVELOPMENT IN AFRICAN AMERICAN ADOLESCENTS**

A Thesis in
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by
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ABSTRACT

Links between sibling relationship quality and positive youth development outcomes were examined in a sample of 192 African American adolescent sibling dyads. Data were collected in home interviews conducted with mothers, fathers, and two adolescent siblings ($M = 16.31$ and $M = 12.56$ for the older and younger siblings' ages). Both siblings reported on four dimensions of sibling relationship quality, and younger siblings reported on their developmental assets (positive identity, positive values, support, boundaries and expectations, social competence, and commitment to learning). Analyses revealed that, after controlling for parent-adolescent relationship quality, sibling warmth was associated with higher levels of developmental assets and sibling conflict, control, and relational aggression were associated with fewer developmental assets. The gender composition of the sibling dyad moderated these linkages, however, such that sibling relationship quality and positive development were more often correlated in opposite sex sibling, than in same sex sibling dyads.

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Chapter 1

Introduction

Recent research provides support for the role of the family as an important socialization influence on positive youth development (Baumrind, 1998; Damon, 1988; Koestner, Franz, & Weinberger, 1990). Most of this research focuses on parental influences, however, and the potential role of siblings has been neglected. The majority of youth in the U.S. grow up with a sibling (Hernandez, 1997), and around the world, siblings are a fixture of family life (Weisner, 1989). The literature on siblings shows that sibling relationships are characterized by companionship, with siblings often spending more time with one another than with parents or peers outside of school hours (McHale & Crouter, 1996). Additionally, older brothers and sisters often serve as role models and caregivers for younger siblings (Brody & Murry, 2001; Tucker, Updegraff, McHale, & Crouter, 1999). Given the salience of this relationship, it is important to consider sibling influences in efforts to illuminate family socialization processes on positive youth development.

Sibling socialization may be especially significant in cultural groups that emphasize close family ties, such as African American families (Brody, Ge, Kim, Murry, Simons, Gibbons, et al., 2003). Indeed, some previous research has linked sibling experiences to African American youth's development. Like most research on minority youth, however, this work tends to focus on risky behavior and adjustment problems (Brody et al., 2003; McHale, Whiteman, Kim, & Crouter, 2007; Pomery, Gibbons, Gerrard, Cleveland, Brody, & Wills, 2005). Accordingly, in order to fill a significant gap in the literature, the goal of this study was to measure the links between sibling relationship qualities and positive development in African American youth.

Adolescent Sibling Relationships

A burgeoning set of studies documents that sibling relationship qualities are associated with individual development (Bank, Burraston, & Snyder, 2004; Bank, Patterson, & Reid, 1996; Branje, van Lieshout, van Aken, and Haselager, 2004; Brody et al., 2003; Brody & Murry, 2001; Brody, Stoneman, Smith, & Gibson, 1999; Slomkowski, Rende, Conger, Simons, & Conger, 2001). Sibling relationships are often characterized by high levels of emotional intensity, and Dunn (1983, 1998, 2006) suggests that it is this relationship intensity that motivates children's social behavior, adjustment, and development. Indeed, a number of studies show that negative sibling relationship qualities (e.g., conflict, control, and relational aggression) are associated with a variety of antisocial behaviors (Bank et al., 2004; Bank et al., 1996; Brody et al., 2003; Slomkowski et al., 2001). Social learning mechanisms also come into play: highly coercive sibling relationships, for example, reinforce aggression and antisocial behavior (Slomkowski et al., 2001). Taken together, this body of research suggests that poor sibling relationship quality is linked to problem behavior and adjustment in childhood and adolescence.

Positive youth development is a fairly new focus of study, and encompasses a spectrum of behaviors, personality characteristics, and attitudes and beliefs. Previous research on families suggests that the parent-child relationship is linked to adolescent positive development; however, these studies neglect to consider sibling relationships as part of this association (Hill, 1998; Kelley, 2006; Marchant, Paulson, & Rothlisberg, 2001; Peterson & Leigh, 1990; Pratt, Sko, & Arnold, 2004; Rosenthal, Feiring, & Lewis, 1998; Smetana & Metzger, 2005; White, 1996). Many fewer studies assess the role of only the sibling relationship in positive youth development. This small body of research suggests that sibling relationships may also be linked to positive developmental outcomes. Low levels of sibling conflict are linked to both social

competence and self-regulation (Brody & Murry, 2001; Brody et al., 1999). Additionally, high levels of sibling support are linked to psychological adjustment (Branje et al., 2004). Another study shows that older siblings' personal qualities (e.g., empathy) were linked to younger siblings' empathy in early adolescence (Tucker et al., 1999). These studies do provide evidence that sibling relationship quality is linked to positive outcomes, however, the majority neglect to account for both parent-child relationships and sibling relationships in the same project.

Accordingly, I proposed to assess the links between sibling relationship quality and parent-child warmth.

While sibling relationships are not as highly correlated with youths' developmental outcomes as the parent-child relationship is, there are certain conditions under which siblings make a difference. Social learning theory suggests that siblings who are more similar to one another, for example, those who are the same gender, will be more likely to model one another's behavior (Mischel, 1966). In contrast, sibling deidentification theory proposes that siblings who are more like one another will differentiate from one another in order to reduce conflict in their relationship (Ansbacher & Ansbacher, 1956; Grotevant, 1978; Schachter, Shore, Feldman-Rotman, Marquis, & Campbell, 1976). At a more general level, these competing theories imply that the sibling relationship will operate differently under different conditions. Indeed, Branje and colleagues (2004) found differences in the links between psychological adjustment and sibling relationship quality when assessing sibling gender composition, but rendered these findings un-interpretable. Sibling socialization processes also may differ across age, such that siblings are more influenced by their relationships with their opposite sex siblings in adolescence than during childhood, because of the increased interest in the opposite sex during this phase of development (Collins & Steinberg, 2006). In order to build upon Branje et al.'s (2004) findings

of sibling differences and investigate these conflicting views of sibling influence processes, I proposed to explore sibling dyad gender composition as a moderator of the link between sibling relationship quality and positive youth development.

