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Transmission of Work Ethic in African-American Families and its Links with Adolescent Adjustment

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Abstract

A strong work ethic generally has positive implications for achievements in work and school settings, but we know little about how it develops. This study aimed to describe the intra-familial transmission of work ethic and the associations between work ethic and adjustment in African American youth. Mothers, fathers, and two adolescent siblings ($M_{\text{age}} = 14.1$ years) in 158 families were interviewed on two occasions. Path models revealed that fathers' work ethic was positively linked with older siblings' work ethic, which in turn was linked with more positive youth adjustment in the domains of school functioning and externalizing and internalizing problems. Moreover, the results indicated that the work ethics of older siblings, but not parents, was linked to those of younger siblings. The discussion focuses on the importance of African American fathers and siblings in youth adjustment and how work ethic may promote positive development.

Keywords

African American; family; fathers; positive youth development; siblings; work ethic

Introduction

The popular press has targeted a poor work ethic as a concern for millennials and generation Y youth (Asghar, 2014)—a concern that is echoed in research findings of generational differences in work-related attitudes (Smola & Sutton, 2002; Sullivan, Forret, Carraher, & Mainiero, 2009). Work ethic generally refers to a positive attitude toward working hard and the value of hard work (Arslan, 2001). In the face of public and scientific interest, however, we know surprisingly little about how young people develop strong work ethics. The limited research on this topic has focused on correlations between work ethic and religious or political beliefs or on differences in work ethic as a function of demographic factors such as age and gender (Furnham, 1984). Research on family influences on the development of work ethic is especially limited (Ter Bogt et al., 2005). Finally, we know little about the role of

sociocultural factors in work ethic: Although some ethnic-comparative studies have examined racial/ethnic differences (Wentworth & Chell, 1997; Woehr, Arciniega, & Lim, 2007), we know almost nothing about factors underlying the substantial within-group variability among individuals within ethnic minority groups. Thus, the present study examines the family transmission of work ethic and its adjustment correlates in African American youth.

Using an ethnic-homogenous design, we examined the links between the self-reported work ethics of mothers, fathers, and adolescent-aged siblings in African American families and the associations between youth's work ethics and indices of their adjustment. African Americans have a long history of involvement in the US labor force (Hill, 1999), and African American parents emphasize the importance of education and hard work when socializing their children (Sanders Thompson, 1994; Stevenson, Chen & Uttal, 1990). Despite the salience of work and work-related socialization in this population, studies examining parent-child work ethic linkages among African Americans are rare. This oversight is surprising given the many challenges African American youth face in gaining a foothold in the labor force. Factors such as the quality of schooling, discrimination in the labor force, larger economic trends, and criminal justice involvement may underlie patterns of data showing that African Americans have the lowest rate of past and projected labor force participation among all racial/ethnic groups (Bureau of Labor Statistics, 2013). In the face of these external challenges, a strong work ethic may be especially protective for these youth. From a positive youth development (PYD) perspective, a developmental strength such as work ethic may not only facilitate positive outcomes but also protect youth from developing problem behaviors (Benson, Scales, Hamilton, & Sesma, 2007; Lerner, Almerigi, Theokas, & Lerner, 2005). Studies focusing on their deficiencies outnumber those examining youth's strengths, however, and this pattern is pronounced in the literature on African American youth (Garcia Coll et al., 1996; McLoyd, 1998). Thus, in addition to assessing the family correlates of youth's work ethic, we also examined the links between youth's work ethic and indices of their adjustment, including school achievement and bonding as well as internalizing and externalizing behaviors.

Family Transmission of Work Ethic among African American Families

The concept of work ethic was introduced by Max Weber in his early work on the Protestant Work Ethic, wherein he argued that individuals' beliefs about work developed through religious values that emphasized hard work and devotion to the call of a higher power (Weber, 1920/2011). Most research on work ethic has focused on group comparisons of work ethic across religions and cultures, possibly because of Weber's early work, though comparisons based on gender and age also have been conducted (Hill, 1997; Pogson, Cober, Doverspike, & Rogers, 2003). Past studies suggest that individuals from less affluent countries (Furnham et al., 1993), Muslims (compared to Christians; Arslan, 2001), and younger individuals (Wentworth & Chell, 1997) tend to show stronger work ethic than their counterparts. However, findings regarding socioeconomic status (Tang & Tzeng, 1991; Ter Bogt et al., 2005) and gender (Baguma & Furnham, 1993; Wentworth & Chell, 1997) are mixed, depending on the sample. Taken together, these findings suggest that work ethic may

vary across sociocultural contexts and highlight the importance of understanding its role in particular populations.

