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Unanticipated Educational Consequences
of a Positive Parent-Child Relationship

If today there exists a single transcendent idea about the family-school connection, it is that a positive parent-child relationship improves children's chances of succeeding in school. However, using data from the Texas Higher Education Opportunity Project (N = 5,836), we demonstrate that, although positive parent-child relations are associated with better academic achievement in high school, they also are associated with an increased desire to live at home during college, which in turn decreases students' chances of enrolling in a 4-year college. Furthermore, we replicated some of these associations using the National Longitudinal Study of Adolescent Health (N = 10,120), demonstrating that positive family dynamics can influence educational outcomes in potentially divergent and unanticipated directions.

If today there exists a single clear and transcendent idea about the family-school connection, it is that a ''good'' family—one that comprises, at minimum, a parent or parents with a positive relationship with their children—helps one to succeed in this world. Nowhere is this more salient than in notions of the intimate connection between family dynamics and educational

achievement and attainment. Psychologists long have claimed that nurturing parenting styles bolster children's competence and success in school (Baldwin, 1948; Sears et al., 1957). And at least since the publication of Parsons and Bales's (1955) *Family, socialization and interaction process*, sociologists have underscored a positive association between an affirming family life and children's well-being, including their adult quality of life.

When parents actively involve themselves in their children's lives—when they monitor their progress, pay attention to their moods and struggles, and communicate openly and frequently with them—their children reap high educational rewards (Heymann & Earle, 2000; Mullis, Rathge, & Mullis, 2003). Positive parenting techniques can soften the negative effects of economic disadvantage (Crosnoe, Mistry, & Elder, 2002), and a secure and emotionally healthy home life facilitates students' success in the classroom (Durkin, 1995). Studies have demonstrated that the frequency of parent-to-child communication and the encouraging nature of that communication are strongly correlated with children's intellectual development, language acquisition, and academic achievement (Brooks-Gunn & Markman, 2005; Hart & Risley, 1995). The academic achievement of children with neglectful parents, in contrast, is far lower than that of students whose parents are involved in their development (Jeynes, 2005; Muller, 1993). In a related vein, the literature finds a positive association between familism

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and educational aspirations and expectations (Pribesh & Downey, 1999; Quian & Blair, 1999). Researchers have found that, when it comes to educational outcomes, familism mitigates the negative experiences associated with minority status (Ream, 2005; Zhou & Bankston, 1998); and some have documented a positive relationship between familism and high school completion among at-risk youth (Furstenberg & Hughes, 1995). The social scientific evidence points to a clear conclusion: Students benefit considerably from a positive, well-developed relationship with their parents.

Perhaps it is not surprising that the vast majority of studies investigating the link between the parent-child relationship and educational outcomes has concentrated on academic achievement at the primary and secondary levels, when most children are attending school while living with their parents. It is well documented that a strong parent-child relationship helps students excel in primary and secondary school, but is it associated with positive educational outcomes beyond secondary school? The few studies addressing this question overwhelmingly have explored the link between family resources (e.g., time, money, cultural competences) and college enrollment. These studies have focused on ancillary family dynamics, evaluating how parents (usually intentionally) groom their children for college by, for example, playing an active role in their education, imparting to them a collection of cultural competences, or introducing them to influential network ties (Perna & Titus, 2005; Sandefur, Meier, & Campbell, 2005).

That such research is important and necessary, none can deny. But when researchers conceptualize, in a Bourdieuian mode, family dynamics as forms of capital, they often overlook significant, nonadjuvant aspects of intimate life. Parents are not simply life coaches who, to varying degrees, cultivate in their children certain college-relevant appetites and competences and participate in their sons' and daughters' school activities. They also are responsible for children's emotional and moral development, physical health, and mental well-being. What is missing from our models of the relationship between two of society's most powerful civilizing institutions—family and college—is a focus on the importance of everyday family dynamics not directly related to college preparation. We need to know not only whether parents are involved in their children's schooling but also

whether they are involved in their daily struggles; we need to observe not only whether parents take their children to natural history museums but also whether they take time to listen to them and to consider their point of view—and how all these dynamics influence students' decisions to continue their education past the secondary level. This study focuses on filial dynamics (as opposed to those more educationally driven) by evaluating the relationship between the quality of the parent-child relationship and postsecondary education. An established literature spanning the social sciences has identified closeness and cohesion between parents and children (Baumrind, 1971; Spera 2005) and parental attention, involvement, and communication (Glasgow, Dornbusch, Troyer, Steinberg, & Ritter, 1997; Steinberg, Lamborn, Darling, Mounts, & Dornbusch, 1994) as having a particularly strong influence over children's moral and psychological development as well as over their academic achievement. Are these aspects of a healthy parent-child relationship, we ask, positively associated with college enrollment?