African American Families

Much of the research on family socialization processes, and research on siblings in particular, has been conducted with European American samples. We know much less about family and sibling influence processes in minority families, and most of what we do know focuses on families living in very challenging circumstances and is directed at studying pathology in youth. Research on normative sibling relationship processes is especially important in minority families. African American families tend to have more shared family roles and rely on older siblings to help with child care more so than some other racial/ethnic groups (Hill, 1998; Taylor, Chatters, & May, 1988). This cultural emphasis on sibling caretaking may mean that older siblings have an especially strong influence on younger siblings' developmental outcomes (Brody et al., 2003). It is necessary to explore patterns of positive development in working and middle class African American families and assess linkages between sibling relationships and positive youth development.

In order to assess associations between sibling relationship quality and positive youth development in African American youth, in the present study, I used an ethnic homogenous design. The use of such a design allows researchers to study within-group variability in development and adjustment (Garcia Coll et al., 1996; McLoyd, 1998). Ethnic homogeneous designs also overcome a serious limitation of ethnic comparative studies: In the latter, European Americans are often treated as the reference group, and when group differences are found, the development and family dynamics of minority groups are pathologized. Comparative designs

also ignore the tremendous variability that exists within ethnic groups. Identifying factors that explain individual differences in outcomes among minority youth is crucial for developing culturally appropriate prevention or intervention programs for promoting youth and family well-being. Finally, ethnic homogeneous designs are grounded in the recognition that, even when nationally representative samples are studied and family background control measures included, comparisons between ethnic groups are uninformative because “ethnicity” is reduced to a status variable, and researchers can only speculate on what ethnicity measures.

Research Goals

The study addressed two research goals. The first was to assess the links between sibling relationship qualities and positive youth development in younger adolescents. I tested the hypothesis that younger siblings would report more positive development when they had warmer relationships with their older siblings and would report fewer developmental assets when they had more conflictual, controlling, and aggressive relationships with their older siblings. Based on the tenets of social learning theory and the conflicting views of sibling deidentification, the second goal was to explore whether the gender composition of the sibling dyad moderated the association between sibling relationship qualities and positive youth development.

Chapter 2

Method

Participants

Data for this study came from the third wave of a 3-year longitudinal study of two-parent African American families, the year in which the data of interest were collected. Of the 202 families that participated in the first study wave, 192 were included in the current study.

Attrition rates were low for a study of this nature, and the families that did not participate in the third wave did not differ from the rest of the sample.

The families were recruited from two contiguous urban centers with substantial African American populations using two strategies. First, local community members were hired to distribute study information in churches, community groups, and youth activities. About half of the sample was recruited using this strategy. The other half of the sample was recruited through a marketing firm list that provided names and addresses of African American children in grades 4-7 who lived in the region of interest. Letters were sent to all qualifying families, and those who were interested were asked to call a toll free number for more information.

Families were generally working or middle class based on income ($M = 59,753.75$, $SD = 54,193.75$ for fathers; $M = 38,680.66$, $SD = 26,054.29$ for mothers), parents' education ($M = 14.25$, $SD = 2.3$ for fathers; $M = 14.69$, $SD = 1.8$ for mothers where 12 = high school, 14 = some post high school, and 16 = bachelors degree), and job prestige ($M = 49.37$, $SD = 12.99$ for fathers; $M = 49.33$, $SD = 11.99$ for mothers; jobs in this range include real estate agent and sheriff-law enforcement officer). The majority of households had two or three children (range = 2 to 8 children). Older siblings averaged 16.31 years of age ($SD = 2.14$) and target siblings averaged 12.56 years of age ($SD = 1.13$). The gender composition of the sibling dyad was approximately

equally distributed across the four types of dyads, $n = 51$ for girl/girl, $n = 44$ for girl/boy, $n = 59$ for boy/girl, and $n = 48$ for boy/boy dyads. The majority of siblings (80%) were biologically related to the whole family, 12% were adopted or half siblings, 5% were step siblings, and 3% were described by their parents as “other” (e.g., cousins).

Procedure

Mothers, father, older and younger siblings participated in home interviews, during which each family member was interviewed separately about their family relationships and individual characteristics. Across the course of the interview, data collection activities were varied to maintain interest (e.g., card sorts, open-ended questions, paper and pencil scales). Following data collection, families received \$200 for their participation.

Measures

Sibling Relationship. Both younger and older siblings completed scales measuring warmth (Stocker & McHale, 1992), conflict (Stocker & McHale, 1992), control (Stets, 1993), and relational aggression (O’Brien & Crick, 1995). All 22 items were rated using a 5-point scale (“never” to “always”) and were summed to create the four subscales: (a) *Warmth* (e.g., some kids share secrets with their brothers and sisters, and other kids don’t. How often do you share secrets with your sister/brother? / 7 items, $\alpha = .76$ for younger sibling and $.82$ for older sibling / $r = .46$ between siblings); (b) *Conflict* (e.g., How often does your sister/brother get mad at or angry with you? / 5 items, $\alpha = .79$ for older sibling and $.86$ for younger sibling / $r = .37$ between siblings); (c) *Control* (e.g., How often do you get to decide what you and your sister/brother will do together? / 5 items, $\alpha = .74$ for younger sibling and $.81$ for older sibling / $r = .20$ between siblings); (d) *Relational Aggression* (e.g., How often does your sister/brother tell your secrets when she/he is mad at you? / 7 items, $\alpha = .80$ for older sibling and $.86$ for younger sibling / $r =$

.21 between siblings). In order to reduce reporter bias, the averages of older and younger siblings' reports on each scale were used in analyses.