The role of parents in youth's work ethic—Only a handful of studies have examined potential family influences on youth work ethic; this research documented moderate links between parents' and children's work ethics. For example, in an early study of a British sample, Furnham (1987) reported a positive correlation between mothers'—but not fathers'—and their children's work ethics. Studying a nationally representative Dutch sample, Ter Bogt and colleagues (2005) found that the parents' educational level and socioeconomic status indirectly affected adolescents' work ethic through culturally conservative attitudes. Such findings suggest that families may be a key context for the development of work ethic. However, the limited research on family factors makes it challenging to generate hypotheses regarding intra-familial transmission patterns. Thus, we grounded our study in the developmental-contextual model of career development (Vondracek, Lerner, & Schulenberg, 1986), which highlights that work-related behavior and attitudes develop in context, with the family of origin being one of the most influential contexts (Whiston & Keller, 2004).

Parents are key figures within family contexts (Bronfenbrenner, 1986), including by serving as role models of work-related behaviors, emotions and attitudes (Bandura, 1977; Porfeli, Wang, & Hartung, 2008). By observing their parents' work-related routines and their work stressors and gratifications, or being exposed to parents' work experiences more directly in the course of daily activities, youth may develop expectations and attitudes about work and its significance for adult life. Parents also may actively socialize their children about the value and meaning of work such as by providing information and advice and discussing their expectations about their children's future labor force involvement and achievements (Sanders Thompson, 1994). A study of single-mother African American families, for example, found that boys who talked more often to their mothers about work and career were more likely to endorse the value of hard work (Toyokawa & McLoyd, 2011). Another qualitative study found that a subgroup of immigrant parents taught their children that hard work was the means through which they could move up in the social ladder (López, 2001). Accordingly, consistent with models of family socialization and the limited empirical research, we predicted that youth's work ethic would be positively associated with those of their mothers and fathers.

In examining the links between parents' and youth's work ethics, we considered the role of parent gender. Few studies have examined differences in these associations as a function of parent gender (Furnham, 1987), but prior studies have examined its role in family dynamics, and research on African American families has documented the unique roles of mothers versus fathers in offsprings' development in general (Stanik, Riina, & McHale, 2013). For example, consistent with prior research highlighting the importance of fathers' socialization role for youth's experiences in the world beyond the family (Parke & Buriel, 1998), studies of two-parent African American families show that fathers' involvement in education accounted for more variance in youth's academic achievement than maternal, family, and demographic factors (Baker, 2014). Moreover, with respect to racial socialization, mothers engaged in cultural socialization more often than fathers, consistent with their “kin-keeper”

role, whereas fathers more often engaged in bias preparation (i.e., providing strategies for coping with prejudice/discrimination; McHale et al., 2006). Work ethic can likewise be transmitted through parents' socialization efforts, and thus these findings imply that youth's work ethic may be differently linked with those of their mothers versus their fathers. Among African Americans, in the face of a history of working mothers, the labor force participation rate of women is lower than that of men (Bureau of Labor Statistics, 2013), and the ideology of man as head of the household is prevalent, and possibly more prevalent among African American two-parent families compared to other ethnic groups (McLoyd, Cauce, Takeuchi, & Wilson, 2000). Taken together, these patterns suggest that African American fathers and mothers may assume different family roles, and that the transmission of work ethic from parents to youth may operate differently as a function of parents' gender. Building on the small body of research on gender dynamics within African American families, we collected both mothers' and fathers' reports of their work ethics and tested the prediction that links between fathers' and youth's ethics would be stronger than those between mothers and youth. Also, because parent-child interactions may vary by youth's gender (Leaper, 2002), we tested whether youth's gender moderated these parent-child linkages.

The role of siblings in youth's work ethic—Beyond the effects of parental socialization, siblings may play a key role in family socialization of youth's work ethics due to their centrality in everyday life. In the US, a majority of youth, including those in African American families, grow up with at least one sibling (King et al., 2010), and time use studies show that, in late childhood and early adolescence, youth spend more out-of-school time with their siblings than with their parents or even peers (McHale & Crouter, 1996; Updegraff, McHale, Whiteman, Thayer, & Delgado, 2005). From a social learning perspective (Bandura, 1977), siblings are prime candidates for modeling because of their frequent involvement: Even without direct instruction, youth take notice of and emulate their siblings' behaviors. Social learning theory further posits that individuals are most likely to imitate models who are high in status, similar to themselves, and warm and nurturant, reinforcing the notion that siblings—particularly older siblings—can be powerful role models (Bandura, 1977). Consistent with social learning tenets, prior research has shown how older siblings, in particular, help to create family norms and expectancies (Epstein, Griffin, & Botvin, 2008), with younger siblings imitating or being influenced by their older siblings more often than the reverse (Brook, Whiteman, Gordon, & Brook, 1990; McHale, Updegraff, Helms-Erikson, Crouter, 2001).