There is good reason to expect as much—because the positive association between a strong parent-child relationship and educational success is so pronounced at the elementary and secondary levels; because students with healthy, intimate relationships with their parents earn better grades and higher test scores (Spera, 2005; Steinberg, Lamborn, Dornbusch, & Darling, 1992); and because parental involvement does not seem to wane as children grow into adolescents (Astone & McLanahan, 1991; Glasgow et al., 1997). A considerable amount of evidence suggests that a positive parent-child relationship is associated with a variety of better educational outcomes (Englund, Egeland, & Collins, 2008; Spera, 2005). Specifically, researchers have found that parental investment in and respect for their children is associated with high academic achievement (Perna & Titus, 2005; Steinberg, Lamborn, Dornbusch et al., 1992); that emotional support and stability in the home environment is strongly related to educational attainment and achievement (Durkin, 1995; Muller, 1993; Tenenbaum, Porche, Snow, Tabors, & Ross, 2007); that a well-developed caregiving bond between parents and children decreases the risk of dropping out of high school (Jimerson, Egeland, Sroufe, & Carlson, 2000; Jozefowicz-Simbeni, 2003) and stimulates students' motivation in the classroom (Aquilino & Supple,

2001); and that students who think their parents offer them little support and guidance tend to do worse in school, have more behavioral problems, and develop lower levels of self-esteem than students who give their parents high marks (Scholte, Van Lieshout, & Van Aken, 2001).

In contrast, it is not axiomatic that because a positive parent-child relationship breeds success at the primary and secondary levels, it also will breed success at the postsecondary level. As analysts long have argued, the chief effect of a social arrangement may change potency, and even direction, depending on one's position in the life course (Elder, 1998; Mortimer & Shanahan, 2003). Forces that are influential before some transition (e.g., marriage, having a child, going to college) often are less so after the transition. Indeed, those forces may bring about a certain set of outcomes before the transition and a completely different (and even disparate) set after it (Shanahan, 2000).

More concretely, there are compelling reasons to expect that a positive parent-child relationship during high school actually is negatively correlated with a postsecondary outcome such as college enrollment. In the majority of cases, enrolling in college, especially in a 4-year institution, requires moving away from one's hometown and family; and a fruitful college career requires one to deny, at least in part, familiar modes of thinking and interacting rooted in one's upbringing—as well as familiar people, especially family members (Desmond & Turley, 2009). That is, a successful college student, as Tinto (1993) has postulated in his work on college attrition, must execute a break from past acquaintances and intimates ''most typically associated with the family, the local high school, and local areas of residence'' (p. 95). But the supported and esteemed child may be more reluctant to enact such a break and may find it more difficult to leave home to attend college.

Although the quality and intensity of the parent-child relationship varies throughout the life course, we focused on this relationship during adolescence, as this is a time when students are making important college-going decisions. Conventional sociological and psychological models predict that a positive parent-child relationship during high school promotes academic achievement and attainment and, thus, should be associated with an increased likelihood of college enrollment (see Figure 1). However, some

research has led us to suspect that a positive parent-child relationship makes it harder for students to distance themselves from family life and may even deter students from enrolling in college, net of their ability and track record (as well as other factors that have been shown to affect the likelihood of enrolling in college, including family structure [Sandefur et al., 2005]; parents' socioeconomic status [Kao & Thompson, 2003]; students' gender, race/ethnicity, or immigrant status [Charles et al., 2007]; and educational aspirations and expectations [Cooper, 2009]). These seemingly incongruous lines of reasoning present the need to evaluate both direct and indirect associations between a positive parent-child relationship and both proximate and more distant educational outcomes (we focus on high school achievement and subsequent college enrollment). They also lead us to the following hypotheses (see also Figure 1):

Hypothesis 1. The quality of the parent-child relationship will directly affect students' high school achievement (proximate outcome).

Hypothesis 2. The quality of the parent-child relationship will not directly affect students' college enrollment (distant outcome).

Hypothesis 3. The quality of the parent-child relationship will be indirectly associated with college enrollment through high school achievement and a desire to stay home for college.

