

The Family as a Context for Adolescent Identity Development

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Abstract

Models of parental influence on the development of adolescent occupational identity were developed in two specific domains: academics and sports. Multiple measures were used as indicators of parental values and behaviors, youth values and beliefs, quality of the parent-child relationship, and adolescents' occupational identities. Direct and indirect pathways were examined using a sample of 444 seventh graders with approximately equal numbers of African- and European-American girls and boys growing up in intact families.

Results indicated a different pattern of relationships across achievement domains. While parents' academic values were not mediated by their specific behaviors but influenced youth values and beliefs directly, fathers' specific behaviors in the sports domain were found to mediate the relationship between parents' and youths' values. Main effects, but not moderation, were observed for the quality of the parent-child relationship; and parental values and beliefs influenced the content of adolescents' occupational identities via both direct and indirect pathways. These findings underscore the importance of family as an instrumental context for adolescent identity formation.

The Family as a Context for Adolescent Identity Development

Beginning with Erikson's (1968) seminal work on adolescence, identity formation has long been considered a critical, stage-salient task of that developmental period. According to this perspective, adolescence provides an opportunity for the synthesis of childhood self-schemas and the projection of these schemas into a vision of one's future. A central aspect of this task involves making decisions about future work roles and an eventual commitment to an occupation that best fits one's unique combination of needs and talents.

These decisions are not made in a vacuum and depend largely on many contextual factors, among them, family, peers, media, school, and community. Each in their own way can shape the nature and content of an adolescent's psychological and behavioral commitment to an occupational identity. The family, however, represents a particularly important setting for identity development during early adolescence and that is the focus of interest in this paper.

Parents are assumed to play a primary role in influencing the structure and content of adolescents' occupational identities. They can do this directly through the role modeling of specific behaviors and/or through specific parenting practices. That is, they may translate their values and beliefs into actions and thereby transfer them to the child simply by engaging in different activities with him or her (Eccles, 1993). The parent who reads to his or her child, for example, sends a clear message regarding the value of academic pursuits, compared to the one who uses his spare time to coach the child's Little League team. In this way, specific parenting behaviors may affect adolescents' activity preferences, their beliefs about themselves, and ultimately their educational and occupational choices.

Parents also may impact their adolescents' occupational identities through their role as a filter for their child's experiences and abilities (Eccles, 1993). Parents hold various beliefs and perceptions regarding their child, as well as value certain activities, that may be communicated in both subtle and overt ways. For instance, a parent might implicitly encourage a child to join the soccer team or explicitly tell their child that they are good at math or science. The available evidence suggests that these messages do matter in terms of influencing adolescents' own self- and task-related beliefs, as well as their educational and career outcomes. Several investigators have documented a relationship between parents' perceptions of their children's academic skills and adolescents' self-concepts of these abilities (e.g., Alexander & Entwisle, 1988; Parsons, Adler, & Kaczala, 1982; Miller, Manhal, & Mee, 1991). Academic self-efficacy, in turn, has been associated with persistence and performance in the classroom as well as with adolescent consideration of a greater range of occupational options (e.g., Betz & Hackett, 1986; Lent, Brown, & Hackett, 1994).

One question that has not been addressed adequately in the literature is whether parents' values and beliefs are communicated directly or indirectly via their role modeling of specific behaviors. With respect to academic achievement, there is some evidence to suggest that parents play a greater role as interpreters of their child's experience rather than as role models (Eccles, 1993; Parsons et al., 1982; Wenzel & Feldman, 1991). A study conducted by Eccles and her colleagues (Parsons et al., 1982), for example, found that the effects of parents' perceptions of their children's abilities on youths' own beliefs was stronger than their role modeling of different activities. However, it is important to note that most of the research has been limited to the

academic domain. Relatively little is known about how parents might differentially socialize achievement values in other activity domains (e.g., sports) (Wigfield & Eccles, 1992).

A potential moderator of the messages that parents provide children about their beliefs and values is the quality of the parent-child relationship. Adolescents may be more likely to internalize parental values and beliefs if they experience a warm, supportive parent-child relationship and view their parents as positive role models (Darling & Steinberg, 1993; Eccles, 1993). Support for this perspective can be derived from the literature on educational achievement and career development. Parenting style (e.g., Dornbusch, Ritter, Leiderman, Roberts & Fraleigh, 1987), communication between parents and children (Forehand, Long, Brody & Fauber, 1986; Masselam, Marcus & Stunkard, 1990), as well as autonomy and relatedness within the parent-child relationship (Bell, Allen, Hauser, & O'Connor, 1996) all appear to influence adolescent behavior and performance in school. Similarly, high levels of emotional support and attachment to parents have been associated with greater career maturity and progress toward committing to a career among college students (Blustein, Walbridge, Friedlander, & Palladino, 1991; Kenny, 1990).