Despite their prominence in family life, we know little about the role of siblings in positive youth development (McHale, Updegraff & Whiteman, 2012)—such as work ethic. Instead, most research on sibling influences has focused on youth adjustment problems. In the context of their social exchanges, for example, siblings may promote and reinforce defiance of parental authority and involvement in risky or delinquent activities (Bullock & Dishion, 2002). A handful of studies suggest, however, that sibling relationships also can promote positive adjustment, including social skills (Brody, Kim, Murry, & Brown, 2003) and empathy (Tucker, Updegraff, McHale, & Crouter, 1999). Importantly, this research shows that sibling similarities cannot be explained solely by genetic similarities (Slomkowski, Rende, Novak, Lloyd-Richardson, & Niaura, 2005), and that sibling social learning

influences may be stronger than parental and as strong as peer influences (Brook et al., 1990).

Taken together, theory and research suggest that, in addition to parents, siblings—particularly older siblings—may play an important role in youth's work ethics. Thus, in addition to testing parental influences, in this study we assessed the indirect effects of parental work ethic on younger siblings, as transmitted through their older sisters and brothers. Given theory and prior findings of differences in sibling influences as a function of birth order, we expected that the indirect linkage model (i.e., parent → sibling → youth) would better explain younger siblings' than older siblings' work ethic. Further, given some findings that sibling influences are stronger in same-sex (i.e., brother-brother, sister-sister) than mixed-sex (i.e., brother-sister, sister-brother) dyads (McHale et al., 2012), we tested whether sibling dyad gender constellation (i.e., same- versus mixed-sex dyads) moderated these linkages.

Work Ethic as a Lever for Positive Development

The second goal of this study was to assess the links between African American youth's work ethic and their adjustment. Prior research provides an empirical foundation for predicting positive associations. A number of studies have documented links between work ethic and work performance in adults. One study of adults found that a strong work ethic was directly related to greater job satisfaction and organizational commitment (Saks, Mudrack, & Ashforth, 1996). Another study found that adults' value for hard work was related with organizational citizen behavior, a discretionary effort to help others or perform tasks that are not required by contract (Ryan, 2002). Together, these findings suggest that holding a strong work ethic can facilitate positive work-related attitudes and behaviors in adulthood. Less is known about the implications of work ethic for youth. Prior studies documented positive links between work ethic and grades in college students (Rau & Durand, 2000) and feelings of school belonging in junior high students (Goodnow & Grady, 1993). Meriac (2012), however, found a negative association between work ethic and grades in college students, and Rau and Durand (2000) reported that college students with higher academic ethics were more focused on learning than on the grades per se. Building on this research, we expected to find positive linkages between African American adolescents' work ethics and school bonding; given inconsistency in prior findings, however, our test of the association between work ethic and grade point average (GPA) was more exploratory.

In this study, we also moved beyond a focus on school-related outcomes to examine links between work ethic and youth's psychosocial adjustment. We know little about the links between orientations to work and psychosocial adjustment among adolescents, although one study found that positive career orientations predicted fewer problem behaviors (Skorikov & Vondracek, 2007). From a positive youth development (PYD) perspective, developmental strengths, that is, “attributes of the person, including skills, competencies, values, and dispositions important for successful engagement in the world,” (p. 896)—are likely to promote thriving and well-being while reducing the potential for high-risk behaviors (Benson et al., 2007). Thus, we predicted that youth with stronger work ethics would display

more positive adjustment, including lower levels of internalizing (depressive symptoms) and externalizing (risky behavior) problems.

The Present Study

This study addressed two goals. First, grounded in the developmental-contextual model of career development (Vondracek et al., 1986) and using an ethnically homogeneous design to better understand within-group variability, we built on prior research on youth work ethic to explore the links between mothers', fathers' and siblings' work ethics and the work ethics of African American youth. Based on past findings regarding the father's role within two-parent African American families, we predicted that links between fathers' and youth's work ethics would be stronger than those for mothers and youth. Moreover, grounded in a social learning model, we predicted that for laterborns, the process of influence would operate from parents, to older siblings, to younger siblings. Second, applying a positive youth development perspective (Benson et al., 2007), we regarded work ethic as a developmental strength and investigated how African American adolescents' work ethics were related to their adjustment, as indexed by their school achievement and bonding as well as depressive symptoms and risky behaviors. Grounded in past research, we expected that stronger work ethics would be associated with better school bonding and fewer depressive symptoms and risky behaviors.

Method

Participants

The data came from a study of two-parent African American family relationships and youth development (McHale et al., 2006). Families that self-identified as African American or Black and included a mother and father figure and who lived together with at least two adolescent-aged offspring were targeted for recruitment. In families with more than two children, we sampled only two consecutively born siblings with the target child being in 4th, 5th, or 6th grade and the sibling being the closest aged older sibling. Two strategies were used to generate the sample in two urban centers in the mid-Atlantic region: First, African American community members recruited about half of the sample by advertising the study in their communities. Second, families identified using a purchased marketing list were sent letters describing the study and asked to respond by postcard or toll-free number if they were eligible and interested. Mothers, fathers, and adolescents ($M_{age} = 12.2$ at Time 1) in 202 families were interviewed in their homes on three annual occasions and reported on their family relationships and individual characteristics.

