

# Authoritative Parenting and College Students' Academic Adjustment and Success

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This study examined connections between college students' adjustment and success and characteristics of their relationships with their parents. A sample of 236 students completed the Student Attitudes and Perceptions Survey, a 135-item anonymous self-report instrument. Students' grades, confidence level, persistence, task involvement, and rapport with their teachers were generally predicted by both current and childhood levels of parental autonomy granting, demandingness, and supportiveness. Ratings of parenting characteristics were equally predictive of adjustment and success among students living with their parents and those living on their own. They were somewhat less predictive of seniors' adjustment and success than they were for freshmen, sophomores, and juniors. These findings suggest that parenting style continues to play an important role in the academic lives of college students.

The number of students enrolling in U.S. colleges is steadily increasing, and the confidence level of entering freshmen about the likelihood that they will successfully complete their degree requirements is at an all-time high. Yet, the proportion of students who actually graduate from college is declining (Sax, Astin, Korn, & Mahoney, 1996; U.S. Department of Education, 1995a, 1995b). An increasing segment of the college population appears to be underprepared or inappropriately motivated. Most theories designed to better understand the determinants of success and failure among college students have focused on social and curricular elements of the immediate college environment (Astin, Tsui, & Avalos, 1996; Padilla, Trevino, Gonzalez, & Trevino, 1997; Pascarella & Terenzini, 1998; Tinto, 1993). Attention to students' family background tends to be limited to consideration of such factors as race and ethnicity, socioeconomic background, and level of parents' or other family members' educational attainment. These studies do not consider characteristics of the students' relationships with their parents or the sorts of parenting practices the students may have experienced during their formative years. The present study addressed this gap. It examined connections between patterns of college students' adjustment and success and patterns of parenting attitudes and practices that characterized students' childhood and current relationships with their parents.

## Correlates and Consequences of Parenting Characteristics

Studies grounded in Baumrind's (1967, 1973, 1989) seminal work on parenting styles have consistently reported advantages for children whose parents practice an authoritative style of parenting over children whose parents do not. For example, Baumrind herself reported that authoritative parenting, characterized by high levels of emotional support, open communication, high standards, and appropriate autonomy granting, was associated with the development of instrumental competence (a blend of agency, communion, and cognitive competence) among young children. Furthermore, children whose parents adopted an authoritative style had the strongest beliefs in their own efficacy and the best-developed array of skills and strategies for the challenges of their everyday lives. In contrast, children of neglecting-rejecting parents were rated as least instrumentally competent (Baumrind, 1973; Baumrind & Black, 1967).

Baumrind reported that the linkages between aspects of parenting and children's functioning persist into adolescence. Analyses of the third wave of data collected from her original sample of families found children of authoritative parents to be the most cognitively motivated, the most cognitively competent, the most achievement oriented, and the highest in terms of math and verbal achievement. The incidence of "problem behaviors" was lowest for this group as well (Baumrind, 1991).

A large body of research has been built on this foundation. Researchers have applied this framework in studies of populations more diverse in ethnic, socioeconomic, and family structure composition. They have operationalized "authoritativeness" in different ways. And they have examined a wider variety of child outcome variables. In a landmark study of the correlates of parenting style, for example, Dornbusch and his colleagues (Dornbusch, Ritter, Leiderman, Roberts, & Fraleigh, 1987) reported that high school students who rated their parents as more authoritative

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and less authoritarian or permissive were earning better grades than classmates who reported their parents as less authoritative and more authoritarian or permissive. By and large, these findings held up across family structure, level of parental education, gender, and ethnicity. Many additional studies using somewhat different typologies have reported findings consistent with this picture. Thus, for example, warm yet demanding parenting has been associated with intrinsic motivation for success at school (Ginsburg & Bronstein, 1993) and with better self-regulatory skills and propensities (Strage, 1998), whereas more restrictive parenting has been associated with extrinsic motivation (Ginsburg & Bronstein, 1993), lower cognitive self-worth (Wentzel, 1991), and less well-honed self-regulatory abilities (Strage, 1998). Greater parental involvement in children's everyday lives has been associated with the development of an internal locus of control over academic arenas (Grolnick & Ryan, 1989), although the effect of parental involvement would appear to be greatest in families in which parents adopt an authoritative style and may even become deleterious in families in which nonauthoritative styles of parenting prevail (Steinberg, Lamborn, Dornbusch, & Darling, 1992). Adolescents' own educational and career aspirations are strongly related to their perceptions of their parents' expectations (Patrikakou, 1997), aspirations, and support (Marjoribanks, 1997).