Positive Youth Development. Younger siblings filled out the Developmental Assets questionnaire (Search Institute, 2001). All 55 items were rated on a 3-point scale (“not true” to “often true”). According to The Search Institute’s (2001) guidelines, and paralleling previous work using this measure on African American youth (Taylor, et al. 2003, 2004), items were divided into 8 subscales that assessed younger siblings’: (a) *Support* (e.g., I seek advice from parents, 7 items, $\alpha = .69$); (b) *Positive Identity* (e.g., I feel good about myself, 6 items, $\alpha = .71$); (c) *Positive Values* (e.g., I stand up for what I believe in, 11 items, $\alpha = .73$); (d) *Boundaries and Expectations* (e.g., I feel that I have adults who are good role models to me, 8 items, $\alpha = .73$); (e) *Commitment to Learning* (e.g., I do my homework, 7 items, $\alpha = .76$); (f) *Social Competence* (e.g., I express my feelings in proper ways, 8 items, $\alpha = .73$); (g) *Empowerment* (e.g., I feel valued and appreciated by people, 4 items, $\alpha = .35$); and (h) *Constructive Use of Time* (e.g., I am involved in church or youth group, 4 items, $\alpha = .49$). Two subscales, empowerment and constructive use of time, were not used in final analyses because of low reliability.

Parental Warmth. Younger siblings rated their relationships with their mothers and with their fathers using an eight-item version of the Child’s Report of Parental Behavior Inventory (CRPBI) (Schuldermann & Schuldermann, 1970). Items such as “my mother cheers me up when I am sad” were rated on a 4-point scale (“really unlike” to “really like”) and α ’s were .91 for maternal warmth and .93 for paternal warmth. I created a single indicator, the average of the two reports, because the correlation between youths’ reports of maternal and paternal warmth was high, $r = .54, p < .001$.

Chapter 3

Results

I first present descriptive data on positive youth development in this sample of African American adolescents. Then I discuss results from a series of regression analyses, performed with the six developmental assets subscales as dependent variables. Regression equations tested whether positive youth development was predicted by sibling relationship qualities. Interaction terms were then added to the regression equations to test if sibling gender composition moderated the association between sibling relationship qualities and younger siblings' developmental assets.

Preliminary Analyses

Means, standard deviations, and correlations between the positive youth development measures are shown in Table 1. Means for all six positive youth development subscales were high; all were above the midpoint of the scale. T-tests were performed to test for gender differences in reports of developmental assets. Boys and girls differed on boundaries and expectations, $M = 2.65$, $SD = .32$ for girls, $M = 2.52$, $SD = .35$ for boys; $t = 2.49$, $p < .05$, and social competence, $M = 2.56$, $SD = .33$ for girls, $M = 2.46$, $SD = .35$ for boys; $t = 2.05$, $p < .05$, with girls rating themselves higher than boys on both scales. Additionally, there was a marginally significant gender difference for commitment to learning, $M = 2.66$, $SD = .32$ for girls, $M = 2.57$, $SD = .38$ for boys; $t = 1.90$, $p = .06$. Again, girls reported higher levels of assets than boys.

Bivariate correlations were conducted to test associations between the positive youth development subscales. All six subscales were correlated (Table 1). Based on the Search Institutes' recommendations (Search Institute, 2001) and previous research conducted suggesting

that the subscales do represent different constructs (Edwards, Mumford, & Serra-Roldan, 2007; Mannes, Roehlkepartain, & Benson, 2005; Taylor, et al. 2003, 2004), I proposed to examine the six subscales separately, rather than combine them into one global measure of positive youth development.

Links between Sibling Relationship Qualities and Positive Youth Development

Correlations were conducted to test associations between the six positive youth development subscales and the four sibling relationship qualities. In general, sibling warmth, control, conflict, and relational aggression were related to reports of positive youth development in expected ways (Table 1). Specifically, sibling warmth was positively associated with all six of the developmental assets. Sibling conflict was negatively correlated with support, positive values, and boundaries and expectations. Sibling control was negatively associated with positive values and social competence.

Ordinary least squares (OLS) regressions were next performed to test whether these associations remained significant after controlling for parental education, parent-child warmth, younger siblings' age and gender, and the gender composition of the sibling dyad. For these analyses, sibling gender was dummy coded as "0" for girls and "1" for boys, and gender composition was dummy coded as "0" for same sex siblings and "1" for opposite sex siblings. The results, shown in Table 2, revealed that, net of family and personal qualities, both support and boundaries and expectations were predicted by sibling warmth. These models accounted for a significant portion of the variance, $R^2 = .31$, $F(6, 167) = 12.20$, and $R^2 = .29$, $F(6, 167) = 10.79$, respectively.

In order to test for moderation by sibling gender composition, interaction terms were added to the regression equations. Of the 24 interactions tested, seven were significant (Tables

3-6). In all models, parents' education, parent-child warmth, younger sibling's age, and younger sibling's gender were included as controls. Interaction terms involving sibling gender composition and sibling relationship qualities were centered to reduce multicollinearity (Aiken & West, 1991). In all of these equations, parent-child warmth was again predictive of younger siblings' reports of positive youth development.