Although Hypothesis 2 states that we expect no direct relationship between parent-child relationship and college enrollment, Hypothesis 3 states that we do expect an indirect relationship, which occurs when a variable is associated with an intervening outcome, which in turn is associated with the final outcome. We expect the indirect pathways in Hypothesis 3 to take the following directions:

Hypothesis 3a: The quality of the parent-child relationship will have a positive indirect effect on college enrollment through its effect on high school achievement.
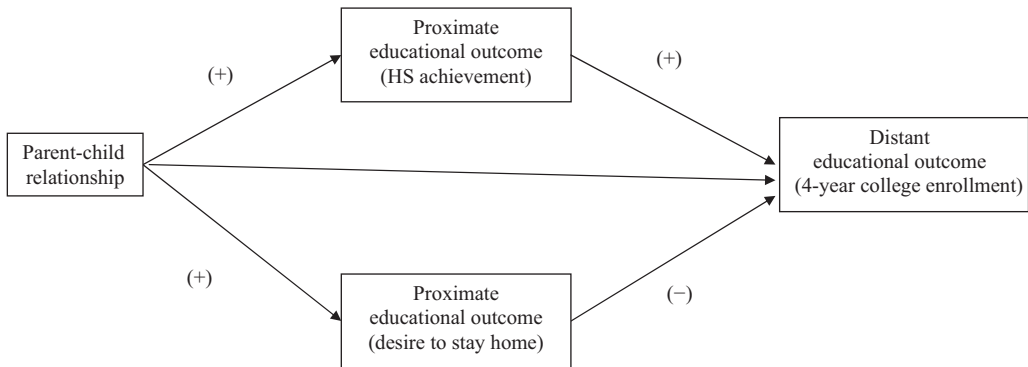
Hypothesis 3b: The quality of the parent-child relationship will have a negative indirect effect on college enrollment through its effect on the desire to stay home for college.

FIGURE 1. PROPOSED MODEL OF DYNAMIC EFFECTS OF THE PARENT-CHILD RELATIONSHIP ON PROXIMATE AND DISTANT EDUCATIONAL OUTCOMES.

I. Conventional Model
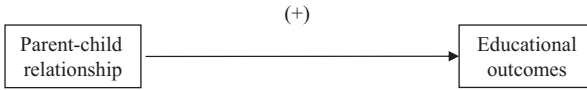
II. Proposed Model

METHOD

This study draws on data from two large-scale surveys: the National Longitudinal Study of Adolescent Health (Add Health) and the Texas Higher Education Opportunity Project (THEOP). Each data set has its own strengths and weaknesses with respect to the questions we pursue here. The nationally representative Add Health data have a wide range of measures of the parent-child relationship, which allows us to examine whether different dimensions of the relationship exert varying effects on proximate and distant educational outcomes. Although not nationally representative and possessing a more limited range of parent-child relationship measures, THEOP data include a measure of students' preference to stay home for college, a factor that is important to one of our main hypotheses regarding the indirect effect of the parent-child relationship on college enrollment. Testing our hypotheses on two separate data sets also increases our confidence in the findings, should we identify the same relationships in both

data sets. The THEOP data allow us to test a key theoretical mediator, and Add Health data allow us to test whether different dimensions of the parent-child relationship have varying associations with both proximate and more distant educational outcomes. Furthermore, the Add Health data allow us to test whether some of the relationships observed in THEOP data can be replicated in a nationally representative sample. Although Add Health data do not permit a direct test of the mediating pathway of preference to stay at home, they do permit a test of whether there are positive associations with academic achievement but negative associations with college enrollment.

Add Health is a nationally representative dataset of adolescents who were in Grades 7 – 12 in 1994 – 1995 (Harris et al., 2003). Using a clustered, school-based sampling design, adolescents in selected schools were administered an in-school survey. A subsample of the students was then selected for more extensive follow-up using an in-home survey. The students were interviewed 1 year later in 1996 (Wave 2), then 6 years later in 2001 – 2002 (Wave 3). We drew

the Add Health sample for the analyses from the restricted-use version of the core longitudinal sample ($N = 10,828$), retaining only adolescents who reported their race and ethnicity as non-Hispanic White, non-Hispanic Black, Hispanic, or Asian (a drop of 708 cases, or 7% of the sample). We also dropped cases that were missing exogenous predictor variables (150 observations, or 1% of the sample), for a final analytical sample of $N = 10,120$.

The THEOP data set (Senior Cohort, Waves 1 and 2) comprises 13,803 seniors attending 96 Texas public high schools in the spring of 2002. All public high schools in Texas were included in the sampling frame except charter schools, special education schools, and schools with fewer than 10 seniors. Students were selected through stratified random sampling and surveyed during their last semester in high school—a time when postgraduation plans, for most, should have been solidified. Data were collected through self-administered surveys, which, for the most part, were completed during class time. Wave 2 was completed about a year after high school graduation. To reduce the cost of data collection, Wave 2 consisted of a race-stratified random sample of Wave 1 students ($N = 6,000$). The analytic sample consisted of 5,836 respondents who had data from both Waves 1 and 2 (a drop of 164 cases, or 3% of the sample). We also dropped cases that were missing exogenous predictor variables (1,740 observations, or 29% of the sample), for a final analytical sample of $N = 4,096$.