One limitation of these studies is that they did not address the question of directionality. The implicit assumption undergirding much of the early work in parenting styles was that parental authoritativeness fostered the variety of positive child and adolescent outcomes. One might equally plausibly argue, however, that parents, in fact, consciously or unconsciously adjust their parenting style in response to evidence of their children's competence and maturity or that the relationship between parenting style and child outcomes is bidirectional in nature. To address the question of directionality, Steinberg and his colleagues collected and analyzed data from two longitudinal samples. Both confirmed the positive effects of authoritative parenting and the deleterious effects of less supportive, more restrictive parenting. Using data from a sample of 120 predominantly White adolescents, Steinberg, Elmen, and Mounts (1989) delineated three dimensions of authoritative parenting (parental acceptance, autonomy granting, and behavioral control) and found all three to be associated with improved grades in the subsequent academic year. Further analyses revealed the relationship between parenting and grades to be mediated by an over-time enhancement of the adolescents' psychosocial maturity attributed to the parenting style. A second longitudinal study replicated this general pattern of findings in a much larger, more ethnically heterogeneous sample of adolescents (Lamborn, Mounts, Steinberg, & Dornbusch, 1991; Steinberg, Lamborn, Darling, Mounts, & Dornbusch, 1994). Authoritative parenting, operationalized as parenting high in acceptance-involvement and high in strictness-supervision, was once again generally found to promote higher levels of psychosocial maturity and school competence and lower levels of internalized distress and problematic behavior. Furthermore, authoritative and permissive parenting were

associated with high school students' retention of good academic self-concepts over a 1-year period, whereas the children of neglecting parents showed the greatest decrease in work and school orientation over the same period.

Few studies have examined the role parenting styles or practices might play in the lives of college students. Yet, both theory and evidence from extant research suggest that these factors might well continue to be important, even when students are no longer in daily contact with their parents. Thus, for example, attachment theorists propose that, as a result of the accumulation of experiences over time, children construct a tripartite "internal working model" of themselves, their attachment figure, and their relationship with their attachment figure. They further propose that this mental structure determines children's self-concept throughout adolescence and into adulthood (Bowlby, 1969; Bretherton & Waters, 1985). Results from studies of the long-term effects of parent-child attachment relationships support this theory, confirming that adults' self-perceptions, as well as their cognitive and social-emotional functioning in a variety of realms outside of the family, appear to be conditioned by the nature of the parent-child relationship during childhood (Kobak & Sceery, 1988; Main, Cassidy, & Kaplan, 1985). Three recent studies showed that students who report a secure relationship with their parents experience a smoother transition from high school to college, as defined by socioemotional adjustment (Kenny & Donaldson, 1991; Lapsley, Rice, & FitzGerald, 1990; Lapsley, Rice, & Shadid, 1989; Larose & Boivin, 1997). The magnitude of the advantage conferred by the secure relationship was equally great for students living with their parents and those living in college dormitories. However, none of these studies addressed the academic adjustment of the students in their samples.

Finally, might one expect effects of parenting characteristics to persist unabated throughout students' tenure in college? The literature on determinants of college success and retention points to the important role people and events in the college milieu play in determining the collegian's experience. Students who have frequent and informal contact with their college instructors and peers, and students who become engaged in intellectual and social pursuits on campus reap a host of cognitive and personal advantages (Milem, 1998; Pascarella, 1980, 1985; Pascarella & Terenzini, 1979, 1980; Terenzini & Wright, 1987a, 1987b). This literature further suggests that as students move through their college years, their relationships with individuals and groups in their college environment become more central and salient in their daily lives. These sorts of findings lead one to speculate that perhaps the importance of students' relationships with their parents in determining their orientation to school matters may decrease as the influence of peers and instructors increases.

#### Profiles of Academic Adjustment and Success: Mastery Orientation

An extensive body of research on academic achievement motivation over the last two decades has yielded a profile of

the “mastery-oriented” student. In many respects, such a student would appear to be ideally prepared to take full advantage of a wide variety of intellectually stimulating and demanding contexts. They tend to prefer challenging tasks and assignments in which they stand to learn something new or increase their competence (learning goals). They are confident in their ability to succeed at academic challenges, and they persist and remain focused on tasks in the face of unexpected difficulty and failure (task involvement). They perceive their instructors as resources that can be consulted when the need arises. And although they might not always earn higher grades than their “performance-goal-oriented,” “failure-avoiding,” or “learned helpless” peers, they are less likely to be hobbled by stress as they strive for academic success, and they are less likely to be deterred by critical feedback regarding their work (see, e.g., Ames, 1987; Cain & Dweck, 1995; Chiu, Hong, & Dweck, 1994; Covington, 1984, 1998; Diener & Dweck, 1978; Dweck & Bempechat, 1983; Dweck & Elliott, 1983; Dweck & Leggett, 1988; Dweck & Wortman, 1982; Hendersen & Dweck, 1990; Jagacinski, 1992; Nicholls, 1976, 1984).

### Linking Parenting Characteristics and Learner Profiles

One might hypothesize that the environment provided by authoritative-style parents contains precisely the elements that will foster a “mastery” orientation. The high levels of age-appropriate demands and autonomy granting observed in authoritative parents may serve to provide ample turf for exploration and goal setting; the high levels of parental support and responsiveness may serve to foster a sense of agency and a confidence in one’s ability to marshal needed resources and support. Indeed, Baumrind’s description of her authoritatively parented preschoolers as high in agency and instrumental competence is consistent with this picture.