Interactions that predicted younger siblings' positive values, commitment to learning, and social competence all followed similar patterns: In contrast to the study hypotheses, sibling warmth was positively correlated with positive development in opposite sex, but not same sex sibling pairs (Figure 1). Additionally, negative sibling relationships were negatively associated with positive development in opposite sex, but not same sex sibling pairs. Specifically, positive values and sibling warmth were significantly correlated when reported by youth from opposite sex sibling dyads, $R^2 = .24$, $F(7, 190) = 8.07$ (Table 3), and control and conflict were negatively correlated with positive values when the younger sibling had an opposite sex older sibling. $R^2 = .25$, $F(7, 190) = 8.71$; $R^2 = .23$, $F(7, 190) = 7.68$, respectively (Table 3). Additionally, sibling control was negatively correlated with commitment to learning and social competence, when youth had an opposite sex older sibling, $R^2 = .15$, $F(7, 190) = 4.46$; $R^2 = .27$, $F(7, 190) = 9.25$, respectively (Table 4 and Table 5). For all of these significant interactions, sibling relationship quality and positive development were not significantly correlated when the youth had a same sex older sibling. Figure 1 shows a graphical representation of the interaction between positive sibling relationship quality and sibling gender composition and figure 2 shows an interaction between negative sibling relationship qualities and sibling gender composition.

The results for positive identity yielded an opposite pattern. Sibling conflict and sibling relational aggression were both positively correlated with positive identity when youth had a

same sex older sibling, $R^2 = .19$, $F(7, 167) = 5.45$; $R^2 = .20$, $F(7, 167) = 5.74$, respectively (Table 6). In both cases, however, sibling conflict and relational aggression were not significantly correlated with positive identity when the youth had an opposite sex older sibling. Figure 3 is a graphical representation of the interaction between sibling relationship quality and sibling gender composition for positive identity.

Chapter 4

Discussion

In this study, research on the family as a socialization unit for positive youth development was extended to explore the role of siblings in African American adolescents' development. Specifically, sibling relationship quality (i.e., warmth, conflict, control, and relational aggression) were explored as potential predictors of support, positive values, positive identity, boundaries and expectations, commitment to learning, and social competence. Further, the moderation of these associations by sibling gender composition was explored.

Correlational analyses revealed that sibling relationship quality was associated with all six domains of positive development: warmer relationships were linked to more positive development, and more negative relationships, to lower levels of positive development. Importantly, because measures of sibling relationship quality were based on both siblings' reports, these patterns of association cannot be interpreted simply as correlated self reports. These findings strengthen previous research findings by echoing that sibling relationship quality is related to individual development outcomes during adolescence (Bank et al., 2004; Bank et al., 1996; Branje et al., 2004; Brody et al., 1999; Brody et al., 2003; Brody & Murry, 2001; Slomkowski et al., 2001; Tucker et al., 1999). These findings also build upon previous research by examining four dimensions of sibling relationship quality within one study. Most prior research focuses on one dimension of sibling relationship quality, but by assessing all four types at once, I was able to establish consistent patterns of the association between sibling relationship quality and positive development.

While these correlational findings were an important first step, previous research indicates that parents are important socializers of both positive youth development and sibling

relationship quality (Hill, 1998; Kelley, 2006; Marchant, Paulson, & Rothlisberg, 2001; Peterson & Leigh, 1990; Pratt, Sko, & Arnold, 2004; Rosenthal, Feiring, & Lewis, 1998; Smetana & Metzger, 2005; White, 1996). Thus, links between positive youth development and sibling relationship quality could be explained by a third variable, parent-child relationship quality, such that the nature of the parent-child relationship is actually responsible for both. In order to account for this possible association, parent-child warmth was controlled in the regression analyses. These findings indicate that sibling relationships account for unique variance, beyond parent-child warmth, that should be considered when assessing positive development. These findings also highlight the importance of assessing sibling relationships in African American adolescents, where siblings often help with child care more so than some other racial/ethnic groups (Hill, 1998; Taylor, Chatters, & May, 1988).

Next the role of sibling dyad gender composition as a moderator of the association between sibling relationship quality and positive youth development was assessed: specifically, I tested whether having an older sibling who was the same sex versus opposite sex as the target youth changed the association between sibling relationship quality and positive youth development. The findings revealed that sibling gender composition did, indeed, moderate the association between sibling relationship quality and positive youth development. I explored the role of both social learning and sibling deidentification in these analyses. Based on social learning tenets, similarity between siblings should strengthen the effects of positive relationship qualities; however, based on deidentification principles, similarity between siblings should make sibling relationship quality more negative. For youth's positive values, commitment to learning, and social competence, however, youth reported higher levels of each domain when they had more positive and less negative relationships with their opposite sex older siblings. In contrast,

sibling relationship quality and positive development were not associated when youth had same sex older siblings. One interpretation of this pattern pertains to the age of the youth in this study. The younger siblings were all young adolescents, entering a phase of development when the opposite sex is of much greater interest than it was during childhood: as such, relationships with opposite sex siblings may be particularly salient. These findings are in contrast to previous work suggesting that there are no consistent results for sibling gender composition as a moderator of the links between sibling relationship quality and individual adjustment (Branje et al., 2004). These inconsistent findings are likely due to the way sibling gender composition was conceptualized. In previous work, sibling gender composition was considered to have four parts: girl/girl, girl/boy, boy/girl, and boy/boy. This study, however, assessed sibling gender composition as a two part variable: same sex versus opposite sex siblings, in order to find more interpretable results. These findings highlight the importance of fostering positive sibling relationships in adolescent youth, especially in opposite sex sibling dyads.

Findings for positive identity differed from those for the other developmental asset indices. The positive identity analyses revealed that higher rates of sibling conflict and relational aggression were linked to greater positive identity development in same sex sibling pairs, but that there was no such association in opposite sex sibling pairs. These findings may be attributed to deidentification processes within the sibling relationship. That is, siblings who are similar to one another (e.g., are the same sex) are most likely to deidentify from one another (Ansbacher & Ansbacher, 1956, Grotevant, 1978, Schachter et al., 1976). This process may be beneficial, however, in that it promotes a sense of personal identity. This pattern of findings may also be driven in part by cultural factors. For instance, the close knit nature of African American families may offer more opportunities for sibling conflict: in African American families, siblings

may spend more time together, especially when they are more alike, and thus they may have more opportunities for conflict. Overall, however, their close family relationships may nonetheless foster positive identity development.