A primary objective of the present study was to examine the direct and indirect pathways linking various domains of parental influence to occupational identity development in an ethnically diverse sample of early adolescents. The general conceptual model presented in Figure 1 summarizes the major domains of parental influence. As shown, three basic questions were examined in this study:

- 1) Do parental values and beliefs influence youth values and expectations indirectly via their role modeling of specific parenting practices? Or do parents play a direct role in socializing youth values and expectations?
- 2) Does the quality of the parent-child relationship moderate the association between parents' values and beliefs and youth values and expectations?
- 3) How do parents shape adolescents' future occupational identities? Do parental values and beliefs influence the structure and content of these occupational identities directly, or indirectly via youth values and expectations?

To date, the research that has focused on parents' role in shaping adolescents' occupational identity development is largely limited to the academic domain. Little is known about how parents, especially fathers, socialize youths' values, beliefs and aspirations in other achievement domains such as sports. Therefore, in the present study, two domain-specific models—an academic and a sports model—were developed in order to address the major research questions depicted in the general conceptual model (See Figure 1).

Method

Sample

The sample is drawn from a large ongoing longitudinal study of an ethnically diverse county in the Mid-Atlantic region of the United States (Jacquelyne Eccles and Arnold Sameroff, Principal Investigators) designed to examine the influence of social contexts (family, peer, school, neighborhood) on adolescent development. Given our focus on parental influences, we selected only those respondents (i.e., adolescents in the 7th grade) growing up in intact families at Wave 1 who were living with their biological mother and biological father (total of 444 out of

1498). This allowed us to investigate the nature of the influence of mothers and fathers separately and without the additional complication of non-intact families (step, adopted, single, nontraditional).

The sample includes approximately equal proportions of African-American and European-American males and females (~111 each); other ethnic groups (including mixed racial categories) were dropped from the analyses because of small group sizes. The median annual income was \$60-65,000 for the African-Americans and \$55-60,000 for the European-Americans. Nearly one-half of European-American mothers (46%) had completed college as compared to 33% of African-American mothers. European-American fathers were somewhat more likely than African-American fathers to have a college degree (56% vs. 37%). Thus, both samples represent populations of comparable socioeconomic diversity, albeit on the high end compared to the average American family.

Measures

Table 1 summarizes in outline form the various constructs and measures used in the analyses. Measures included count variables, open-ended items, and scales with Cronbach's alphas that ranged from .62 to .89 (See Table 1). Noted below are brief explanations for the measures in each domain.

Identity. The outcome measures reflect our primary interest in the impact of parental influence on adolescent identity development, specifically around occupational choice. Response categories were based on a combination of several open-ended questions coded *across* the adolescent interview that began with the adolescents' occupational choice, but also included other references and concerns about the self as revealed in such questions as how the youth

imagined him/herself as a grown-up; their heroes and admired adults; what they would wish for if they had three wishes; and what they would do if they had a million dollars. Taking all these into account, adolescents were classified as being clarified (i.e., having at a consistent theme) around a particular occupation versus being conflicted or vague (i.e., no real interest or detail) in their future conceptions of themselves. The themes themselves revolved around numerous possible occupations from which we chose to focus on two types: professional occupations that assume *academic* aspirations and require specialized education (e.g., doctor, lawyer, architect) and *sports* occupations (e.g., football player, baseball player). Two dichotomous variables were created based on these categories: 1) clarified around professional careers (academic) versus other occupations and/or those with no theme; and 2) clarified around sports careers versus other occupations and/or those with no theme.

A substantial number of seventh graders were clarified around a prestigious/white-collar occupational goal (39.3%) whereas only 8.7% were clarified around a sports theme. Not surprisingly, boys were much more centered on sports—especially white males (21% vs. 11.8% for black males; 2.9% and 0% for white and black females respectively)—and girls on professional careers, notably among black females (53.4% compared to 45.1% for white females; 32.4% and 25.2% for white and black males respectively).

Predictors. Interviews with the target adolescent, mother and father included face-to-face and self-administered questionnaires. Predictor variables were based on scales constructed from these questionnaires and guided by theoretical concerns and factor analyses. The items were generally 5 to 7-point Likert scales. The specific constructs used in this paper are described below along with sample items.

Youth's Beliefs, Values and Expectations. Three self-report scales were used in the academic domain: self-concept of academic skills (e.g., "How good are you in math/other school subjects?"); the value of school as important for the future (e.g., "I have to do well in school if I want to be a success in life"); and a combination of two items for educational expectations and aspirations (i.e., "How far do you think you will actually go in school?", "How far would you like to go in school?"). Only one scale was used in the sports domain: self-concept of sports ability (e.g., "How good are you in sports?"). Cronbach's alphas ranged from .69 to .88.

Parental Beliefs, Values and Expectations. A parallel scale was used in the academic and sports domains for parental perceptions of the youth's abilities (e.g., "How good is your child at math/sports?"). In the academic domain only, parents were asked about their child's chances for positive outcomes such as completing college, and about their educational expectations and aspirations for their child (i.e., "How far do you think your child will actually go in school?," "How far would you like your child to go in school?"). Cronbach's alphas ranged from .72 to .89. An open-ended item which tapped parents' endorsement of the youths' athletic talents was used in the sports domain.