We used primarily Time 3 (T3) data, when the measures of interest were collected. Of the 202 families that participated at T1, we removed those in which both parents did not self-identify as African American or Black ($n = 10$), those in which the older sibling had graduated from high school by T3 ($n = 20$), families in which one or more members did not participate at T3 ($n = 7$), and families in which the parent figures were not in a couple relationship (e.g., father's mother was the youth's mother figure; $n = 3$). Families that participated only at T1 were also excluded ($n = 4$). This resulted in a homogenous sample of 158 families.

At T3, of the final sample ($n = 158$), mothers averaged 42.2 ($SD = 5.7$) and fathers averaged 45.1 ($SD = 7.8$) years of age, respectively. The majority of families (78%) included two or three children (range = 2 ~ 8; $M = 2.9$). Mothers' education averaged 14.5 ($SD = 1.9$) years and fathers' education, 14.1 ($SD = 2.4$) years, with a score of 12 signifying high school graduate, 14 signifying some college, and 16 signifying a bachelor's degree. Mothers' and fathers' education levels were highly correlated ($r = .46$). Family income at T3 averaged \$92,691 ($SD = \$79,157$), with 8 families reporting incomes over \$200,000 and 21 reporting incomes less than \$35,000 during the past year. At T3, older siblings averaged 15.8 ($SD = 1.7$), and younger siblings averaged 12.5 ($SD = 1.1$) years of age. The sample of adolescents was approximately equally divided by gender for both older (47.4% girls) and younger (55.4% girls) siblings and included almost equal numbers of same-sex (50.3%) and mixed-sex sibling pairs. At T3, 82% ($n = 126$) of mothers and 89% of fathers ($n = 119$) were working for pay. Parents' occupational prestige varied considerably from private household cleaner to lawyer. Using the National Opinion Research Council (NORC) coding, occupational prestige averaged 49 and 48 for mothers' and fathers' jobs, respectively (Nakao & Treas, 1994). Jobs in this average range include real estate agent and sheriff.

Measures

Work ethic—Work ethic was reported by mothers, fathers, and youth at T3 using a six item measure, e.g., “I often don't finish work I start (reverse-coded);” “It's very important to me to do my [home] work well,” (Greenberger & Bond, 1984). Items were rated on scale of 1 (*strongly disagree*) to 4 (*strongly agree*) and summed. The original scale was developed as a 10-item measure, but factor analysis with a different sample suggested that six items loaded on one factor: a confirmatory factor analysis yielded relatively good fit with our study sample of youth, $\chi^2(9) = 28.20$, $p < .001$; CFI = .91; SRMR = .05, and excellent fit with our sample of parents, $\chi^2(9) = 11.01$, $p = .23$; CFI = .99; SRMR = .03. Cronbach's alpha ranged from .57 (older siblings) to .72 (mothers). Recent research suggests that work ethic is a multidimensional construct that is comprised of dimensions including work centrality, self-reliance, hard work, leisure, morality, delay of gratification, and wasted time (Miller, Woehr, & Hudspeth, 2002). Our measure was conceptually closest to the “hard work” dimension of work ethic which highlights aspirations for completing work and performing well.

Psychosocial adjustment

Grade point average (GPA): We calculated the mean of grades in English, math, social studies, and science obtained from youth's most recent report cards.

School bonding: We assessed school bonding with six items on which youth used a five-point scale (1 = *strongly disagree*; 5 = *strongly agree*) to rate the degree to which they felt: close to people at school, being part of the school, students were prejudiced at school (reverse-coded), happy being at school, teachers were fair, and safe in school (Hare, 1996). The items were summed, and higher scores indicated stronger school bonding; alpha = .76 for older and .67 for younger siblings.

Depressive symptoms: We used 10 items from the short form of the Children's Depression Inventory (Kovacs, 2001). For each item, youth chose from among three response options

corresponding to a three-point scale (e.g., “I am sad once in a while,” “I am sad many times”, “I am sad all the time.”). Items were summed so that higher scores indicated more depressive symptoms; $\alpha = .74$ for older and $.71$ for younger siblings.

Risky behavior: We used an 18-item scale that captured involvement in behaviors such as use of substances, involvement with the law, skipping school, and disobeying parents about something important (Eccles & Barber, 1990). Responses could range from 1 (*never*) to 4 (*more than 10 times*) and were summed; $\alpha = .88$ for older and $.83$ for younger siblings.

Control variables—To control for third variables that might explain both work ethic and youth adjustment, we took advantage of the longitudinal design, using data from T1 to control for prior levels of youth and parent characteristics.

Locus of control (T1): Because we did not measure work ethic at T1, we included youth's locus of control, which is associated with work ethic, to control for youth's personal characteristics (Furnham, 1987; Rau & Durand, 2000). This was assessed using the 21-item Nowicki-Strickland Internal-External Control Scale for Children (Nowicki & Strickland, 1973) on which youth answer yes or no to items such as, “Most of the time it doesn't pay to try hard because things never turn out right anyway.”