This study contributes to the literature in several ways. First, it expands our knowledge about sibling relationships by highlighting a new domain in which sibling relationships are linked to individual development. It also adds to our knowledge about siblings by using multiple reporters for sibling relationship quality. The use of both siblings' reports indicates that these results are more than simply correlated self reports. In addition to expanding our knowledge about siblings, it also contributes to the literature on African American families and adolescents by assessing positive development, instead of the more typical focus on pathology and risk. Additionally, it extends our understanding of African American family processes by assessing sibling relationships in a normative sample.

While this study has implications for the significance of sibling relationships in African American adolescents, certain methodological shortcomings limit the conclusions. First, although I have interpreted the findings in the direction that is consistent with the larger literature (e.g., sibling relationships impacting individual development), the cross sectional and correlational design does not allow conclusions about direction of effect. Alternatively, these findings could be interpreted as positive youth development fostering positive sibling relationships in African American adolescents. Future research needs to assess the trajectory of positive youth development over time and link changes in the sibling relationship to this trajectory. Additionally, the sample for this study was limited to two-parent, two-child families. Located in a specific geographic region, families were targeted in order to collect a rich set of data from four family members. While this study was designed to collect information on within

family processes in a rich set of data, future work should consider using data from nationally representative studies in order to further assess the nature of these associations.

In conclusion, this study highlights the importance of the sibling relationship for positive youth development. Results from this study also indicated that the gender composition of the sibling dyad should also be accounted for when assessing positive development, although findings suggest that these processes are more complicated than previously expected. Additionally, this study reveals the unique importance of siblings in African American adolescent's lives and highlights the role they play in fostering positive development. Although these results suggest the importance of siblings, a crucial next step would be assessing these associations over time and across diverse samples.

References

- Aiken, L. S. & West, S. G. (1991). *Multiple Regression: Testing and Interpreting Interactions*. Thousand Oaks, CA: Sage.
- Ansbacher, H. L., & Ansbacher, R. R. (1956). *The individual psychology of Alfred Adler*. New York: Basic Books.
- Bank, L., Burraston, B., & Snyder, J. (2004). Sibling conflict and ineffective parenting as predictors of adolescent boys' antisocial behavior and peer difficulties: Additive and interactional effects. *Journal of Research on Adolescence, 14*, 99-125.
- Bank, L., Patterson, G., & Reid, J. (1996). Negative sibling interaction patterns as predictors of later adjustment problems in adolescent youth and adult males. In G. H. Brody (Ed.), *Sibling Relationships: Their causes and consequences* (pp. 197-229). New York: Ablex.
- Baumrind, D. (1998). Reflections on character and competence. In A. Colby, J. James, & D. Hart (eds.) *Competence and character through life*. (pp. 1-28). Chicago: The University of Chicago Press.
- Branjee, S. J. T., van Lieshout, C. F. M., van Aken, M. A. G., & Haselager, G. J. T. (2004). Perceived support in sibling relationships and adolescent adjustment. *Journal of Child Psychology and Psychiatry, 45*, 1385-1396.
- Brody, G. H., Ge, X., Kim, S. Y., Murry, V. M., Simons, R. L., Gibbons, F. X., Gerrard, M., & Conger, R. D. (2003). Neighborhood disadvantage moderates associations of parenting and older sibling problem attitudes and behavior with conduct disorders in African American children. *Journal of Consulting and Clinical Psychology, 71*, 211-222.
- Brody, G. H. & Murry, V. M. (2001). Sibling socialization of competence in rural single-parent African American families. *Journal of Marriage and Family, 63*, 996-1008.

- Brody, G. H., Stoneman, Z., Smith, T., & Gibson, N. M. (1999). Sibling relationships in rural African American families. *Journal of Marriage and Family, 61*, 1046-1057.
- Collins, W. A. & Steinberg, L. (2006). Adolescent development in interpersonal context. In N. Eisenberg, W. Damon, & R. M. Lerner (Eds.), *Handbook of Child Psychology: Vol 3, Social, Emotional, and Personality Development (6th ed.)* (pp. 1003-1067). Hoboken, NJ: Wiley.
- Damon, W. 1988. *The moral child: Nurturing children's natural moral growth*. New York: Free Press.
- Dunn, J. (1983). Sibling relationships in early childhood. *Child Development, 54*, 787-811.
- Dunn, J. (1998). Siblings, emotion, and development of understanding. In S. Braten (Ed.), *Intersubjective communication and emotion in early ontogeny: Studies in emotion and social interaction* (pp. 158-168). New York: Cambridge University Press.
- Dunn, J. (2006). Moral development in early childhood and social interaction in the family. In M. Killen & J. G. Smetana, (Eds.) *Handbook of Moral Development* (pp. 331-350). Mahwah, NJ: Lawrence Erlbaum.
- Edwards, O. W., Mumford, V. E., & Serra-Roldan, R. (2007). A positive youth development model for students considered at-risk. *School Psychology International, 28*, 29-45.
- Garcia Coll, C., Crnic, K., Lamberty, G., Wasik, B. H., Jenkins, R., Garcia, H. V., & McAdoo, H. P. (1996). An integrative model for the study of developmental competencies in minority children. *Child Development, 67*, 1891-1914.
- Grotevant, H. D. (1978). Sibling constellations and sex typing of interests in adolescence. *Child Development, 49*, 540-542.