Specific Parental Behaviors. Academic behaviors on the part of parents consisted of proactive encouragement around general talents and skills (e.g., "How often have you praised your child when she/he did well in this activity?"; $\alpha=.76$); family activity involvement (i.e., frequency of involvement in scouting or youth clubs, literary, GED or tutoring programs); involvement in the child's school (i.e., frequency of involvement as a classroom volunteer, advocate, policy maker/evaluator); and time use with the adolescent (e.g., "How often has your parent helped you do homework or a school project?"; $\alpha=.78$). Parents' sport-related behaviors

also included proactive encouragement around general talents and skills, but focused specifically on sports involvement (e.g., “How often have you played sports with your seventh grader?”) and parental support of talents (e.g., “What have you done to help your child with this [sport] talent?”) as well. In addition, fathers were asked, “Of what activities have you been a coach/leader?”.

Quality of the Parent-Child Relationship. Identical measures for relationship quality were not available in both mothers and fathers. However, comparable measures were used which included: positive identification and communication. For analyses conducted with mothers, questions were asked about positive identification with the mother such as “How much do you want to be like the kind of person your parent is when you’re an adult?” ($\alpha=.62$). An identical measure for positive identification was not available for fathers. Therefore, questions were used which addressed communication with fathers (e.g., “How often do your parents and you talk about how things are going in your life?”; $\alpha=.83$).

Results

A series of hierarchical linear and binary logistic regressions were conducted to test the pathways linking parent and youth values, parental behaviors, quality of the parent-child relationship, and adolescents’ occupational identity (See Figure 1). Multiple regression was chosen over other methods (e.g., structural equation modeling) because it offers a straightforward approach to examining interactions as well as main effects. Logistic regression also was employed when the dependent variable was dichotomous (i.e., clarified around professional careers vs. other, clarified around sports vs. other). The following general analytic strategy was used to test both domain-specific models.

First, a series of hierarchical linear regressions were conducted to investigate specific parental behaviors as *mediators* of the relationship between parent and youth values. To test for mediation, three separate regression equations were estimated as delineated by Baron and Kenny (1986): 1) specific parenting behaviors as mediators were regressed on parental values (IV), 2) youth values (DV) were regressed on parental values, and 3) youth values were regressed on both parental values and specific parenting behaviors. Mediation is established when significant associations are observed between parental values and specific parenting behaviors (Equation 1) as well as parental and youth values (Equation 2), and the relationship between parental and youth values becomes nonsignificant when controlling for specific parenting behaviors (Equation 3). It is important to note that the effects of GPA and/or significant demographic variables were controlled for by entering them first into the equations.

A second set of hierarchical regression analyses examined the quality of the parent-child relationship as a *moderator* of the relationship between parent and youth values. Using youth values around academics or sports as the dependent variables, parental values and beliefs were entered into the equation as a block after controlling for GPA and/or significant demographic variables. Measures of the quality of the parent-child relationship were entered next, followed by a final block comprised of interactions terms (e.g., positive identification X educational expectations/aspirations).

A final set of logistic regression analyses investigated the role of youth values as a *mediator* of the relationship between parents' values and adolescents' occupational identities. This mediational hypothesis was tested using the Baron and Kenny (1986) strategy outlined above. In this instance, mediation would be established if parental values no longer significantly

predict occupational identity status when youth values are entered simultaneously into the regression equation. As before, the effects of GPA and/or significant demographic variables were controlled for by entering them first into the equations.

All analyses were conducted separately for mothers and fathers using the full sample of intact 2-parent families. Given the demographic make-up of the sample, subgroup comparisons also were conducted by sex and race (i.e., African-American boys, African-American girls, European-American boys, and European-American girls). Findings will be presented first for the academic model followed by results for the sports model.

Academic Model

In this section, detailed results will be presented for mothers and adolescents only given that a similar (albeit somewhat weaker) pattern of relationships was observed with fathers. Results from analyses conducted within subgroups (i.e., African-American boys and girls, European-American boys and girls) will not be presented in detail; specific results will be included only when notable differences are observed in the pattern of relations across groups.

Our first research aim addressed the question: Do parents influence youth values and beliefs about academics directly, or indirectly via their specific behaviors? A formal test of this mediational hypothesis was unnecessary because preliminary analyses revealed few significant associations between parents' academic values and their specific parenting practices such as proactive encouragement or involvement in the child's school. Parents' specific behaviors also were not consistently linked to adolescents' academic values and expectations. Thus, parental academic values and beliefs do not appear to be translated via their specific parenting practices at

this age. Rather, parents' values and beliefs seem to play a direct role in socializing youth values and expectations.