Parent-Child Relationship Measures

In Add Health, we created multiple measures of the parent-child relationship to capture four dimensions: closeness, family cohesion, parent involvement, and communication. The first dimension, closeness to parents, consisted of five items: (a) How close do you feel to your mother/father? (b) How much do you think she/he cares about you? (c) How much do you agree/disagree that your mother/father is warm and loving toward you? (d) How much do you agree/disagree that when you do something wrong that is important, your mother/father talks about it with you and helps you understand why it is wrong? (e) How much do you agree/disagree that you are satisfied with the way your mother/father and you communicate with each other? All items were coded on a scale from 0 to 4, with higher scores indicating greater

closeness. The second dimension, family cohesion, consisted of three items: (a) How much do you feel that people in your family understand you? (b) How much do you feel that you and your family have fun together? (c) How much do you feel that your family pays attention to you? These items were also coded on a scale from 0 to 4, with higher scores indicating greater family cohesion. The third dimension, parent involvement, consisted of five items following this prompt: Which of the following things listed on this card have you done with your mother/father in the past four weeks: (a) gone shopping; (b) played a sport; (c) gone to a religious service or church-related event; (d) gone to a movie, play, museum, concert, or sports event; and (e) worked on a project for school? The fourth dimension, parent communication, consisted of four items following this prompt: Which of the following things listed on this card have you done with your mother/father in the past four weeks: (a) talked about someone you are dating or a party you went to, (b) talked about a personal problem you were having, (c) talked about your school work or grades, and (d) talked about other things you're doing in school? For every dimension, we added the items for each parent together to create parent-specific measures. We then averaged the measures to create an overall measure. We used the same procedure for Wave 2 data, and the final measure for each dimension was the average of Wave 1 and Wave 2.

In THEOP, students were asked whether they agreed or disagreed with the following statements about their parents or guardians: (a) my parents/guardians do a good job as parents; (b) my parents/guardians accept me as I am; (c) I like to get my parents'/guardians' point of view on things I'm concerned about; (d) my parents/guardians can tell when I'm upset about something; (e) my parents/guardians expect too much from me; (f) when we discuss things, my parents/guardians consider my point of view; (g) I tell my parents/guardians about my problems and troubles; (h) I don't get much attention from my parents/guardians; (i) at least one of my parents/guardians is home when I get home from school. We constructed two measures of the parent-child relationship. First, using all nine items, we created an overall parent-child relationship measure. We reverse coded the two negative items so that a higher value indicates a better parent-child relationship. For the second measure, we conducted an exploratory factor

analysis, which showed that four of the items (Statements c, d, f, and g) load together on one factor. We used the four items to create a measure of parent-child closeness that captures an affective dimension. For both measures (overall parent-child relationship and parent-child closeness), we averaged the values of the items to create composite measures.

Proximate and Distant Educational Outcomes

Our response variables included two proximate outcomes (academic achievement in high school and desire to live at home during college) as well as one more distant outcome (enrollment in a 4-year college). Both data sets included measures of high school achievement and college enrollment, but only the THEOP data included a measure of the students' desire to live at home during college.

The first proximate outcome, academic achievement, is a measure of high school standardized grades on a scale from 1 to 4, averaged during the most recent grading period (THEOP) or averaged across Waves 1 and 2 (Add Health) for English, math, science, and history and/or social science ($1 = lower than C$, $2 = C$, $3 = B$, $4 = A$).

We based the second proximate outcome, the desire to live at home during college, on the THEOP question, ''In choosing a college or university to attend, how important to you are/were each of the following? . . . Ability to attend school while living at home.'' Approximately 56% of students responded that the ability to attend school while living at home was somewhat or very important. About 6% of students indicated that they did not aspire or expect to continue their education beyond high school and therefore were not asked about their preference to live at home during college. Because students without college plans and those who dropped out of high school before their senior year were systematically excluded, our findings from this data set may be somewhat conservative.

Enrollment in a 4-year college was measured in the Add Health data approximately 6 years after the first two waves of data collection, when respondents were 18 – 26 years old. Because of the length of the intervening time between high school completion and data collection, some students in the Add Health data had time to complete a 4-year college degree. These respondents were included in the college attendance measure. In the THEOP data, college enrollment was measured about a year after high school completion, reporting whether respondents had enrolled in a bachelor's degree program at any point since completing high school. We did not include enrollment in a 2-year or less-than-2-year college because that type of college enrollment is associated with a significantly lower likelihood of obtaining a 4-year degree (Arbona & Nora, 2007; Light & Strayer, 2004; Rouse, 1995). Furthermore, we expect the desire to live at home during college to play a more important role in 4-year college enrollment than community college enrollment, where students more frequently have the option to live at home.