### Specific Questions Addressed in This Study

This study sought to test three specific predictions regarding the relationship between the characteristics of college students’ childhood and present-day relationships with their parents, on the one hand, and their adjustment to and success in college, on the other. First, it was predicted that college students who reported more authoritative parenting, as indexed by high levels of autonomy granting, demandingness, and supportiveness, would have more of a mastery orientation to their college experience than their peers whose parents had adopted a less authoritative style of parenting. Second, following the general findings of attachment theory and research, it was predicted that the relationship between parenting and college academic outcomes would be equally strong whether students still lived with their parents or lived on their own. Finally, following general theory and research on college student retention and success, it was predicted that the relationship between parenting and academic outcomes would weaken as students advanced in their class standing.

## Method

### Participants

The data presented in this article are part of a large-scale investigation of the factors relating to the achievement and achievement motivation profiles of 236 students enrolled at a large metropolitan university in California. The sample was composed primarily (90%) of child development majors and minors. More than three quarters of the participants were female ( $n = 197$ ). The sample reflected the ethnic diversity of the campus: Approximately one third of the respondents listed their ethnicity as Caucasian-White ( $n = 73$ ); slightly less than one fifth indicated that they were of Asian descent ( $n = 40$ ); roughly one sixth identified themselves as Hispanic ( $n = 37$ ); 9 respondents identified themselves as African American; and 5 indicated that they were of Native American descent. The remaining participants ( $n = 72$ ) indicated their ethnicity as “other” or failed to specify an ethnic group to which they felt they belonged. Given the climate of suspicion surrounding the consequences of disclosing one’s ethnic group, and given the multiethnic heritage of many of the students on this campus, the relatively large percentage of respondents declining to select an ethnicity is not surprising.

Slightly more than one third of the respondents reported living with their parents during the academic year ( $n = 91$ ). The high cost of living in the areas surrounding the university, coupled with the limited availability of student housing on campus, accounted for this seemingly high proportion of students living with their parents. The sample consisted primarily of juniors ( $n = 85$ ) and seniors ( $n = 95$ ). Slightly less than one fifth of the sample consisted of freshmen and sophomores. An additional 15 students declined to state their academic year. This distribution is representative of the campus at large; more than three quarters of the matriculated students transfer from local community colleges on completion of their general education and lower division course work. More than three quarters of the participants were between 18 and 25 years of age. Additional characteristics regarding the demographic and family backgrounds of the sample are presented in Table 1.

### Instrument and Procedure

Participants completed the Student Attitudes and Perceptions Survey (SAPS) during a class meeting of one of their child development courses. Participation was entirely voluntary, and students received no course credit or remuneration for their participation. Nonetheless, approximately 90% to 95% of the students present on the day of data collection completed the survey. Surveys were anonymous so as to encourage students to be as candid in their answers as possible.

The SAPS consists of 135 items, most of which ask respondents to provide demographic information or to rate their level of agreement with statements regarding their family background, academic profile, and general personality and temperament. Ratings are made on a 5-point scale ranging from *strongly disagree* (1) to *strongly agree* (5).

**Demographic variables.** A composite index of parental education was computed by averaging the responses to items inquiring about the highest educational level achieved by respondents’ mothers and fathers ( $\alpha = .74$ ; two items). One survey item asked respondents to indicate whether they were the first person in their immediate family to attend college. An additional item asked respondents to describe their family’s socioeconomic status as they were growing up. Inasmuch as neither parenting measures nor student adjustment and success measures differed systematically as

**Table 1**  
*Demographic Characteristics of the Study Sample (N = 236)*

Characteristic	n	%
<b>Ethnicity</b>		
Caucasian	73	30.9
Asian American	40	16.9
Hispanic	37	15.7
African American	9	3.8
Native American	5	2.1
Other—not specified	72	30.5
<b>Gender</b>		
Male	21	8.9
Female	197	83.4
Not specified	18	7.6
<b>First person in family to attend college</b>		
Yes	63	26.7
No	166	70.3
Not specified	7	3.0
<b>Family socioeconomic status</b>		
Wealthy—upper class	5	2.1
Comfortable—upper middle class	43	18.2
Comfortable—middle class	110	46.6
Getting by—lower middle class	63	26.7
Financially very strained—poor	6	2.5
Not specified	9	3.8
<b>Mother's educational attainment</b>		
Some high school	37	15.7
High school graduate	50	21.2
Some college—vocational training	55	23.3
College graduate	52	22.0
Some postgraduate education	30	12.7
Not specified	12	5.1
<b>Father's educational attainment</b>		
Some high school	35	14.8
High school graduate	51	25.8
Some college—vocational training	68	28.8
College graduate	37	15.7
Some postgraduate education	21	8.9
Not specified	14	5.9
<b>Residence</b>		
With parents	91	38.6
On own	137	58.1
Not specified	8	3.4
<b>Academic year</b>		
Freshman	20	8.5
Sophomore	20	8.5
Junior	80	33.9
Senior	95	40.3
Not specified	15	8.9

a function of responses to these latter two items, the analyses reported in this study did not consider them further.