- Hernandez, D. J. (1997). Child development and social demography of childhood. *Child Development, 68*, 149-169.
- Hill, R. B. (1998). Enhancing the resilience of African American families. *Journal of Human Behavior in the Social Environment. Special Issue: Human Behavior in the Social Environment from an African American Perspective, 1*, 49-61.
- Koestner, R., Franz, C., & Weinberger, J. (1990). The family origins of empathic concern: A 26-year longitudinal study. *Journal of Personality and Social Psychology, 59*, 709-716.
- Kelley, D. (2006). Parents' influences on youths' civic behaviors: The civic context of the caregiving environment. *Families in Society, 87*, 447-455.
- Mannes, M., Roehlkepartian, E. C., & Benson, P. L. (2005). Unleashing the power of community to strengthen the well-being of children, youth, and families: An asset-building approach. *Child Welfare Journal. Special Issue: Community Building and 21st-century Child Welfare, 84*, 233-250.
- Marchant, G. J., Paulson, S. E., & Rothlisberg, B. A. (2001). Relations of middle school students' perceptions of family and school contexts with academic achievement. *Psychology in Schools, 38*, 505-519.
- McHale, S. M. & Crouter, A. C. (1996). The family contexts of children's sibling relationship. In G. Brody (Ed.), *Sibling relationships: Their causes and consequences* (pp. 173-195). Norwood, NJ: Ablex.
- McHale, S. M., Whiteman, S. D., Kim, J-Y, and Crouter, A. C. (2007). Characteristics and correlates of sibling relationships in two-parent African American families. *Journal of Family Psychology, 21*, 227-235.

- McLoyd, V. C. (1998). Changing demographics in the American population: Implications for research on minority children and adolescents. In V. C. McLoyd & L. Steinberg (Eds.), *Studying Minority Adolescents: Conceptual, Methodological, and Theoretical Issues*, (pp. 3-28). Mahwah, NJ: Lawrence Erlbaum.
- Mischel, W. (1966). A social learning view of sex differences in behavior. In E. E. Maccoby (Ed.), *The development of sex differences* (pp. 57-81). Palo Alto, CA: Stanford University Press.
- O'Brien, K. M. & Crick, N. R. (1995). The Sibling Qualities Measure. Unpublished scale, University of Minnesota.
- Peterson, G. W. & Leigh, G. K. (1990). The family and social competence in adolescence. In T. P. Gullotta, G. R. Adams, & R. Montemayor (Eds.), *Developing Social Competence in Adolescence* (pp. 97-138). Thousand Oaks, CA: Sage.
- Pomery, E. A., Gibbons, F. X., Gerrard, M., Cleveland, M. J., Brody, G. H., & Willis, T. A. (2005). Families and risk: prospective analyses of familial and social influences on adolescent substance use. *Journal of Family Psychology, Special Issue: Sibling Relationship Contributions to Individual and Family Well-Being*, 19, 560-570.
- Pratt, M. W., Skoe, E. E., & Arnold, M. L. (2004). Care reasoning development and family socialization patterns in later adolescence: A longitudinal analysis. *International Journal of Behavioral Development*, 28, 139-147.
- Rosenthal, S., Feiring, C., Lewis, M. (1998). Political volunteering from late adolescence to young adulthood: Patterns and predictors. *Journal of Social Issues. Special Issue: Political development: Youth growing up in a global community*, 54, 477-493.

- Schachter, F. F., Shore, E., Feldman-Rotman, S., Marquis, R. E., & Campbell, S. (1976). Sibling deidentification. *Developmental Psychology, 12*, 418-427.
- Schuldermann, E. & Schuldermann, S. (1970). Replicability of factors in Children's Report of Parent Behavior (CRPBI). *Journal of Psychology, 76*, 239-249.
- SEARCH Institute. (2001). Developmental Assets profile: Preliminary user manual. Minneapolis, MN: Author.
- Slomkowski, C., Rende, R., Conger, K. J., Simons, R. L., & Conger, R. D. (2001). Sisters, brothers, and delinquency: Evaluating social influence during early and middle adolescence. *Child Development, 72*, 271-283.
- Smetana, J. G. & Metzger, A. (2005). Family and religious antecedents of civic involvement in middle class African American late adolescents. *Journal of Research on Adolescence: Special Issue: Moral Development, 15*, 325-352.
- Stets, J. E. (1993). Control in dating relationships. *Journal of Marriage and Family, 55*, 673-685.
- Stocker, C. & McHale, S. M. (1992). The nature and family correlates of preadolescents' perceptions of their sibling relationships. *Journal of Social and Personal Relationships, 9*, 179-195.
- Taylor, R. J., Chatters, L. M., & Mays, V. M. (1988). Parents, children, siblings, in-laws, and non-kin as sources of emergency assistance to black Americans. *Family Relations, 37*, 298-304.
- Taylor, C. S., Lerner, R. M., von Eye, A., Bobek, A. B. B., Dowling, E. M., & Anderson, P. M. (2003). Positive individual and social behavior among gang and non gang African American male adolescents. *Journal of Adolescent Research, 18*, 548-574.

- Taylor, C. S., Lerner, R. M., von Eye, A., Bobek, A. B. B., Dowling, E. M., & Anderson, P. M. (2004). Internal and external developmental assets among African American male gang members. *Journal of Adolescent Research, 19*, 303-322.
- Tucker, C. J., Updegraff, K. A., McHale, S. M., & Crouter, A. C. (1999). Older siblings as socializers of younger siblings' empathy. *The Journal of Early Adolescence, 19*, 176-198.
- Weisner, T. S. (1989). Comparing sibling relationships across cultures. In P. G. Zukow (Ed.), *Sibling interaction across cultures: Theoretical and methodological issues* (pp. 11-22). New York: Springer-Verlag.
- White, F. A. (1996). Family processes as predictors of adolescents' preferences for ascribed sources of moral authority: A proposed model. *Adolescence, 31*, 133-144.