Youth's educational goals (T3): Based on past research showing interrelations between goals, persistence, and goal attainment (De Volder & Lens, 1982; Phaet, Andriessen, & Lens, 2004), we included a one-item index of youth's educational goals, on which youth reported the highest educational degree they would like to earn if they had no constraints.

Parents' educational values (T3): In order to isolate the effects of parents' work ethic from their related socialization efforts (López, 2001), we included parents' educational values as controls. Mothers and fathers completed an eight-item adaptation of Murdock's (1999) Economic Value of Education scale on which they used a five-point scale to rate items such as, “I tell my child that many of the things he/she learns in school will be useful in the future.” We averaged mothers' and fathers' scores to create a single measure of parents' values.

Youth's age (T1): Given its prior links to work ethic (Wentworth & Chell, 1997), we controlled for youth's age, measured in years.

Parents' education (T1): Average of mother and father's educational level was used as a proxy for family socioeconomic status (Sirin, 2005).

Moderator variables

Gender—Girls were coded 0 and boys were coded 1.

Sibling gender constellation—Same-sex sibling pairs were coded as 0 (i.e., sister-sister, brother-brother) and mixed-sex sibling pairs as 1 (i.e., brother-sister, sister-brother).

Results

Analysis Plan

Path models were fit to the data, using Mplus (Muthén & Muthén, 1998-2011), to test two research questions in a single set of models: (1) How are mothers', fathers', and siblings' work ethics linked with those of youth? (2) How are their work ethics linked with youth's psychosocial adjustment? The first set of models tested for potential parent-youth work ethic linkages ("Direct linkage model"; Model A in Figure 1). All youth were included in one model and the CLUSTER option in Mplus was used to address the non-independence of observations (Muthén & Muthén, 1998-2011). Then, a multi-group analysis was conducted to examine whether the estimates differed for older versus younger siblings (i.e., by birth order). We compared the chi-squared differences to decide whether the model was equivalent across the two groups. The second set of models tested the parent-sibling-youth work ethic linkages ("Indirect linkage model"; Models B and C in Figure 1). To compare processes of influence between siblings (i.e., Model B versus Model C), we used the AIC (Akaike Information Criterion) and BIC (Bayesian Information Criterion) indices. AIC and BIC are both penalized-likelihood criteria that are used to decide on the adequate number of predictors in a model or when comparing models that are not necessarily nested within each other (Lott & Antony, 2012). Usually, smaller AIC and BIC indices signify more parsimonious and better-fitting models. To decide whether the final model was a good fit to the data, we used established standards (Hu & Bentler, 1999). In all models, exogenous variables were allowed to covary, and maximum likelihood estimation was applied (Schafer & Graham, 2002). Once the final direct and indirect linkage models were determined, we tested for gender moderation (youth gender moderation in Model A and sibling gender dyad moderation in Models B and C; in the case for the former analysis, the gender moderation test was conducted independently from the birth order effect). To test for moderation effects, we first ran a multi-group model with all paths fixed to be equal across groups. Then we freed the paths that were expected to differ by group. In the direct linkage model, the mother-youth and father-youth paths were freed so we could test whether these links varied by youth gender. In the indirect linkage model, the older-younger sibling link was freed to test whether it varied by gender constellation of the sibling dyad. When the two models showed no statistical difference in the chi-squared test, we concluded that the paths did not differ across the two groups.

Descriptive Statistics

Mothers' and fathers' work ethics were not statistically correlated, and were not significantly different, $r = -.13$, n.s.; $t(130) = -.53$, n.s.; see Table 1. However, both mothers and fathers demonstrated significantly higher work ethic than either older or younger siblings (Mother-older: $t(147) = 7.35$, $p < .001$; father-older: $t(129) = 7.03$, $p < .001$; mother-younger: $t(150) = 5.85$, $p < .001$; father-younger: $t(122) = 4.48$, $p < .001$). Older and younger siblings' work ethics were modestly but positively correlated, and were not significantly different, $r = .21$, $p < .01$; $t(150) = -1.44$, n.s. Bivariate correlations are presented in Table 1.

Control variables were correlated with family members' work ethics and youth adjustment (Table 1). For both siblings, age was positively correlated with risky behavior, parent

education was positively correlated with GPA, and parents' educational values were correlated with mothers' and fathers' work ethics. Youth's educational goals were positively associated with youth work ethic only among younger siblings, and locus of control was associated with GPA only among older siblings. These results led us to include these variables as controls.

Transmission of Work Ethic in African American Families

Using a combination of multiple fit indices, the parent-youth direct linkage model fit was acceptable (Model A in Table 2). Multi-group analysis results (Model A.1 and A.2 in Table 2) suggested, however, that the parameter estimates were not equivalent for older and younger siblings (Satorra-Bentler scaled chi-square difference = 71.71, difference in df = 31, $p < .05$). Rather, the father-youth link was significant for older but not younger siblings (Figure 2). Mothers' work ethic was linked to that of neither sibling, and no evidence of youth gender moderation was found for parent-child linkages (difference in $\chi^2 = 0.27$, difference in df = 2, $p = \text{n.s.}$).