**Parenting characteristics.** The SAPS contains 32 items relating to the characteristics of respondents' relationships with their parents, both during their childhood and currently. These items were adapted or designed to approximate the dimensions of authoritative parenting suggested in the literature (cf. Baumrind, 1991; Lamborn et al., 1991; Maccoby & Martin, 1983) while at the same time being developmentally and contextually appropriate for college students. This effort resulted in the construction of six scales (three dimensions and two time periods). The first scale indexed the degree to which respondents believed their parents currently encouraged their independence (Autonomy Granting;  $\alpha = .56$ ; five items). The second scale indexed the degree to which respondents believed their parents currently made high academic

demands of them (Demandingness;  $\alpha = .67$ ; two items). The third scale indexed the degree to which respondents believed their parents were currently emotionally supportive of them (Supportiveness;  $\alpha = .77$ ; five items). The fourth scale indexed the degree to which respondents believed their parents had encouraged their independence during childhood (Childhood Autonomy;  $\alpha = .79$ ; six items). The fifth scale indexed the degree to which respondents believed their parents had made high demands of them during childhood (Childhood Demandingness;  $\alpha = .67$ ; six items). The sixth scale indexed the degree to which respondents reported their parents had been emotionally supportive of them during childhood (Childhood Supportiveness;  $\alpha = .87$ ; eight items). Means, standard deviations, and ranges for these scales are presented in Table 2.

There is some danger that respondents' estimates of the characteristics of their childhood and present-day relationships with their parents contaminated each other. Absent longitudinal data or truly independent measures of the parent-child relationships at these two time periods, it is not possible to eliminate this potential problem. As a means of minimizing it, however, respondents, while they were answering questions about their childhood, were instructed to "think about a time when you were in grade school, about 8 years old . . ." so as to anchor them as specifically as possible at a point in their childhood. Analogously, while they were answering questions about their current relationship with their parents, respondents were instructed to "think about what your relationship is like with your parents now, these days."

**Student adjustment and success variables.** Six indexes of student adjustment and success were considered in this study. Respondents were asked to report their overall and major grade point averages (GPAs). The fact that the distribution of grades obtained from the respondents in this study closely approximated that for child development majors overall, along with the fact that the survey was anonymous, should help assuage concerns about the accuracy of students' reports of their own grades. Four additional measures of college adjustment and success were taken. These measures were designed to yield a profile of respondents as more or less mastery oriented in their achievement motivation. The items drew on the work of Dweck, Ames, Nicholls, and others, adapted as appropriate for college students. The first scale contained items concerning students' confidence in their ability to complete college (Confidence;  $\alpha = .75$ ; three items). The second scale consisted of items designed to measure the degree to which students would persist in the face of difficulty or failure (Persistence;  $\alpha = .82$ ; four items). The third scale measured the degree to which students were able to avoid distraction and maintain focus while working on their academic assignments (Task Involvement;  $\alpha = .77$ ; five items). Finally, the fourth scale measured the degree to which respondents thought of their instructors as resources rather than threats (Teacher Report;  $\alpha = .73$ ; six items). High scores on these four scales

**Table 2**  
*Means, Standard Deviations, and Ranges for Parenting Variables*

Scale	M	SD	Range
Autonomy Granting	3.52	0.76	1.40–5.00
Demandingness	4.18	0.93	1.00–5.00
Supportiveness	3.80	0.81	1.00–5.00
Childhood Autonomy	3.48	0.92	1.00–5.00
Childhood Demandingness	3.21	0.81	1.00–5.00
Childhood Supportiveness	3.64	0.93	1.00–5.00

*Note.*  $N = 236$ . Parenting characteristic scores reflect mean responses to items on a 5-point scale (1 = *strongly disagree*, 5 = *strongly agree*).

reflected a mastery orientation. Means, standard deviations, and ranges for these six indexes of adjustment and success are presented in Table 3.

## Results

### Plan of Analysis and Presentation of Findings

This section is divided into three parts. We begin by presenting the results of bivariate and partial correlations computed to identify patterns linking childhood and current parenting characteristics and student adjustment and success. We then present the results of two multivariate analyses of variance (MANOVAs) and a series of partial correlations computed to address the question of whether the nature or magnitude of the relationship between parenting and student outcomes differed as a function of student residence. Finally, we present the results of two MANOVAs and a series of partial correlations computed to address the question of whether the nature or magnitude of the relationship between parenting and student outcomes differed as a function of respondents' year in college.

There is mixed evidence concerning the validity of parenting constructs across ethnic groups as well as the universality with which authoritative parenting characteristics foster positive academic and psychosocial outcomes for adolescents (Chao, 1996; Darling & Steinberg, 1993; Dornbusch et al., 1987; Steinberg, Dornbusch, & Brown, 1992). It was not our intention to focus centrally on ethnicity in the analyses reported here. However, so as to guard against unwarranted generalizations or oversimplifications, analyses were performed on the sample in its entirety and then repeated separately for White, Asian American, and Hispanic students when group sizes permitted. Although ethnic group differences emerged for several of the major variables, patterns linking parenting characteristics and indexes of student adjustment and success were essentially the same across ethnic groups. Thus, in the interest of brevity, the analyses reported here are limited to those collapsing across ethnicity.