Table 1

Means (SD) for and Correlations between Positive Youth Development (PYD) indices, Sibling Relationship Qualities, and Family Characteristics

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|--------------------------------|-------------------|--------|--------|-------------------|--------|--------|---------|---------|--------|-------|-----|----|
| 1. Support | -- | | | | | | | | | | | |
| 2. Positive Identity | .53*** | -- | | | | | | | | | | |
| 3. Positive Values | .46*** | .59*** | -- | | | | | | | | | |
| 4. Boundaries and Expectations | .82*** | .46*** | .42*** | -- | | | | | | | | |
| 5. Commitment to Learning | .47*** | .45*** | .48*** | .47*** | -- | | | | | | | |
| 6. Social Competence | .46*** | .62*** | .68*** | .52*** | .57*** | -- | | | | | | |
| 7. Warmth | .27*** | .15* | .18* | .24** | .15* | .17* | -- | | | | | |
| 8. Conflict | -.18* | -.03 | -.15* | -.19* | -.09 | -.11 | -.19** | -- | | | | |
| 9. Control | -.07 | -.02 | -.16* | -.05 | -.07 | -.20** | .10 | .37*** | -- | | | |
| 10. Relational Aggression | -.14 [†] | .00 | -.06 | -.14 [†] | -.03 | -.02 | -.27*** | .71*** | .27*** | -- | | |
| 11. Parent-Child Warmth | .46*** | .39*** | .41*** | .46*** | .31*** | .38*** | .23** | -.26*** | -.01 | -.18* | -- | |
| 12. Parents' Education | .05 | .01 | -.02 | .06 | -.04 | .02 | -.08 | -.03 | .08 | -.07 | .01 | -- |

| | | | | | | | | | | | | |
|------------------|---------------|---------------|---------------|---------------|---------------|---------------|-----------------|-----------------|-----------------|----------------|---------------|-----------------|
| <i>Mean (SD)</i> | 2.56 (.37) | 2.56 (.35) | 2.48 (.31) | 2.60 (.40) | 2.62 (.35) | 2.51 (.34) | 20.23 (4.48) | 13.17 (4.03) | 13.75 (3.35) | 9.63 (3.79) | 3.24 (.61) | 14.46 (1.75) |
|------------------|---------------|---------------|---------------|---------------|---------------|---------------|-----------------|-----------------|-----------------|----------------|---------------|-----------------|

Note. † $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$

Table 2

OLS Regression Results Examining Youths' Support and Boundaries and Expectations.

| | Support | | | Boundaries and Expectations | | |
|---------------------|----------|-------------|---------|-----------------------------|-------------|-------------------|
| | <i>B</i> | <i>SE B</i> | β | <i>B</i> | <i>SE B</i> | β |
| Parents' Education | .13 | .14 | .06 | .14 | .13 | .07 |
| Parent-Child Warmth | 2.47 | .42 | .39*** | 2.33 | .39 | .41*** |
| Youth Age | -.91 | .26 | -.24 | -.43 | .24 | -.12 [†] |
| Youth Gender | -.09 | .49 | -.01*** | -.99 | .46 | -.15* |
| Gender Composition | -.33 | .49 | -.05 | -.04 | .45 | -.01 |
| Sibling Warmth | .19 | .06 | .22** | .14 | .54 | .18** |

Note. [†] $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$.

Table 3

Sibling Dyad Gender Composition as a Moderator of Sibling Relationship Qualities and Positive Values Linkages.

| | <u>Sibling Warmth</u> | | | <u>Sibling Control</u> | | | <u>Sibling Conflict</u> | | |
|--|-----------------------|-------------|---------|------------------------|-------------|---------|-------------------------|-------------|-------------------|
| | <i>B</i> | <i>SE B</i> | β | <i>B</i> | <i>SE B</i> | β | <i>B</i> | <i>SE B</i> | β |
| Parent's Education | .01 | .11 | .00 | -.03 | .11 | -.02 | -.05 | .11 | -.03 |
| Parent-Child Warmth | 1.78 | .34 | .35*** | 1.94 | .32 | .39*** | 1.79 | .34 | .36*** |
| Youth Age | -.53 | .18 | -.20** | -.49 | .18 | -.18** | -.52 | .18 | -.19** |
| Youth Gender | -.14 | .40 | -.02 | .06 | .40 | .01 | -.10 | .40 | -.02 |
| Gender Composition | -.22 | .40 | -.04 | -.26 | .39 | -.04 | -.24 | .40 | -.04 |
| Sibling Relationship | -.01 | .06 | -.02 | .01 | .08 | .01 | .03 | .07 | .04 |
| Gender Composition X Sibling Relationship | .19 | .09 | .19* | -.28 | .12 | -.22* | -.19 | .10 | -.17 [†] |

Note. [†] $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$.

Table 4

Sibling Gender Composition as a Moderator of Sibling Relationship Qualities and Commitment to Learning Linkages.

| | <u>Sibling Control</u> | | |
|---|------------------------|-------------|---------|
| | <i>B</i> | <i>SE B</i> | β |
| Parent's Education | -.11 | .14 | -.05 |
| Parent-Child Warmth | 1.71 | .40 | .30*** |
| Youth Age | -.33 | .22 | -.11 |
| Youth Gender | -.71 | .49 | -.10 |
| Gender Composition | .05 | .48 | .01 |
| Sibling Relationship | .11 | .10 | .10 |
| Gender Composition X Sibling Relationship | -.29 | .14 | -.20* |

Note. † $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$.