The indirect linkage models proved to have an excellent fit for both siblings (Models B and C in Table 2), but when we compared the AIC and BIC of Models B and C, the indices indicated that Model B (fathers to older siblings to younger siblings) was a better fit than Model C (fathers to younger siblings to older siblings) suggesting that the process of influence operates in an age-graded fashion. Path coefficients suggested that the association between fathers' and older siblings' work ethics ($\beta = .25$) were about six times stronger than that between mothers' and older siblings' ($\beta = .04$). Furthermore, the indirect effects from fathers to younger siblings through older siblings were also six times stronger than those of mothers (see Figure 2). No evidence of dyad gender constellation moderation was found for sibling linkages (difference in $\chi^2 = 0.04$, difference in df = 1, $p = \text{n.s.}$).

Work Ethic as a Lever for Positive Development

The results regarding the role of work ethic in youth adjustment are presented in Figure 2. Beginning with older siblings (estimates based on the "Direct linkage model"), work ethic was positively related to school bonding $\beta = .30$, $p < .001$, and negatively related to both depressive symptoms, $\beta = -.23$, $p < .01$, and risky behavior, $\beta = -.23$, $p < .01$ (Figure 2). Turning to younger siblings, work ethic was also negatively related to depressive symptoms, $\beta = -.21$, $p < .01$, and risky behavior, $\beta = -.19$, $p < .01$ (estimates based on the "Indirect linkage model").

Discussion

In the face of its potential significance, we know little about the role of work ethic in positive development, and almost nothing about how work ethic is transmitted within the context of families—particularly among minority families. Understanding how work ethic develops in families may help in creating programs to systematically promote positive work attitudes and behaviors among youth. Such efforts are especially important given the challenges of negotiating minority status in US society. This study advances the understanding of how families can promote youth work ethic through finding linkages

involving fathers' and siblings' work ethics. It also contributes to the limited research on positive youth development among African American adolescents in documenting links between youth's work ethic and their psychosocial adjustment, as indexed by school bonding as well as depressive symptoms and risky behaviors.

More specifically, this study contributes to the family and positive youth development literatures in three key ways. First, it focused on a sample of African American families, using an ethnic homogeneous design to examine factors that accounted for within-group variation in the work ethic and adjustment of African American youth from two-parent families. Many studies with African American samples have relied on a comparative framework, such that when group differences arise, researchers are left to speculate about the causes of those differences. As scholars have argued, understanding the bases for the substantial within-group variability among minority youth and their families is just as important as learning about between-group differences (McLoyd, 1998). Also, most of the research on African American families has focused on those facing special challenges, such as impoverished and single-mother families, and the roles of resident fathers have been virtually ignored. By studying mothers and fathers in two parent African American families, we were able to illuminate the (differential) implications of their work ethics for their children's work ethics, and ultimately, their children's psychosocial adjustment—shedding new light on the significance of African American fathers in their children's adjustment.

A second contribution of this study was its focus on work ethic linkages within families (Vondracek et al., 1986). We know little about the sources of youth's work ethics, and our findings not only documented the role of fathers, but our analyses also took the novel step of examining the role of siblings in the process of work ethic transmission. In the face of their ubiquity in family life—more children in the US today grow up in a home with a sibling than with a father or father figure, for example (McHale et al., 2012)—siblings have been neglected in the study of positive youth development, and to our knowledge, this is the first study to examine siblings' role in youth work ethic. Our findings advance understanding of both sources of youth work ethic and family system dynamics in documenting a hierarchical or “age-graded” pattern of transmission.

Finally, our study contributed to the literature on youth work ethic by moving beyond a focus on school/work functioning as a proximal correlate to examine its links with adjustment. Our findings of the links between work ethic and internalizing and externalizing symptoms are consistent with a positive youth development perspective in showing that a strong work ethic can serve as a developmental strength that is protective against adjustment problems (Benson et al., 2007). In this way, youth's work-related attitudes may impact their lives later in adulthood.

Transmission of Work Ethic in African American Families

When only parent-child linkages were considered, we found that the models, as applied to both siblings, were an adequate fit to the data, but that a significant positive link was only evident between fathers' and older siblings' work ethics. In contrast, no linkages involving mothers' or younger siblings' work ethics were evident. This finding is counter to that of an early study, which found a positive mother-child association but no father-child associations