**Table 3**  
*Means, Standard Deviations, and Ranges for Student Adjustment and Success Variables*

Variable-scale	<i>M</i>	<i>SD</i>	Range
Grade point average <sup>a</sup>			
Overall	3.52	0.96	1.00–5.00
Major	3.78	0.97	1.00–5.00
Confidence	4.21	0.87	1.00–5.00
Persistence	4.10	0.79	1.50–5.00
Task Involvement	3.09	0.82	1.00–5.00
Teacher Rapport	3.75	0.71	1.40–5.00

*Note.*  $N = 236$ . Student adjustment and success scores reflect mean responses to items on a 5-point scale (1 = *strongly disagree*, 5 = *strongly agree*).

<sup>a</sup>Students reported their grades using a 5-point scale (1 = *below 2.00*, 2 = *2.00–2.49*, 3 = *2.50–2.99*, 4 = *3.00–3.49*, 5 = *3.50–4.00* [A = 4, B = 3, C = 2, D = 1]).

### Relationships Among Parenting Characteristics and Student Adjustment and Success for the Entire Sample

Table 4 presents the results of a series of bivariate correlations among major variables in this study. Several of the correlations between parental education and parenting characteristics and between current and childhood ratings for each of the three parenting characteristics were statistically significant. Parent education was associated with current levels of demandingness ( $r = .20, p < .01$ ) and with childhood autonomy ( $r = .21, p < .01$ ) and childhood supportiveness ( $r = .26, p < .001$ ). Correlations between ratings of current and childhood autonomy granting ( $r = .48, p < .001$ ), demandingness ( $r = .28, p < .001$ ), and supportiveness ( $r = .67, p < .001$ ) were also large. One must interpret these latter correlations with caution, inasmuch as the childhood and present-day parenting ratings were clearly not independent of one another. Nonetheless, they suggest significant stability over time. Therefore, to control for the contribution of parental education and to remove the effects of "accumulations" of autonomy granting, demandingness, and supportiveness while examining the relationship between current-day parenting characteristics and student adjustment and success, we computed three series of partial correlations controlling for ratings of childhood parenting characteristics and parental education, singly and in combination. The results of these analyses are presented in Table 5.

Controlling for parental education and childhood parenting characteristics mildly attenuated the estimate of the magnitude of the relationship between current patterns of parenting and students' adjustment and success, but a pattern linking the two persisted nonetheless. Autonomy granting remained predictive of overall GPA ( $r = .18, p < .05$ ), persistence ( $r = .16, p < .05$ ), and teacher rapport ( $r = .16, p < .05$ ), and the correlations with confidence and task involvement approached conventional levels of statistical significance ( $r = .13, p < .10$ , and  $r = .13, p < .10$ , respectively). Demandingness remained predictive of confidence ( $r = .28, p < .001$ ) and teacher rapport ( $r = .19, p < .01$ ), and supportiveness remained predictive of confidence ( $r = .30, p < .001$ ), persistence ( $r = .26, p < .001$ ), and teacher rapport ( $r = .15, p < .05$ ).

### Contribution of Student Residence

Converging evidence from two MANOVAs as well as a set of correlational analyses suggested that student residence had little if any effect on the nature or magnitude of the relationship between parenting characteristics and student adjustment and success. The first MANOVA yielded a significant overall difference in parenting as a function of student residence,  $\lambda = .94, F(1, 224) = 2.20, p < .05$ , but none of the univariate tests of significance for the six measures of parenting were significant. The second MANOVA revealed no difference in student adjustment and success as a function of student residence, either overall,  $\lambda = .97, F(1, 198) = 0.86, ns$ , or for any other individual indexes of achievement or achievement orientation. Means

Table 4  
Correlations Among the Major Variables

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Parent education	—												
2. Autonomy granting	.07	—											
3. Demandingness	.20**	-.08	—										
4. Supportiveness	.11	.54***	.30***	—									
5. Childhood autonomy granting	.21**	.48***	.31***	.58***	—								
6. Childhood demandingness	-.01	-.39***	.28***	-.11	-.07	—							
7. Childhood supportiveness	.26***	.36***	.41***	.67***	.83***	.07	—						
8. Overall GPA	.13*	.15*	-.05	.09	.03	-.19**	.02	—					
9. Major GPA	.21**	.11	.02	.11	.06	-.10	.11	.81***	—				
10. Confidence	-.01	.27***	.30***	.44***	.36***	.10	.37***	.19**	.20**	—			
11. Persistence	.08	.23***	.13	.36***	.24***	-.04	.26***	.29***	.29***	.49***	—		
12. Task involvement	.06	.18**	.04	.12	.15*	-.09	.12	.37***	.40***	.31***	.40***	—	
13. Teacher rapport	.16*	.28***	.22***	.28***	.29***	.05	.28***	.35***	.40***	.47***	.44***	.47***	—

Note. Minimum  $n = 200$ . GPA = grade point average.  
\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

and standard deviations as well as results of the univariate tests of significance for each of the dimensions of parenting are presented in Table 6.