When predicting academic achievement, desire to live at home during college, and college enrollment, we controlled for a number of relevant variables. We incorporated socioeconomic status into our models, using parents' education (the highest level either parent completed). Parents' income was not asked of adolescents in the THEOP or Add Health sample. We did not include the parent report of income available in the Add Health data for model comparability. In addition to socioeconomic status, we included measures of gender, race/ethnicity, first-generation immigrant status (not born in the United States), parental presence (in THEOP: presence of mother and father; in Add Health: single biological parent, biological parent with partner, or no biological parents in the household), and students' educational aspirations and expectations. In THEOP, aspirations were based on how far students would *like* to go in school, and expectations were based on how far they *think* they will go (emphases in the questionnaire). Similarly, in Add Health, aspirations were based on how much students wanted to go to college, and expectations were based on how likely they thought it was for them to go to college. Table 1 provides summary statistics for all the variables used in our analyses.

Analyses

We used structural equation modeling, or more accurately path analysis, to explore the association between parent-child relationships and proximate and distant educational outcomes. In path analysis, associations between observed variables are modeled in terms of systems of equations (Kaplan, 2009). Each of the arrows in

Table 1. *Summary Statistics*

	Add Health					THEOP				
	Mean	SD	Range	No. of Items	Alpha	Mean	SD	Range	No. of Items	Alpha
Overall parent-child relationship						3.00	0.54	1−4	9	0.82
Closeness	3.29	0.56	0−4	5	0.77−0.88[a]	2.91	0.71	1−4	4	0.84
Family cohesion	2.75	0.74	0−4	3	0.78−0.79[a]					
Involvement	1.41	0.90	0−5	5	[b]					
Communication	1.87	0.98	0−4	4	[b]					
High school achievement	2.79	0.71	1−4			3.14	0.63	1−4		
Stay-at-home preference						0.56	0.50	0−1		
College enrollment	0.34	0.47	0−1			0.48	0.50	0−1		
Female	0.53	0.50	0−1			0.53	0.50	0−1		
Hispanic	0.17	0.37	0−1			0.32	0.47	0−1		
Black	0.20	0.40	0−1			0.18	0.39	0−1		
Asian	0.07	0.25	0−1							
Other						0.10	0.31	0−1		
First-generation immigrant	0.08	0.27	0−1			0.15	0.36	0−1		
Single biological parent	0.22	0.42	0−1							
No biological parents	0.06	0.24	0−1							
Biological parent with partner	0.15	0.36	0−1							
Mother present						0.90	0.31	0−1		
Father present						0.68	0.47	0−1		
Parent education: HS grad	0.27	0.44	0−1			0.20	0.40	0−1		
Parent education: some college	0.20	0.40	0−1			0.27	0.44	0−1		
Parent education: college grad	0.24	0.43	0−1			0.22	0.42	0−1		
Parent education: graduate degree	0.13	0.33	0−1			0.18	0.38	0−1		
Adolescent educ. aspirations	3.41	0.93	0−4			0.83	0.38	0−1		
Adolescent educ. expectations	3.14	1.06	0−4			0.79	0.41	0−1		

Note: Add Health ($N = 10,121 − 10,276$); THEOP ($N = 4,978 − 5,836$). The number of observations represents the number of cases without missing data on each *item*. [a]We report alphas in ranges because we created the measure by averaging the items separately for mothers and fathers and across waves. [b]We do not report alphas for involvement and communication because these measures are counts of activities.

our heuristic path diagram (Figure 1) represents a path that estimates the association between the connecting variables using multiple regression analysis. The arrow that connects the two variables represents the direct effect of the parent-child relationship on college enrollment. Arrows extending from the parent-child relationship to the proximate outcomes and those extending from the proximate outcomes to the more distant outcome represent the indirect or mediational pathways through which the parent-child relationship affects college enrollment.

We used path analysis to model explicitly the mediational processes through which we hypothesized parent-child relationships to be associated with educational outcomes. Use of path analysis as a statistical technique to estimate mediation is recommended over other approaches to assessing mediation (MacKinnon, Fairchild, & Fritz, 2007). Path analysis also provides a concise and intuitively appealing method for decomposing associations into direct and indirect effects. Path analysis allowed us to estimate the direct, indirect, and total effect (the latter being the combination of direct and indirect effects [Alwin & Hauser, 1975]) of the parent-child relationship on proximate and distant educational outcomes. Breaking down the total effect into its components provides a more nuanced understanding of the relationship between parent-child relationships and educational outcomes. For each measure of parent-child relationship, we estimated a separate path analysis model. We used a full-information maximum likelihood procedure to account for missing data, using MPLUS, in which missingness is allowed to be

a function of the observed covariates but not the observed outcomes (Muthen & Muthen, 2007; Schafer & Graham, 2002).