To examine the quality of the mother-child relationship as a moderator of the relationship between maternal and youth values, a series of hierarchical linear regressions were performed in which positive identification with the mother was used as a measure of the quality of the mother-child relationship. As shown in Table 2, no significant interactions were observed for the full sample of intact 2-parent families. Nonetheless, significant main effects were observed for maternal values as well as positive identification after controlling for GPA, maternal level of education, and family income. First, mothers who viewed their child as having a greater chance for positive outcomes and who held high educational expectations/aspirations were more likely to have children who placed a high value on school being important for their future. Similarly, higher maternal perceptions of their child's academic abilities were associated with higher levels of academic self-concept in adolescents. Moreover, mothers' educational expectations/aspirations for their child were positively related to higher levels of educational expectations/aspirations among youth. Second, adolescents who strongly identify with their mothers tended to place a greater value on school being important to the future, and to possess higher levels of academic self-concept and educational expectations/aspirations. Maternal values accounted for significant changes in R^2 that ranged from 5% to 13% whereas positive identification accounted for between 2% and 4% of the explained variance.

In general, a similar pattern of results was observed within all subgroup comparisons—the most consistent predictors being maternal reports of youth academic skills and mothers' educational expectations and aspirations for her child. One notable exception was that

positive identification exerted significant main effects only for girls in this sample. For example, a strong positive identification with one's mother was associated with a greater valuing of school for the future among both African- and European-American girls ($\beta=.21, p<.05$ and $\beta=.32, p<.01$ respectively), and to higher levels of academic self-concept among European-American girls ($\beta=.23, p<.01$). A second exception was that maternal reports of their adolescents' academic abilities ($\beta=.27, p<.05$) and chances for positive outcomes ($\beta=.34, p<.01$) were significantly related to youth reports of the importance of school for the future among African-American girls only. Maternal perceptions of chances for positive outcomes also predicted African-American girls' educational expectations and aspirations ($\beta=.29, p<.05$).

A final set of logistic analyses addressed whether parents influence adolescents' occupational identities directly or indirectly via youth values. To test this mediational hypothesis, logistic regression analyses were performed using clarification around professional careers as the dichotomous dependent variable. When only maternal values and beliefs were entered into the equation, mothers' reports of chances for positive outcomes were shown to be positively related to adolescents being clarified around professional careers ($B=.55, p<.05$). However, when youth values were entered simultaneously with maternal values, the relationship between maternal reports of chances for positive outcomes and youth identity status became nonsignificant (See Table 3). As shown, only youth educational expectations and aspirations significantly predicted identity status after controlling for sex of the adolescent and GPA. That is, for each one-unit increase in educational expectations/aspirations, the odds of being clarified around a professional career increases by 81% or by a factor of 1.81. These results suggest that the effect of maternal values on occupational identity development is indirect and mediated via youth values.

A similar pattern of findings was observed across subgroups with one exception. Among European-American girls, self-concept of academic skills was found to be *negatively* related to being clarified around a professional career (See Table 4). That is, European-American girls with high GPAs who envision themselves as a professional when they grow up tend to have lower self-concepts of their academic abilities. Conversely, European-American girls with lower GPAs who do not want a professional career have higher self-concepts of their academic skills on average. As shown in Figure 2, this suppressor effect appears to be driven by those European-American girls at the lower end of the distribution for GPA who tend to overestimate their academic ability relative to their actual performance. European-American girls at the upper end of the distribution appear to hold a fairly accurate perception of their academic skills.

Sports Model

For the domain-specific model for sports, detailed results will be presented for fathers only. With few exceptions, a similar set of findings was obtained with mothers in this sample. As before, parallel analyses were conducted within subgroups by sex and race; however, specific findings will not be provided because the pattern of relations was comparable across groups.

In contrast to the academic model, specific parenting behaviors were found to partially mediate the relationship between fathers' sports-related beliefs and adolescents' self-concepts of their athletic ability. Three separate regression equations were estimated in order to test this mediational hypothesis. First, preliminary regression analyses revealed significant associations between fathers' sports-related beliefs and their specific parenting practices as well as youths' beliefs and values about sports. For example, a father's perception of his child's athletic ability and talent for sports predicted whether or not he coached a team, engaged in sports-related

activities with his child, and offered instrumental support or actively encouraged his child's interests and abilities (β 's ranged from .09 to .61 controlling for demographic variables).

Likewise, fathers' sports-related beliefs were related positively to adolescents' self-concept of their athletic ability and the value they placed on sports ($\beta=.34$, $p<.001$ and $\beta=.24$, $p<.001$ for paternal reports of youth athletic ability and the value of sports, and fathers' beliefs about their children's talent for sports respectively).

Findings for the final test of the mediational hypothesis are presented in Table 5. As shown, only partial mediation is indicated in this model because both fathers' sports-related values and specific parenting behaviors predicted adolescents' values about sports. Fathers who viewed their children as talented at sports, who valued athletic ability, and who provided high levels of instrumental support for their children's talents tended to have adolescents who perceived themselves as very athletic and who valued sports. These results suggest that fathers' sports-related values operate directly as well as indirectly via their role modeling of specific behaviors. Of interest is that no evidence of mediation was found for mothers' specific parenting practices. Only a direct effect of mothers' sports-related beliefs on youth beliefs and values about sports was observed.