A series of partial correlations between the indexes of parenting and student adjustment and success controlling for parental education were performed separately for students indicating they lived with their parents and students indicating they lived on their own. As the results reported in Table 7 indicate, there was little if any systematic difference in the magnitude of the relationships between parenting and student ratings for these two groups. First, whether students lived with their parents or not, autonomy granting was predictive of confidence ( $r = .28, p < .05$ , and  $r = .26, p < .01$ , respectively) and persistence ( $r = .24, p < .05$ , and  $r = .29, p < .001$ , respectively). Autonomy granting was related to teacher rapport for students living on their own ( $r = .37, p < .001$ ) but not for students living with their parents. Second, whether students lived with their parents or not, demandingness was predictive of confidence ( $r = .44, p < .001$ , and  $r = .25, p < .01$ , respectively) and teacher rapport ( $r = .22, p < .05$ , and  $r = .20, p < .05$ , respectively). Finally, supportiveness was predictive of confidence, persistence, and teacher rapport for both groups of students ( $r$ s ranged from .25 to .62, all  $p$ s  $< .01$ ).

An interesting contrast regarding the relationship between parenting and grades differentiated students by residence. For students living on their own, overall GPA was positively related to autonomy granting ( $r = .22, p < .05$ ) and negatively related to demandingness ( $r = -.19, p < .05$ ). Yet, no such relationship emerged for students living with their parents. One interpretation of this contrast is that good grades increased the willingness of parents whose students were living on their own to grant their children greater autonomy, whereas poor grades may have made them feel they needed to monitor and push their collegian more closely. In a similar vein, a positive correlation emerged between parental supportiveness and overall GPA for students residing with their parents ( $r = .24, p < .05$ ), whereas the correlation of these two variables for students living on their own was not significant. In this case, one might speculate that parents were more keenly aware of how their live-at-home students were doing and that they more consistently responded to their children's successes with support and encouragement.

### Contribution of Academic Year in College

A final series of analyses sought to examine differences in the magnitude of the relationship between parenting characteristics and college adjustment and success as a function of year in college. Table 8 provides a summary of the correlations between parenting characteristics and college student adjustment and success for freshmen, sophomores, and juniors versus seniors. As the data in this table illustrate, there seemed to be little if any systematic difference between these two groups of students in the relationship between parenting characteristics and grades; none of the three dimensions of parenting were predictive of grades for either group. However, the lower level students and seniors did

**Table 5**  
*Correlations Between Parenting Characteristic Ratings and Indexes of Student Adjustment and Success*

Characteristic	Overall GPA	Major GPA	Confidence	Persistence	Task involvement	Teacher rapport
<b>Autonomy granting</b>						
Autonomy granting	.15*	.11	.27***	.23***	.18**	.27***
Childhood autonomy	.03	.06	.36***	.24***	.17**	.29***
Autonomy (controlling for childhood autonomy)	.17**	.09	.13	.14*	.12	.14*
Autonomy (controlling for PE)	.16*	.08	.25***	.23***	.15*	.24***
Autonomy (controlling for childhood autonomy and PE)	.18**	.09	.13	.16*	.13	.16*
<b>Demandingness</b>						
Demandingness	-.05	.02	.30***	.13	.04	.22***
Childhood demandingness	-.19***	-.10	.10	-.04	-.09	.05
Demandingness (controlling for childhood demandingness)	.02	.05	.27***	.12	.08	.23***
Demandingness (controlling for PE)	-.08	-.03	.30***	.09	.04	.21***
Demandingness (controlling for childhood demandingness and PE)	-.02	.01	.28***	.10	.06	.19**
<b>Supportiveness</b>						
Supportiveness	-.08	.12	.44***	.35***	.12	.28***
Childhood supportiveness	.02	.11	.37***	.26***	.12	.28***
Supportiveness (controlling for childhood supportiveness)	.12	.05	.30***	.25***	.07	.14*
Supportiveness (controlling for PE)	.09	.08	.46***	.35***	.10	.27***
Supportiveness (controlling for childhood supportiveness and PE)	.14	.07	.30***	.26***	.07	.15***

*Note.* Minimum  $n = 196$ . For each parenting characteristic, Line 1 consists of bivariate correlations between the parenting scale scores and the student adjustment and success scores; Line 2 consists of bivariate correlations between respondents' ratings of childhood parenting characteristics and their ratings of their adjustment and success; Line 3 consists of partial correlations between current parenting ratings and student adjustment and success after control for childhood ratings for a given characteristic; Line 4 consists of partial correlations between parenting characteristics and student adjustment and success after control for parental education (PE); and Line 5 consists of partial correlations between ratings of current parenting characteristics and student adjustment and success after control for PE and corresponding childhood parenting ratings. GPA = grade point average.  
\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

differ with respect to the indexes of mastery orientation. More specifically, the relationships between parenting and academic outcomes were significantly attenuated for the more advanced students. Autonomy granting was predictive

of confidence for the lower level students ( $r = .35, p < .001$ ) but not for seniors. Similarly, demandingness was predictive of confidence ( $r = .39, p < .001$ ), persistence ( $r = .20, p < .05$ ), and teacher rapport ( $r = .31, p < .01$ ) for lower