RESULTS

Similar to previous research, in both data sets we found that students performed better in high school when they had a positive relationship with their parents. After controlling for demographic and socioeconomic factors, we found over-whelming support for Hypothesis 1; all of the measures of the parent-child relationship were positively associated with high school achievement. Table 2 shows the full model results using one of the parent-child relationship measures available from each dataset (results described are consistent with those obtained in the separate models for each of the parent-child relationship measures). However, we found mixed support for Hypothesis 2, which stated that the parent-child relationship would not directly affect college enrollment. With THEOP data, neither of the parent-child relationship measures had a direct effect on college enrollment, as expected. But using Add Health data, which has a number of different dimensions of the parent-child relationship, we found a range of results: involvement had no direct effect; communication had a positive, direct effect; and closeness and family cohesion had negative, direct effects—having more closeness or more family cohesion was associated with a decrease in the odds of enrolling in college by a magnitude of 13% and 12%, respectively. Coefficients in tables are reported as probit regression coefficients that were converted to logit coefficients using the rule of thumb that estimated logit coefficients differ from probit coefficients by a factor of about 1.7 when there is not a great deal of sampling variability (Long & Freese, 2003). The logit coefficients were then exponentiated to derive the percentage change in odds (e.g., the Add Health closeness direct effect on college enrollment was converted as follows: $-.082 \times 1.7 = -.139$, exponentiated to .870).

Analyses of the THEOP data showed that, net of other factors, a more positive parent-child relationship was associated with a stronger desire to live at home during college (see Table 2, Column 4) and that wanting to live at home during college, in turn, was associated with a lower likelihood of enrolling in a 4-year college (see Column 5). Students who were Black or Hispanic, first-generation immigrants, whose parents had less than a college education, and who did not expect to finish college were most likely to desire to live at home during college. In fact, regardless of demographic and socioeconomic factors, Hispanic students were significantly more likely than White students to state that it was important to stay home for college, a finding that complements previous research on Hispanic familism (Desmond & Turley, 2009; Marin & Marin, 1991).

Focusing next on the mediating pathways (high school achievement and desire to stay at home), we examined the indirect effects of the parent-child relationship on college enrollment. For every measure, we found strong evidence in support of Hypothesis 3a, which stated that the parent-child relationship would have a positive, indirect effect on college enrollment, operating through high school achievement. The odds of enrolling in college increased by 4% to 19%. Furthermore, we found strong support for Hypothesis 3b, which stated that the negative, indirect effect of the parent-child relationship on college enrollment operates through a desire to stay home. Although we could assess Hypothesis 3b using THEOP data only, we found that the negative indirect effect decreased the odds of enrolling in college by about 5% for each unit increase in parent closeness.

DISCUSSION

To increase our knowledge of the ways in which everyday family dynamics (those not directly related to academic performance and attainment) influence postsecondary educational outcomes, we asked, Does a positive parent-child relationship advantage or disadvantage students when it comes to college enrollment? Our findings suggest it does both.

Consistent with previous research, we found strong evidence that the parent-child relationship has a positive association with high school achievement. However, in both data sets, we found little evidence that the parent-child relationship has a positive, direct effect on college enrollment. In fact, the Add Health data suggest that some dimensions of the parent-child relationship exert a modest (but statistically significant) negative effect on college enrollment. Instead, we found that the benefit of having a higher-quality or positive parent-child relationship operates indirectly

Table 2. *Full Structural Equation Model*

| | Add Health | | | | THEOP | | | | | |
| | HS Achievement | | College Enrollment | | HS Achievement | | Stay at Home | | College Enrollment | |
	β	SE	β	SE	β	SE	β	SE	β	SE
Closeness	0.143***	0.018	−0.082*	0.038	.070***	.015	0.102*	.043	0.050	.044
HS achievement			0.716***	0.031					0.306***	0.043
Stay at home									−0.271***	0.047
Female	0.174***	0.020	0.008	0.041	0.131***	0.032	−0.160**	0.050	0.041	0.059
Hispanic	−0.134**	0.038	0.009	0.070	−0.153***	0.031	0.430***	0.086	0.142	0.110
Black	−0.240***	0.035	0.113	0.080	−0.291***	0.033	0.173	0.091	0.021	0.082
Asian	0.121	0.062	0.128	0.122						
Other	0.040	0.045	0.044	0.083	0.005	0.045	0.272*	0.108	0.136	0.115
First-generation immigrant	−0.129***	0.021	−0.172**	0.051	−0.026	0.037	0.354***	0.068	0.058	0.077
Single biological parent	−0.075*	0.038	−0.496***	0.102						
No biological parents	−0.089***	0.023	−0.283***	0.057						
Biological parent with partner										
Mother present					0.092*	0.043	−0.085	0.086	0.273***	0.088
Father present					0.030	0.023	−0.123	0.064	0.106	0.087
Parent education: HS grad	0.025	0.030	0.255***	0.070	−0.015	0.037	−0.112	0.107	−0.064	0.094
Parent education: some college	0.103**	0.032	0.466***	0.078	0.089	0.046	−0.451***	0.111	0.045	0.097
Parent education: college grad	0.154***	0.034	0.762***	0.080	0.100*	0.045	−0.705***	0.119	0.228*	0.108
Parent education: graduate degree	0.318***	0.044	1.037***	0.103	0.130***	0.038	−0.908***	0.129	0.222	0.135
Adolescent educ. aspirations	0.035*	0.014	0.220***	0.042	0.050	0.057	−0.003	0.094	0.567***	0.137
Adolescent educ. expectations	0.216***	0.014	0.314***	0.041	0.234***	0.057	−0.518***	0.081	0.701***	0.109
CFI					0.910					
RMSEA					0.065					