The quality of the father-child relationship did not moderate the relationship between paternal and youth sports-related values and beliefs—a pattern consistent with the academic model. In this instance, adolescent reports of communication were used as an indicator of the quality of the father-child relationship. As displayed in Table 6, no significant interactions were found for the full sample of intact 2-parent families. However, main effects were observed for communication and, as mentioned previously, for fathers' sports-related beliefs. Youth who

reported high levels of communication with their fathers tended to have higher self-concepts of their athletic ability and to place greater value on sports. In addition, fathers who perceived their children to be talented at sports and who valued athletic ability were more likely to have adolescents who viewed themselves as athletic and who valued sports ($\Delta R^2=.21$).

An examination of the links between paternal values and adolescents' clarification around a sports profession indicated that parents influence adolescents' occupational identities not only directly, but also indirectly via youths' beliefs and values about sports. A series of logistic regressions were performed in which the dependent variable was clarification around sports careers. As shown in Table 7, when adolescents' and fathers' sports-related beliefs were entered simultaneously, the relationship between paternal perceptions of their children being talented at sports and identity status remained significant. That is, for each one-unit increase in fathers' perceptions of their child being gifted at sports, the odds of being clarified around a sports career increases by 44% or by a factor of 1.44. A trend also was indicated for adolescents' beliefs about their athletic ability and the value of sports ($B=.38$, $p=.06$) such that the odds of being clarified around a sports career increases by 46% or by a factor of 1.46 for each one-unit increase in this variable. It is important to note that this trend for youth sports-related beliefs was found to be significant in analyses conducted with mothers ($B=.55$, $p<.05$). Taken together, these results imply that parental sports-related beliefs influence adolescents' occupational identities via both direct and indirect pathways.

Discussion

A major question addressed by this research was whether parents influence youths' values and expectations directly, or indirectly via their role modeling of specific parenting

practices. Results from these analyses suggest that the processes of socialization differ across achievement domains. First, with respect to the academic domain, parental values and beliefs do not appear to be translated via their specific behaviors at this age. Instead, parents' values and beliefs played a direct role in socializing youth values and beliefs—a finding consistent with past research (Eccles, 1993; Parsons et al., 1982). In contrast, fathers' specific parenting practices in the sports domain were found to partially mediate the link between parents' and youths' sports-related values and beliefs. Fathers' provision of instrumental support for their children's talents was a particularly powerful mediator of this relationship. Interestingly, this pattern of associations was not observed with mothers in this sample.

Why might fathers' specific behaviors serve as an important mediator of the link between parents' and adolescents' values and beliefs in the sports domain, but not in the academic domain? In regard to the academic model, it may be that parents no longer engage in specific practices such as helping their child with homework by the time adolescents enter junior high school. By early adolescence, parents may allow their children a certain amount of independence with respect to their schoolwork. Nonetheless, a parent may still send clear messages concerning the value of an education and their beliefs about their child's academic potential. Alternatively, at this age, other contexts beyond the family, such as the school or peer group, may begin to assume a larger role in socializing adolescents around academic pursuits.

For a child to highly value athletics, and ultimately want to pursue a career in sports, it appears that specific parenting practices do matter. In this instance, fathers, through their provision of instrumental support for their child's talents, may fill a vacuum not covered by other developmental contexts. Taking a physical education class in school might not carry the same

message as playing “catch” with your father or having him come to your basketball game. Such parental behaviors might serve as an important source of role modeling in this domain.

Otherwise, adolescents may not seek out a sports niche unless they had received specific behavioral reinforcement at home. One implication is that observing an attachment figure engage in certain sports-related behaviors might represent a powerful mechanism for orienting young adolescents toward sports.

Contrary to expectations, the quality of the parent-child relationship was not found to moderate the relationship between parents’ and adolescents’ values and beliefs in either the academic or sports domain. Nonetheless, across both domains, the quality of the parent-child relationship was found to exert main effects on youths’ values and beliefs. Adolescents who strongly identify with their mothers tended to place a greater value on school being important to their futures, and to possess higher levels of academic self-efficacy and educational expectations/aspirations. Similarly, higher levels of parent-child communication were associated with adolescents who viewed themselves as athletic and who valued sports. These findings suggest that the impact of the quality of the parent-child relationship on adolescents’ values and expectations is independent of the degree to which parents endorse certain achievement-related beliefs.

Finally, parents’ values and beliefs were found to impact the content of adolescents’ future occupational identities via both direct and indirect pathways; however, the pattern of relationships differed across achievement domains. For example, in the academic model, the effect of maternal reports of chances for positive outcomes on whether or not an adolescent was clarified around a professional career was mediated by the youth’s educational expectations and

aspirations. Adolescents who possessed higher educational expectations and aspirations were more likely to desire a professional career in the future. In comparison, parents' sports-related beliefs were linked to adolescents being clarified around sports careers via both direct and indirect pathways. Specifically, fathers' perceptions of their children as being gifted at sports influenced youths' occupational identities directly as well as indirectly via adolescents' own sports-related beliefs. Adolescents who perceived themselves as athletic and valued sports, and whose fathers believed that they were talented at sports were more likely to envision themselves as sports figures in the future.