of work ethic among a sample of British college students (Furnham, 1987). Along with birth cohort effects that correspond to increasing involvement by fathers in their children's socialization (Parke & Buriel, 1998), our sample also differed in age and ethnicity. An important research direction is to study how parental influences operate in diverse populations of youth. As noted, our findings also highlighted fathers' family roles, with implications for programs and policies. In the US today, African American youth most often grow up in single parent, mother-headed families (US Census Bureau, 2015), and thus the role of fathers in two-parent African American families may be especially salient. Indeed, a number of studies have highlighted the significance of African American fathers in their children's positive development and educational outcomes (Baker, 2014; Bryant & Zimmerman, 2003). In our study, mothers and fathers did not differ in their work ethic levels, and their work ethic levels were uncorrelated, suggesting that problems of multicollinearity were not responsible for the non-significant maternal work ethic effects. One probable explanation for differences between maternal and paternal effects is fathers' perceived role as a parent relative to that of mothers. Consistent with conceptual frameworks that highlight fathers' roles as connecting their children to the world beyond the family (Parke & Buriel, 1998), fathers may perceive their roles as socializing and preparing their offspring to become successful workers, and they make special efforts to convey their values about work to their children. Children may contribute to this process when they perceive the roles of mothers and fathers as different and model their fathers more than their mothers when it comes to work-related attitudes, because fathers are seen as the family breadwinners. Future studies should directly assess the *processes* of work ethic transmission within families, including how mothers and fathers talk about work to their children, and should examine factors that may condition parent-youth work ethic linkages, such as youth's and parents' perceptions of family roles, including mothers' versus fathers' labor force involvement (e.g., job prestige, work hours) and domestic roles and the quality of parent-child relationships.

When siblings were considered as part of the family transmission process, the findings were consistent with the social learning tenet that high status figures are more likely to be modeled, such that older siblings' work ethics had implications for those of younger siblings. In this way, our findings contribute to the literature on sibling influences in adolescence, but expand on that literature in focusing on positive development rather than adjustment problems (Brook et al., 1990; McHale et al., 2001). Older siblings in our sample averaged about three years older than their younger sisters and brothers, meaning that they were especially relevant models. The transmission process of work ethic that we identified—parents to older siblings to younger siblings—also is suggestive of the relative strength of sibling and parental influence on younger siblings (Brook et al., 1990). Older siblings help shape their younger siblings' environments, and as socializers for younger siblings, may provide a powerful context of learning and developing a strong work ethic. Although the indirect effects of fathers' work ethic to younger siblings' work ethic through their older sibling was statistically significant, however, the coefficient size was modest, suggesting that there are other factors and processes that are involved in the development of youth's work ethic and that our findings require replication.

Work Ethic as a Lever for Positive Development

A contribution of the current study is its focus on positive development in minority youth, a major gap in the literature that has focused on dysfunction and adjustment problems (Garcia Coll et al., 1996; McLoyd, 1998). Our findings revealed that a strong work ethic may have positive impacts on African American youth's psychosocial adjustment. An orientation to working hard did not explain significant variance in GPA beyond factors such as family socioeconomic status, parents' educational goals for their children, and youth's own educational aspirations, which are known to be critical factors of achievement (Sirin, 2005, Fan & Chen, 2001). Stronger work ethic, however, was linked with stronger school bonding and fewer risky behavior problems and depressive symptoms above and beyond the control variables. As noted earlier, African American parents take special effort to socialize their children about the importance of education and hard work for success in contemporary US society (Stevenson et al., 1990). Work ethic thus may be part of broader socialization efforts aimed at promoting achievement in the face of challenges and stressors such as racial discrimination. In this way, a strong work ethic may serve as a protective factor for African American youth in their everyday lives. Importantly, the effects of work ethic were stronger for older than for younger siblings' adjustment. One explanation for this may be that the effects of work ethic may accumulate over time, such that the connections between work ethic and adjustment become more apparent with development. Future studies should use longitudinal designs to examine whether and how the implications of work ethic may change across development.

More generally, the link between work ethic and adjustment is consistent with a positive youth development perspective (Benson et al., 2007; Lerner et al., 2005), which suggests that promoting developmental strengths in youth can encourage other positive outcomes and reduce negative ones. Research has often highlighted the challenges and increasing levels of negative adjustment across adolescence, reflecting early views of this developmental period as "storm and stress" (Lerner & Steinberg, 2009). Findings documenting the range of adolescents' developmental assets and positive future orientations, though not often focused on minority youth, provide for a more optimistic view (Lerner et al., 2005). A direction for research is to identify other protective characteristics of African American youth toward developing interventions that can further promote their positive development and prevent adjustment problems.

Limitations and Directions for Future Research

In the face of its contributions, this study has a number of limitations that imply directions for future research. First, the correlational and largely cross-sectional data mean that causal inferences cannot be drawn. As noted, future studies should include longitudinal data on youth work ethic to examine its developmental course and predictive associations. In addition, also as noted, research should aim to identify the processes through which work ethic transmits between family members and how it exerts protective effects on youth adjustment. Finally, research is needed on factors that may condition the linkages between parents' and youth's work ethic and their implications. The sample for this study was deliberately homogenous in terms of family structure and ethnicity, and the findings are not generalizable to other groups. We focused on youth from two-parent, working, and middle

class African American families given how little is known about the role of fathers and issues of positive youth development in this racial/ethnic group and in an effort to illuminate factors that explain differences *within* this group (McLoyd, 1998). Research on nationally representative samples is needed to replicate and further investigate whether the effects that emerged in this study extend to youth from other family structures and socioeconomic backgrounds. Given the higher prevalence of single-parent African American families (US Census Bureau, 2015), it is important to examine how family structure and SES moderate the linkages between parents' and youth's work ethic and between youth's work ethic and adjustment that we identified here.