Table 5

Sibling Gender Composition as a Moderator of Sibling Relationship Qualities and Social Competence Linkages.

| | <u>Sibling Control</u> | | |
|---|------------------------|-------------|-------------------|
| | <i>B</i> | <i>SE B</i> | β |
| Parent's Education | .05 | .12 | .03 |
| Parent-Child Warmth | 2.01 | .36 | .36*** |
| Youth Age | -.50 | .19 | -.17* |
| Youth Gender | -.57 | .44 | -.08 |
| Gender Composition | -.81 | .43 | -.12 [†] |
| Sibling Relationship | -.03 | .09 | -.03 |
| Gender Composition X Sibling Relationship | -.28 | .13 | -.19* |

Note. [†] $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$.

Table 6

Sibling Gender Composition as a Moderator of Sibling Relationship Qualities and Positive Identity Linkages.

| | <u>Sibling Conflict</u> | | | <u>Sibling Relational Aggression</u> | | |
|--|-------------------------|-------------|------------------|--------------------------------------|-------------|---------|
| | <i>B</i> | <i>SE B</i> | β | <i>B</i> | <i>SE B</i> | β |
| Parent's Education | -.02 | .14 | -.01 | -.01 | .14 | -.00 |
| Parent-Child Warmth | 2.19 | .43 | .38*** | 2.28 | .42 | .39*** |
| Youth Age | -.32 | .26 | -.09 | -.26 | .26 | -.07 |
| Youth Gender | .24 | .50 | .03 | .34 | .50 | .05 |
| Gender Composition | -.40 | .49 | -.06 | -.39 | .49 | -.06 |
| Sibling Relationship | .17 | .03 | .19 [†] | .22 | .10 | .23* |
| Gender Composition X Sibling Relationship | -.27 | .12 | -.22* | -.34 | .14 | -.25* |

Note. [†] $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$.

Figure 1. Dyad Gender Composition as a Moderator for Sibling Warmth and Positive Values Linkages.

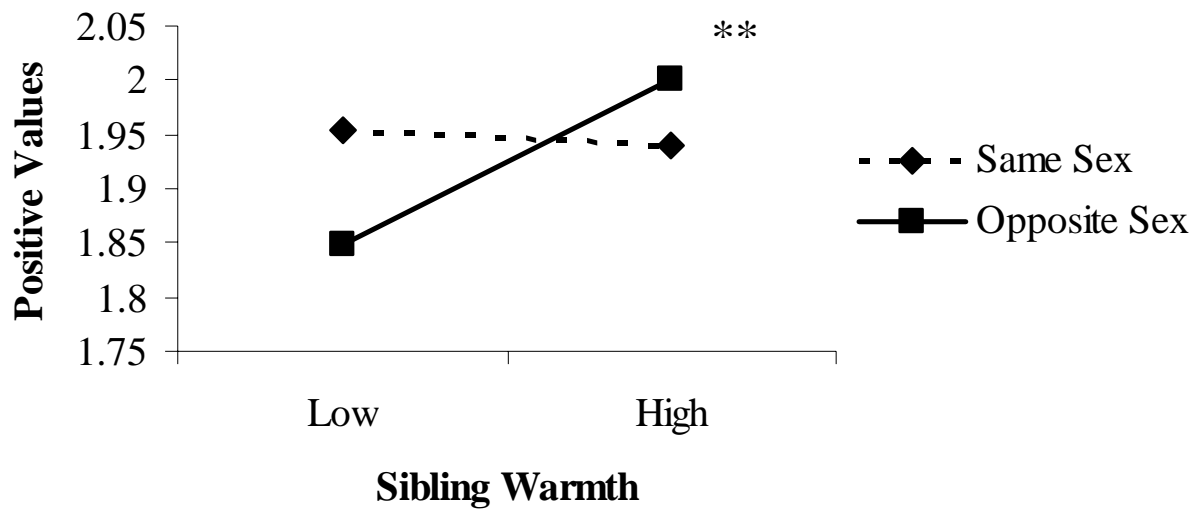


Figure 2. Dyad Gender Composition as a Moderator for Sibling Control and Social Competence Linkages.

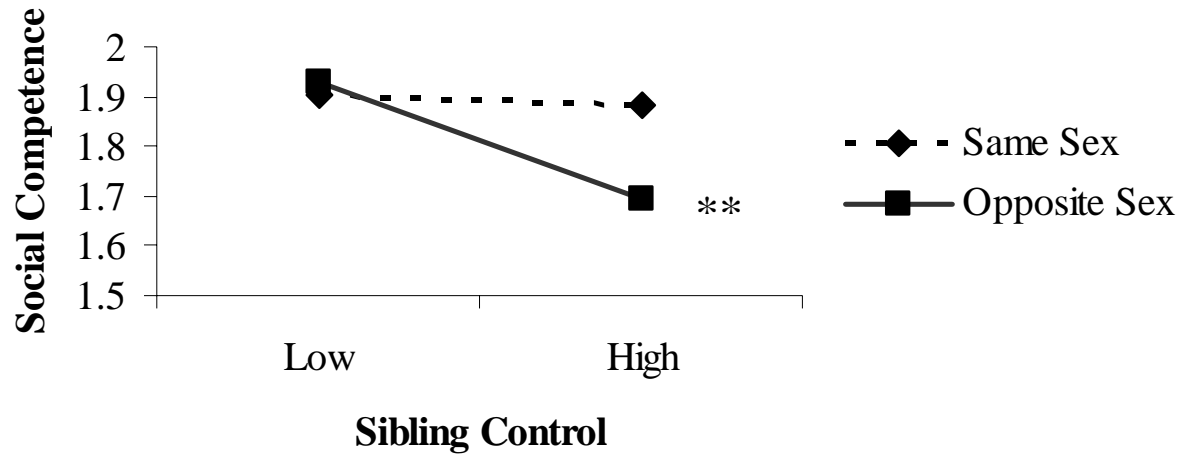


Figure 3. Dyad Gender Composition as a Moderator for Sibling Conflict and Positive Identity Linkages.