In general, subgroup analyses revealed a similar pattern of findings across African- and European-American girls and boys in this sample. A noteworthy exception to this rule was that self-concept of academic skills was negatively related to clarification around a professional career among European-American girls only. Interestingly, those girls at the lower end of the distribution for GPA who tended to overestimate their academic ability relative to their actual performance were *more likely* to aspire to a professional career. One interpretation of this finding is that overconfidence in one's abilities may serve an adaptive or self-protective function in the face of academic failure (Steele, 1988).

Future Directions

In the present study, two domain-specific models—an academic and a sports model—were developed in order to explore the various direct and indirect pathways linking domains of parental influence to the development of early adolescents' occupational identities. Few researchers to date have examined how parents differentially socialize adolescents' achievement-related values and beliefs beyond the realm of academics (Wigfield & Eccles, 1992). Moreover,

little has been done previously to investigate the role fathers as well as mothers play in shaping children's achievement-related beliefs and occupational goals. Results from this study highlight the theme that the family is a critical context for adolescent identity formation.

One strength of this study was the use of an ethnically diverse sample of African-American and European-American adolescents and their families. The sample included intact, primarily middle- and upper middle-class families, and results indicate little difference in socialization processes between African-Americans and European-Americans. Patterns of parental influence on adolescent identity formation, however, may vary among single-parent families and stepfamilies, and for families of lower socioeconomic status. Thus, a future objective is to extend this research to the full sample of families available in the larger study which includes a greater range of family types.

A limitation of the present report is its reliance on cross-sectional data. As a result, the causal pathways that link domains of parental influence to adolescents' visions of themselves in future occupations remain speculative. The processes linking parents' achievement-related values and beliefs to adolescents' occupational identities may well represent reciprocal or bidirectional influences—a phenomenon that the current data do not address. Moreover, the present study focused on a sample of early adolescents (i.e., seventh graders), and the pattern of relationships may differ among as they mature. Another future extension of our work is to investigate these questions longitudinally.

Finally, this study did not address the combined role of mothers and fathers for adolescents' occupational identity development. In the present study, mothers and fathers were tested in separate regression analyses, and therefore, their relative influence could not be

compared directly. Family systems theory suggests that the roles of mothers and fathers are mutually interdependent and should be considered simultaneously (Minuchin, 1985). A next step for this research program is the examination of more sophisticated, and potentially more meaningful, models that incorporate both mothers and fathers as part of a complex family system.

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Table 1. Summary of constructs and measures by domain.

Academics	Sports
Identity	
Clarified Around Professional Career	Clarified Around Sports Career
Youth's Beliefs, Values & Expectations	
School Important for Future ($\alpha=.69$)	
Self-Concept of Academic Skills ($\alpha=.78$)	Self-Concept of Sports Abilities ($\alpha=.88$)
Educational Expectations/Aspirations ($\alpha=.83$)	
Parental Beliefs, Values & Expectations	
Chances for Positive Outcomes for Youth ($\alpha=.81$)	
Perceptions of Youth's Academic Abilities ($\alpha=.89$)	Perceptions of Youth's Sports Abilities & Value ($\alpha=.72$)
Educational Expectations/Aspirations for Youth ($\alpha=.73$)	Perception of Youth's Sports Talents (open-ended)
Specific Parental Behaviors	
Proactive Encouragement (General) ($\alpha=.76$)	Proactive Encouragement (General) ($\alpha=.76$)
Activity Involvement	Involvement in Sports Activities
Involvement in Youth's School	Support of Talents
Time Use with Youth ($\alpha=.78$)	Coaching (Fathers Only)
Quality of Parent-Child Relationship	
Positive Identification with Mother ($\alpha=.62$)	Communication with Father ($\alpha=.83$)
Controls	
Child's Age, Sex and Ethnicity	
Child's Grade Point Average (GPA)	
Parental Educational Level and Occupational Status	
Family Income Level	

Table 2. Predicting youths' academic values from mothers' beliefs and values for the full sample of intact 2-parent families (N=406).

Predictors	School Important for Future (Y)			Academic Self-Concept (Y)			Expectations/Aspirations (Y)		
	β	R ²	ΔR^2	β	R ²	ΔR^2	β	R ²	ΔR^2
Block 1:									
GPA	.26***			.43***			.12*		
Fathers' Level of Education	-.06			.05			.14**		
Family Income	.12*			.02			.12*		
		.09***			.20***			.08***	
Block 2:									
Perceptions of Academic Skills (M)	.08			.28***			.09		
Chances for Positive Outcomes (M)	.17*			.02			.08		
Educational Expectations/Aspirations (M)	.12*			.01			.33***		
		.15***	.06***		.25***	.05***		.21***	.13***
Block 3:									
Positive Identification (Y)	.21***			.13**			.13**		
		.19***	.04***		.27***	.02**		.23***	.02**
Block 4:									
Pos Id X Perceptions of Acad. Skills	-.02			.07			-.03		
Pos Id X Chances Positive Outcomes	.06			-.04			.03		
Pos Id X Educ. Expectations/Aspirations	.00			-.03			.00		
		.19***	.00		.27***	.00		.23***	.00

Note— β weight for variable's entry into equation.