Note: THEOP ($N = 4,096$); Add Health ($N = 10,120$). We estimated all models in MPLUS 5.2, using the TYPE = COMPLEX option and specifying the stratification and cluster variables (and the longitudinal weight) to adjust the estimates for the complex sampling design of surveys. All models used the WLSMV estimator, which is a robust weighted-least-squares estimator. Coefficients reported are probit regression coefficients. CFI = comparative fit index. RMSEA = root mean squared error approximation. We do not report the chi-square model fit statistic because, when using the WLSMV estimator, the chi-square difference is not distributed as chi-square. We do not report model fit statistics for the Add Health models because they do not have any degrees of freedom—we are estimating all possible pathways between the variables.

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

Table 3. *Decomposition of the Total Effect of the Parent-Child Relationship on College Enrollment*

	Direct Effect		Indirect Effect Through HS Achievement		Indirect Effect Through Stay at Home		Total Effect	
	β	SE	β	SE	β	SE	β	SE
THEOP								
Overall relationship	−0.080	0.071	0.031***	0.010	−0.015	0.015	0.097	0.067
Closeness	0.050	0.044	0.021***	0.006	−0.028*	.013	0.044	0.042
Add Health								
Closeness	−0.082*	0.038	0.102***	0.013			0.020	0.040
Family cohesion	−0.076*	0.031	0.074***	0.009			−0.002	0.032
Involvement	0.007	0.025	0.095***	0.008			0.102***	0.027
Communication	0.072**	0.021	0.034***	0.007			0.105***	0.021

Note: Add Health ($N = 10,120 – 10,156$); THEOP ($N = 4,094 – 4,096$). Ranges of observations account for the fact that some observations have one parent relationship measure but not another. Coefficients are probit regression coefficients obtained from MPLUS using the WLSV estimator. The direct, indirect, and total effects for each of the parent relationship measures are taken from separate models that contain only one of the parent relationship measures. We calculated indirect effects as the multiplication of the path from the parent relationship measure to achievement times the path from achievement to college enrollment.

$^* p < .05.$ $^{**} p < .01.$ $^{***} p < .001.$

through its effect on high school achievement. But students who have a positive parent-child relationship are also more likely to want to stay at home for college, which leads to a negative indirect effect on college enrollment. In other words, children who are more strongly connected to their parents find it more difficult to enact the ever-important break from former associations and lifestyles, a break that is fundamental if one wishes to enroll and excel in college (cf. Aquilino & Supple, 2001; Best, Hauser, & Allen, 1997).

Although we were able to model only the desire to stay at home in the THEOP data, we found evidence in the Add Health data supportive of this finding as well. The negative, direct associations in the Add Health data between two dimensions of the parent-child relationship (closeness and family cohesion) are consistent with our finding in the THEOP data of a negative, indirect relationship between closeness and wanting to stay at home. The closeness and family cohesion dimensions in the Add Health data are the most similar to the THEOP parent-child relationship measures, so it is not surprising that they produced similar results. Both findings—one directly and the other indirectly—highlight how a positive parent-child relationship can be a negative influence on college enrollment. Furthermore, because we were

not able to include a measure of wanting to stay at home in the Add Health analyses, it is possible that the direct effect of closeness and family cohesion is capturing the negative impact of wanting to stay at home when students feel close and cohesive with their families.

Limitations and Alternative Explanations

This study has used student-reported data from large-scale surveys. Reliance on survey items to measure the parent-child relationship provides only a glimpse of the full complexity of the relationship between adolescents and their parents. Our use of student-reported data is also a one-sided account of the relationship and interactional dynamics between the adolescents and their parents. Parents' and students' perceptions of similar phenomena can diverge in significant ways, and unfortunately, some of our data do not allow us to corroborate students' responses with those of their parents. Only careful, firsthand observation of interactions between children and parents could tender a richer and more nuanced account of the parent-child relationship (cf. Brooks-Gunn & Markman, 2005; Caldwell & Bradley, 1984; Lareau, 2003). Nevertheless, student-reported information offers a glimpse into actual household dynamics and is an important data source worthy of serious treatment.