Conclusion

Building upon a developmental-contextual model of career development (Vondracek et al., 1986), this study provided support for the proposition that work ethic develops within a family context. As some of the most powerful socialization agents, parents and siblings can serve as models and socializers of work-related beliefs and attitudes. In our study, we found that fathers and older siblings were particularly important in African American youth's work ethic development. Further, encouraging youth's attitudes about the value of hard work and their corresponding behaviors may promote positive development and inhibit negative outcomes in adolescents (Benson et al., 2007). At the most general level, the study of the precursors to youth career development can have implications far beyond their implications for building an effective workforce given their significance for youth well-being and adjustment.

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Model A: Direct transmission of work ethic from parents to youth

Note. Older and younger siblings are all included as youth. The CLUSTER option in Mplus was used to address non-independence of data.

Model B: Indirect links of work ethic from parents to younger siblings

Model C: Indirect links of work ethic from parents to older siblings

Figure 1.
Conceptual models of work ethic transmission within the family.

Note. Estimates on top are for older siblings and those on the bottom are for younger siblings.

Figure 2.

Parameter estimates for Model A (above) and Model B (below). Standardized estimates are shown. See also Table 2 for fit indices of the models. Control variables were youth age (T1), parent education (T1), parent educational values (T3), youth educational goal (T3), and youth locus of control (T1; controls not depicted). Variables shown in the figure are all measured at T3.

* $p < .05$. ** $p < .01$. *** $p < .001$.

Table 1
Correlations, Means and Standard Deviations for Study Variables

	1	2	3	4	5	6	7	8	9	10	11	12	M	SD
1. Mothers' work ethic (T3)		-.13	.11	.09	-.05	.11	.04	.14	.05	.17*	.10	.14	19.19	2.77
2. Fathers' work ethic (T3)			.02	.14	-.05	.02	.05	.14	.08	.18*	.07	.02	19.08	2.86
3. Youth's work ethic (T3)				.07	-.20*	.10	-.15	-.07	-.08	-.04	.25**	.11	17.28	3.12
4. GPA (T3)		-.03	.15		.09	.00	-.07	-.13	.19*	-.04	.04	.08	2.83	0.74
5. Depressive symptoms (T3)			-.25**	-.20*		-.12	.08	-.02	.06	-.01	-.07	-.18*	1.78	2.29
6. School bonding (T3)				.18*	.27**	.14	-.25**	-.18*	.14	-.13	.06	.01	22.96	3.96
7. Risky behavior (T3)					-.07	-.16	-.16	.21**	-.30***	.19*	.08	.06	23.43	5.44
8. Age (T1)						.17	.10	-.08	-.01	-.05	-.05	-.37***	10.31	1.08
9. Parents' education (T1)							.08	.15	.07	-.07	-.16	.29***	14.28	1.83
10. Parent educational value								.25**	.16	.03	-.23**	-.02	4.32	0.41
11. Youth educational goals									.02	-.02	.04	.06	4.07	1.11
12. Locus of control													32.93	3.55
Mean (older siblings)													4.07	33.80
Standard deviation													1.08	3.66

Note. Scores for older siblings are below, and scores for younger siblings are above the diagonal.

* $p < .05$.

** $p < .01$.

*** $p < .001$.

Table 2

Criterion Indices for Model Selection

	χ^2 (df)	RMSEA	CFI	SRMR	AIC	BIC
Direct linkage model (parents to youth)						
Model A: Parents to youth	16.65 (8)**	.07	.89	.03	5746.22	5910.78
Model A.1: Multi-group analysis, parameters freely estimated across groups	33.08 (16)**	.09	.80	.04	5768.46	6097.58
Model A.2: Multi-group analysis, all parameters fixed to be equal across groups	83.56 (47)***	.08	.57	.06	5749.45	5970.03
Indirect linkage model (parents to siblings to youth)						
Model B: Parents to older sibling to younger sibling	17.88 (17)	.02	.98	.03	8178.26	8444.68
Model C: Parents to younger sibling to older sibling	22.96 (17)	.04	.93	.04	8473.14	8739.59

Note. When comparing nested models, namely Models A.1 and A.2, the chi-squared difference was tested using the scaling correction factor for MLR (an Mplus option for maximum likelihood estimation with robust standard errors; Satorra & Bentler, 2001). When comparing models that were *not* nested, namely Models B and C, the AIC and BIC were applied.

**
 $p < .01$.

 $p < .001$.