*** $p < .001$; ** $p < .01$; * $p < .05$; + $p < .10$

Table 3. Testing the mediational model for predicting clarification around professional occupations for the full sample of intact 2-parent families (N=413).

Predictors	Professional (1) vs. Other (0)			Block 2		
	B	Wald	Exp(B) ²	B	Wald	Exp(B)
Block 1:						
GPA	.39**	7.92	1.48	.25	1.83	1.29
Child Sex ¹	-.39***	12.72	.68	-.40***	11.59	.67
Δ Model X ²	28.56***			---		
Overall % Correctly Classified	62.84%			---		
Block 2:						
Perceptions of Academic Skills (M)	---	---	---	-.11	.41	.90
Chances for Positive Outcomes (M)	---	---	---	.42+	3.07	1.53
Educational Expectations/Aspirations (M)	---	---	---	-.21+	2.87	.81
Self-Concept of Academic Skills (Y)	---	---	---	-.09	.39	.92
School Important for Future (Y)	---	---	---	.30	2.05	1.36
Educational Expectations/Aspirations (Y)	---	---	---	.59***	25.81	1.81
Δ Model X ²	---			44.94***		
Overall % Correctly Classified	---			66.99%		

Note—***p<.001; **p<.01; *p<.05; +p<.10

¹Male=1; Female=-1

²Exp(B)=Estimated multiplicative change in the *odds* for a one-unit increase in the predictor.

Table 4. Predicting clarified around occupational careers from maternal and youth academic values for European-American girls in intact 2-parent families (N=96).

Predictors	Professional (1) vs. Other (0)			Block 2		
	B	Wald	Exp(B) ²	B	Wald	Exp(B)
Block 1:						
GPA	.52+	2.96	1.68	.84+	3.25	2.32
Model X ²	3.09+			---		
Overall % Correctly Classified	56.25%			---		
Block 2:						
Perceptions of Academic Skills (M)	---	---	---	-.24	.38	.78
Chances for Positive Outcomes (M)	---	---	---	.26	.28	1.30
Educational Expectations/Aspirations (M)	---	---	---	.01	.00	1.01
Self-Concept of Academic Skills (Y)	---	---	---	-.61*	4.05	.51
School Important for Future (Y)	---	---	---	.25	.36	1.29
Educational Expectations/Aspirations (Y)	---	---	---	.37+	2.94	1.44
Δ Model X ²	---			9.34+		
Overall % Correctly Classified	---			62.50%		

Note—***p<.001; **p<.01; *p<.05; +=p<.10

²Exp(B)=Estimated multiplicative change in the *odds* for a one-unit increase in the predictor.

Table 5. Testing the mediational model predicting to youths' sports values and beliefs for the full sample of intact 2-parent families (N=367).

Predictors	Self-Concept of Sports Ability & Value (Y)		
	β	R ²	ΔR^2
Block 1:			
Child Sex ¹	-.26***		
		.13***	.13***
Block 2:			
Perceptions of Sports Ability & Value (F)	.32***		
Perceptions of Sports Talents (F)	.14*		
Coaching (F)	.08+		
Sports Activity Involvement (F)	.03		
Proactive Encouragement (F)	-.07+		
Fathers' Support of Talents (F)	.17**		
		.37**	.24***

Note— β weight for variable's entry into equation.

***p<.001; **p<.01; *p<.05; +=p<.10

¹Males=1; Females=2

Table 6. Predicting youths' sports values from fathers' beliefs and values for the full sample of intact 2-parent families (N=379).

Predictors	Sports Values (Y)		
	β	R ²	Δ R ²
Block 1:			
Child Sex ¹	-.36***		
Ethnicity ²	.01		
Fathers' Level of Education	-.03		
Family Income	.02		
		.13***	.13***
Block 2:			
Perceptions of Sports Ability & Value (F)	.34***		
Perceptions of Sports Talents (F)	.24***		
		.34**	.21***
Block 3:			
Communication (Y)	.09*		
		.35**	.01*
Block 4:			
Comm X Perceptions of Sports Ability & Value	-.07		
Comm X Perceptions of Sports Talents	-.04		
		.36***	.01

Note— β weight for variable's entry into equation.

***p<.001; **p<.01; *p<.05; +=p<.10

¹Males=1; Females=2

²African-American=1; European-American=2

Table 7. Testing the mediational model for predicting clarification around sports careers for the full sample of intact 2-parent families (N=406).