After all, one cannot hope to understand how students respond to a relationship without taking into account how they perceive that relationship (Glasgow et al., 1997).

With respect to alternative explanations, taking account of students' desire to live at home during college is to focus on but a fraction of a much more complicated set of preferences having to do with their transition to adulthood—preferences that the data sets we have employed here do not fully capture. Because a student's evaluation of his or her relationship with parents is positively correlated with the desire to stay at home during college, we have inferred that the former preference motivates the latter. Although this is a reasonable inference, one's desire to stay home during college might have just as much to do with one's community, romantic relationships, or peer network as it does with one's parent-child relationship (Tinto, 1993). Future studies that draw on ideas developed in life course theory (Elder, 1998; Shanahan, 2000) to plumb the preferences of students transitioning (or failing to transition) to college—ones that simultaneously examine the influence of parents, friends, romantic partners, and communities on college enrollment—would deepen our analyses and increase the understanding of why some students go to college and others (who are equally gifted and proven) do not.

Implications for Future Research

The parent-child relationship and educational outcomes are not always bound together in a simple monotonic relationship. We have found that the total (positive) effect of a healthy parent-child relationship is somewhat diminished by an unanticipated consequence of that very relationship: the development of the child's desire to remain at home during college. Supportive parents might nourish in their children two loyalties—to school and to family. Although these loyalties can coexist harmoniously while students remain in primary and secondary school, the loyalties may be at odds during the transition to college. In particular, positive parenting might produce a successful high school student who has no intention of leaving home to attend college. Such self-enforced limitations could force students—including high achievers and especially non-White students—to consider only a few institutions close to home rather than the

significantly wider array of institutions farther away, or worse, they could discourage students from going to college altogether.

Overwhelmingly, conventional wisdom and scholarly opinion hold that students benefit in a panoply of ways from a positive parent-child relationship. Social scientists, in fact, are close to universal in thinking that a healthy parent-child relationship is conducive to educational achievement and attainment (Crosnoe et al., 2002; Perna & Titus, 2005; Xitao & Chen, 2004). But our findings present a more complicated picture. Positive family ties can exert a variety of effects that simultaneously influence individual outcomes in divergent directions. The results of this research present a challenge to previous studies finding that a family's supportiveness is positively correlated with virtually all measures of educational attainment and achievement, and they have useful implications for the way social scientists conceptualize the relationship between family life and educational outcomes.

First, and most fundamentally, to develop a robust and synthetic theory of educational stratification, we must analyze both ancillary family dynamics (e.g., the development of cultural capital) and those more filial in nature (e.g., the quality of the parent-child relationship). To understand, for example, why some students enroll in a 4-year university and other equally qualified students do not requires taking account of their parents' education, network ties, and participation in school activities (ancillary matters), as well as parents' disciplinary techniques and communicative styles (filial matters). If this study is any indication, researching the relationship between filial patterns and school outcomes might reveal more complicated and counter-intuitive dynamics than those documented in previous research.

Second, our study complicates current wisdom about the interaction between family ties and educational outcomes and, in so doing, encourages new lines of research. Through our research, a paradox has come to light: strong family ties, considered vital to a child's success in school, sometimes can serve as an impediment to a child's educational attainment, diluting the total (positive) effect of the parent-child relationship on college enrollment. A positive and supportive parent-child relationship does not produce uniform effects across time and space; its effect on high school achievement, we found, is quite dissimilar to its

effect on college enrollment. Parents who strive to develop an encouraging and close relationship with their children might produce a high school honors student but not a 4-year college graduate.

''Paradoxes,'' wrote Granovetter (1973), ''are a welcome antidote to theories which explain everything all too neatly'' (p. 1378). The paradox identified through our research springs other research questions. Which particular dimensions of the parent-child relationship facilitate educational achievement and attainment, and which ones (unintentionally) attenuate students' desire to leave home to seek the best education possible? Are there other social arrangements (e.g., peer networks) that simultaneously help and hinder students in the educational realm? And if the overall findings of this study are accentuated or intensified for non-White students, how might analyzing familism and filial dynamics in non-White and immigrant communities push forward theories of racial inequality in the educational realm? Questions such as these endorse a social science that seeks to understand how family dynamics influence a wide array of outcomes in potentially divergent and unanticipated directions. As we have shown here, a proximate educational outcome of a certain social relationship may be quite dissimilar to a more distant educational outcome brought about by the very same relationship.

NOTE

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