**Table 6**  
*Comparison of Parenting Characteristics and Student Adjustment and Success as a Function of Student Residence*

Variable	Living with parents		Living on own		F	p
	M	SD	M	SD		
<b>Parenting characteristics</b>						
Childhood autonomy	3.44	0.93	3.51	0.96	0.35	.55
Childhood demandingness	3.12	0.87	3.27	0.77	2.02	.16
Childhood supportiveness	3.70	0.85	3.60	0.98	0.60	.44
Autonomy granting	3.47	0.71	3.55	0.78	0.77	.38
Demandingness	4.24	0.88	4.13	0.96	0.83	.36
Supportiveness	3.82	0.76	3.77	0.86	0.12	.73
<b>Student adjustment and success</b>						
<b>Grades</b>						
Overall	3.56	0.86	3.50	1.02	0.31	.58
Major	3.78	0.88	3.78	1.02	0.01	.99
Confidence	4.26	0.74	4.20	0.94	0.29	.59
Persistence	4.20	0.74	4.04	0.81	2.90	.09
Task involvement	3.12	0.78	3.07	0.86	0.79	.37
Teacher rapport	3.74	0.70	3.74	0.71	0.07	.78

*Note.* For students living with parents,  $n = 91$ ; for students living on their own,  $n = 137$ . Students reported their grades using a 5-point scale (1 = below 2.00, 2 = 2.00–2.49, 3 = 2.50–2.99, 4 = 3.00–3.49, 5 = 3.50–4.00 [A = 4, B = 3, C = 2, D = 1]).  $F$  and  $p$  values are from multivariate analyses of variance for each of the indexes of parenting and student adjustment and success. For parenting characteristics,  $df = 1, 198$ ; for student adjustment and success,  $df = 1, 225$ .

Table 7

*Comparison of Partial Correlations (Controlling for Parental Education) Between Ratings of Parenting Characteristics and Indexes of Student Adjustment and Success for Students Living With Their Parents and Students Living on Their Own*

Variable and residence status	Overall GPA	Major GPA	Confidence	Persistence	Task involvement	Teacher rapport
Autonomy granting						
Live with parents	.11	-.01	.28**	.24*	.20	.05
Live on own	.22*	.16	.26**	.29***	.14	.37***
Demandingness						
Live with parents	.12	.13	.44***	.06	.06	.22*
Live on own	-.19*	-.11	.25**	.09	.03	.20*
Supportiveness						
Live with parents	.23*	.21	.61***	.37**	.15	.31**
Live on own	.02	.02	.39***	.34***	.07	.25**

*Note.* For students living with parents, minimum  $n = 72$ ; for students living on their own, minimum  $n = 129$ . GPA = grade point average.  
\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

level students but not for seniors. Finally, supportiveness was predictive of confidence ( $r = .63, p < .001$ ) and teacher rapport ( $r = .36, p < .001$ ) for lower level students but was predictive only of confidence ( $r = .28, p < .01$ ) for seniors. In two cases, the relationships between dimensions of parenting and academic outcomes were stronger for the seniors than for the younger students: autonomy granting was predictive of persistence ( $r = .37, p < .001$ ) and teacher rapport ( $r = .37, p < .001$ ) for the more advanced students but not for the younger ones.

Might this overall attenuation in the relationship between parenting and student outcomes be the result of differences between the younger and more advanced students in parenting characteristics or in student adjustment and success? Two MANOVAs with student year as the independent variable were conducted to compare the parenting characteristics and adjustment and success reported by students as a function of academic year. There was no overall main effect of academic year on childhood or current parenting characteristics,  $\lambda = .96, F(1, 212) = 1.60, ns$ . There were no significant differences for any of the six indexes of parenting

when evaluated with univariate tests. However, there was a significant difference in overall academic adjustment and success as a function of student year,  $\lambda = .91, F(1, 187) = 2.85, p < .05$ . There were also significant differences for three of the six individual indexes of student adjustment and success: Overall GPA increased with years of matriculation,  $F(1, 187) = 11.45, p < .001$ , as did major GPA,  $F(1, 187) = 10.01, p < .01$ , and confidence,  $F(1, 187) = 6.22, p < .01$ . Differences in persistence, task involvement, and teacher rapport, although not reaching conventional levels of statistical significance, favored the seniors. This is not surprising; selective attrition and increased personal and academic maturity no doubt differentiate seniors from younger students. Means, standard deviations, and results of the univariate analyses of the comparison of parenting characteristics and academic adjustment and success for lower level students and seniors are presented in Table 9. Taken together, the results of this last series of analyses suggest that students' perceptions of their parents do not change appreciably as they advance through college but that these percep-