Predictors	Sports (1) vs. Other (0)			Block 2		
	B	Wald	Exp(B) ³	B	Wald	Exp(B)
Block 1:						
Child Sex ¹	1.31***	18.18	3.69	1.07***	11.48	2.93
Ethnicity ²	-.38*	4.02	.68	-.39+	3.76	.68
Δ Model X ²	37.27***			---		
Overall % Correctly Classified	91.13%			---		
Block 2:						
Perceptions of Sports Ability & Value (F)	---	---	---	.38+	2.80	1.47
Perceptions of Sports Talents (F)	---	---	---	.36**	6.77	1.44
Self-Concept of Sports Ability & Value (Y)	---	---	---	.38+	3.49	1.46
Δ Model X ²	---			26.36***		
Overall % Correctly Classified	---			91.13%		

Note—***p<.001; **p<.01; *p<.05; +=p<.10

¹Male=1; Female=2

²African-American=1; European-American=2.

³Exp(B)=Estimated multiplicative change in the *odds* for a one-unit increase in the predictor.

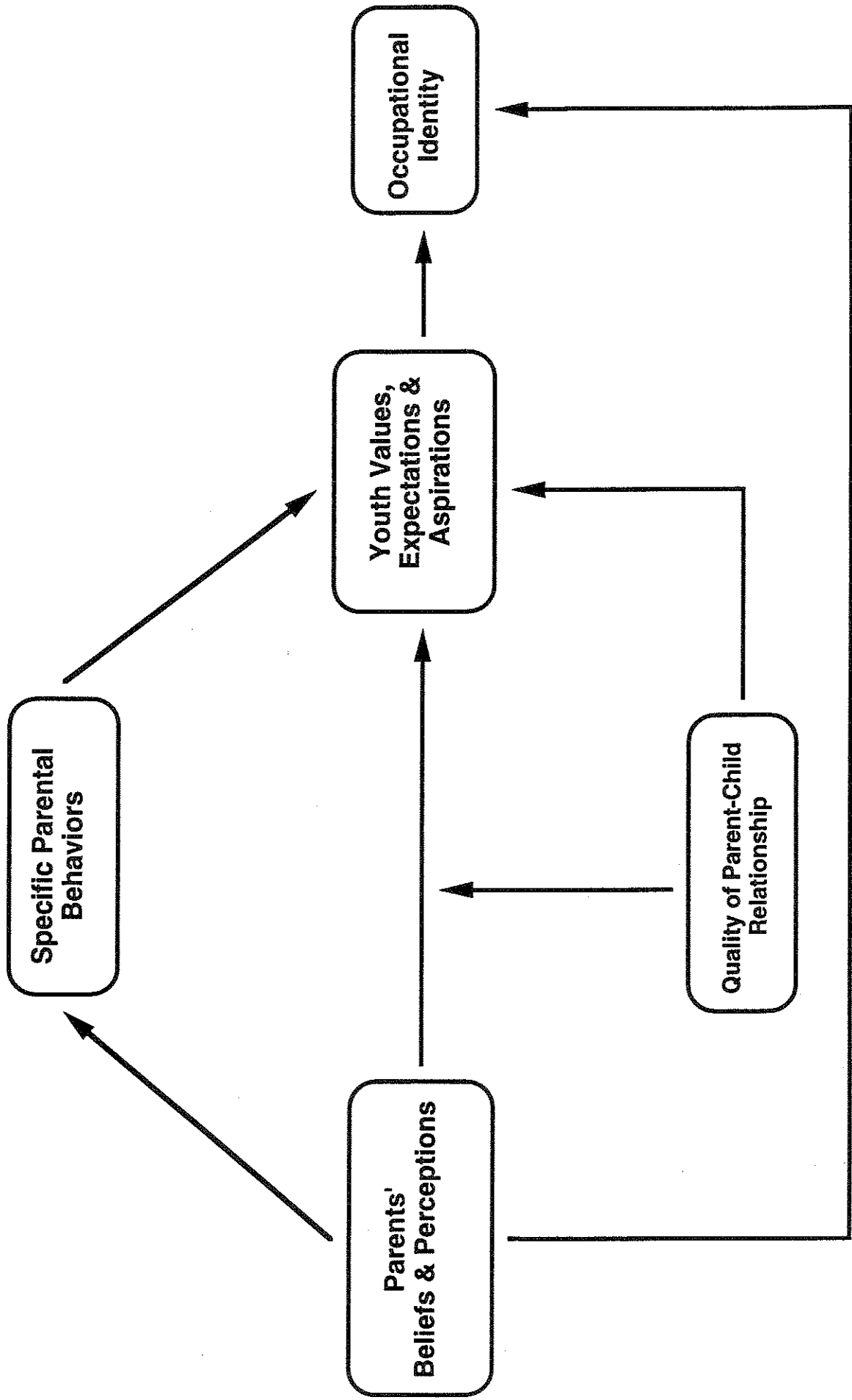


Figure 1. Conceptual Model Linking Domains of Parental Influence to Adolescent Identity Development. 1

¹Note: Ethnicity, child's sex and age, parents' level of education and occupation, and family income also were included in the model.

Figure 2. Academic ability among European-American girls as a function of self-concept of academic skills.