Table 8

*Comparison of Partial Correlations (Controlling for Parental Education) Between Ratings of Parenting Characteristics and Indexes of Student Adjustment and Success for Freshmen, Sophomores, and Juniors Versus Seniors*

Variable and student status	Overall GPA	Major GPA	Confidence	Persistence	Task involvement	Teacher rapport
Autonomy granting						
Lower level students	.17	.03	.35***	.10	.13	.17
Seniors	.17	.17	.09	.37***	.19	.36***
Demandingness						
Lower level students	-.01	.11	.39***	.20*	.02	.31**
Seniors	-.19	-.20*	.12	.01	.03	-.01
Supportiveness						
Lower level students	.14	.13	.63***	.40***	.07	.36***
Seniors	.05	.04	.28**	.32**	.16	.16

*Note.* For lower level students, minimum  $n = 92$ ; for seniors, minimum  $n = 95$ . GPA = grade point average.  
\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

Table 9  
*Comparison of Lower Level Students' and Seniors' Ratings of Parenting Characteristics and Adjustment and Success*

Variable	Lower level students		Seniors		F	p
	M	SD	M	SD		
Parenting characteristics						
Childhood autonomy	3.42	1.02	3.55	0.80	1.08	.30
Childhood demandingness	3.23	0.87	3.20	0.74	0.12	.73
Childhood supportiveness	3.69	0.99	3.61	0.85	0.41	.52
Autonomy granting	3.49	0.82	3.57	0.71	0.53	.47
Demandingness	4.26	0.91	4.17	0.90	0.41	.52
Supportiveness	3.86	0.83	3.76	0.80	0.83	.36
Student adjustment and success						
Grades						
Overall	3.34	0.94	3.77	0.95	11.45	.01
Major	3.57	1.01	4.01	0.86	10.09	.01
Confidence	4.07	0.97	4.41	0.65	6.22	.01
Persistence	4.03	0.85	4.21	0.72	1.22	.27
Task involvement	3.02	0.76	3.20	0.91	1.58	.21
Teacher rapport	3.68	0.75	3.87	0.65	1.53	.22

Note. For lower level students,  $n = 120$ ; for seniors,  $n = 95$ . Students reported their grades using a 5-point scale (1 = below 2.00, 2 = 2.00–2.49, 3 = 2.50–2.99, 4 = 3.00–3.49, 5 = 3.50–4.00 [A = 4, B = 3, C = 2, D = 1]).  $F$  and  $p$  values are from multivariate analyses of variance for each of the indexes of parenting and student adjustment and success. For parenting characteristics,  $df = 1, 187$ ; for student adjustment and success,  $df = 1, 211$ .

tions become less powerful in shaping students' achievement motivation profiles over that same time period.

## Discussion

To be sure, one must be cautious in interpreting correlations and in drawing conclusions from self-report data. These caveats notwithstanding, the results reported here tend to paint a fairly consistent picture. In summarizing, we would like to highlight four points.

First, SAPS data showed that the three dimensions of parenting found to be of significance in the literature on children and adolescents continued to be valid constructs for college students. All three scales rating current parenting had good internal consistency for this sample, as well as for two additional samples recruited during a pilot phase of the present investigation.

Second, students' perceptions of the current practices of their parents were predictive of the degree to which they held a mastery orientation toward their academic work. Generally speaking, the more autonomy, demands, and supports parents provided, the more confident, persistent, and positively oriented to their teachers the students were.

Third, the relationship between parenting characteristics and student outcomes was equally strong whether the students resided with their parents or not. This finding underscores the continued importance of parenting styles well into young adulthood. These results are also consistent with a growing body of literature concerning the "antipa-

tory socialization" (Weidman, 1989) and the "social and cultural capital" that parents invest in their children and adolescents (Connor & De Vos, 1989; Cooper et al., 1994; Duran, 1994; Goldenberg & Gallimore, 1995; Mehan, 1992; Phelan, Davidson, & Cao, 1991). Much of this work demonstrates that, to the degree values and expectations at home match those in school, children will be and feel better equipped and more likely to succeed. To the degree that there are important differences in the values and expectations intrinsic to the "microsystems" that constitute the "multiple worlds" that students must learn to negotiate, misunderstandings are likely, and students who feel grounded at home may feel quite confused about their allegiances and goals in school and may thus be ineffectual (Bronfenbrenner, 1979; Cooper et al., 1994; Cooper, Jackson, Azmitia, & Lopez, 1998). An authoritative home world (one that consists of high levels of autonomy, demands, and emotional support) effectively imparts the elements of a mastery orientation toward schoolwork, which in turn prepares students for the world of American college, where self-regulation, persistence, and autonomy are important for success.

Finally, the link between characteristics of students' relationships with their parents and their adjustment and success in college was somewhat weaker for the seniors than for their younger counterparts. This finding is consistent with the literature on college retention, suggesting that other factors inherent in students' immediate context come to play an increasingly important role in their adjustment to and success in college. As students successfully make their way through college, they form new social and support networks and identify new role models. We are at present pursuing this direction of inquiry through both quantitative and qualitative investigations of these factors.

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