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THE PARENT-ADOLESCENT RELATIONSHIP AND COLLEGE ASJUSTMENT OVER THE FRESHMAN YEAR

by

KOSTAS ANDREA FANTI

Under the Direction of Christopher C. Henrich

ABSTRACT

This study investigates whether the parent-adolescent relationship is related to the academic, social, and personal-emotional expectations of adjustment and actual adjustment to college during the transition to college. The mother-adolescent relationship was more consistently linked to college adjustment than the father-adolescent relationship both cross-sectionally and longitudinally, and students identified their parents and especially their mother amongst the first people who they go to for support. More African Americans than students from other ethnic backgrounds and more dormitory residents than commuters identified their mother as their first supportive figure, suggesting that the students' living arrangements and their cultural backgrounds need to be taken under consideration when studying this transitional period.

INDEX WORDS: Mother-adolescent relationship, Father-adolescent relationship, College adjustment, College expectations, Academic, Social, Personal-emotional

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The Parent-Adolescent Relationship and College Adjustment Over The Freshman Year

In recent years there has been growing interest in adolescents' transition to college and the developmental socioemotional challenges that accompany that transition. Only half of entering college students manage to finish their degree in a 5 year period, and of the remaining half, 37% drop out altogether (United States Department of Education, 2001), suggesting that college students are at risk for failure to graduate on time or graduate at all.

The attrition rate for the freshman year alone is 20% (Mallinckrodt & Sedlacek, 1987). Further, the freshman year has been found to be critical in reducing attrition rates in subsequent years (Boyer, 1987; Fidler, 1991; Koester & Lustic, 1991; Strumpf & Hunt, 1993; Upcraft, et al., 1989; Woosley, 2003). Boyer suggested that successful adjustment to college during the freshman year can significantly influence the entire undergraduate experience. Students who have clear and purposeful academic planning during the freshman year tend to persist to college (Wessell, Engle, & Smidchens, 1978). The same applies to students who are committed to complete a college degree (Pascarella & Chapman, 1983). Furthermore, the first year's social adjustment experience has been linked to higher probabilities of degree completion (Woosley, 2003), and social adjustment during the entire freshman year was found to be very important for college persistence (Mallinckrodt, 1988; Milem & Burger, 1997; Pantages & Creedon, 1978). In addition, personal or emotional problems during the freshman year have been linked to dropping out of college (Pappas & Loring, 1985).

Therefore, academic, social, and personal-emotional adjustment during the freshman year are good predictors of whether or not students graduate (Gerdes & Mallinckrodt; Baker & Siryk, 1984; Gerdes & Mallinckrodt, 1994; Mallinckrodt, 1988; Pantages & Creedon, 1978). Academic adjustment is a broad concept that involves the actual academic performance of a student and a

number of other factors that relate to how well students manage the educational demands of the academic experience in a particular setting, like motivation and satisfaction with the academic environment. Social adjustment defines how well the students deal with social challenges at the university as well as with interpersonal experiences like meeting people, making friends, and joining groups. Personal-emotional adjustment is related to how well students deal with general psychological distress or the somatic consequences of distress (Baker & Siryk, 1984). For the purposes of this study we measure the expectations or the anticipated adjustment to college during the first month of college and the actual adjustment to college during the end of the second semester of college for all the three different facets of college adjustment.

This study is specifically interested in freshman college students who come immediately to college after high school and is based on the premise that entrance into college is an important educational ecological transition (Bronfenbrenner, 1977), similar to the transitions to kindergarten, elementary, middle school, and high school (Staton, 1993). Such transitions require that the student create new coping styles, overcome initial anxiety, adopt new behaviors (Bogat et al., 1980; Hirschowitz, 1976), and failure to do so can negatively influence performance and adjustment (Elias, Rothbaum, & Cara, 1986). According to Barber & Olsen (2004) academic, personal-emotional, and social functioning of students tend to suffer after the transition to new schools (kindergarten, elementary, middle school, high school, and college), and since those three factors during the transition to college have been linked to college persistence, it is important to study what can positively influence those factors, easing this transition for college students.

According to Bronfenbrenner (1977), ecological transitions represent good opportunities to examine the extent to which factors in one social context (e.g., the family) are related to

children's adjustment in another, changing context (e.g., the transition from high school to college). Indeed, one factor that has been positively linked to adolescents' adjustment to college is their relationship with their parents. In fact, research has demonstrated that parents can positively influence adjustment across all educational transitions - to kindergarten, elementary, middle, and high school (e.g. Baumrind, 1991, Brody et al., 1994; Burchinal et al., 1997; Kraft-Sayre & Pianta, 2000; Lamb-Parker et al., 1999; Love et al., 1992; Paro et al., 2003; Rimn-Kaufman & Pianta, 2000; Stormshak et al., 2002). This study focuses on two facets of that relationship. The first is students' perceptions of the current quality of relationship with their parents, and the second is relying on parents as support figures in times of stress.

Quality of relationship with parents and college adjustment

The quality of the parental relationship is measured based on the communication, closeness, and trust between college students and their parents, resulting in an overall measure of students' positive perceptions of their relationship with each parent. In support of this focus, Lapsey et al.'s (1990) results indicated that positive parent-adolescent relationship for freshman college students was related to academic adjustment, but not to personal-emotional and social adjustment. Rice et al. (1995) found that the college students who were able to better manage the academic and personal adjustment challenges of the college environment were the ones who perceived a positive relationship with their parents. However, in that study positive parent-adolescent relationship was not linked to social adjustment. Other studies provide support for the association of positive parent-adolescent relationship to the personal-emotional *and* social adjustment of college students (Bartholomew & Horowitz 1991, Holmbeck & Wandrei, 1993; Kenny & Donaldson, 1991). For example, Bartholomew and Horowitz (1991) compared securely attached individuals who view their parents as supportive with insecure individuals, and found

that college students who view their parents as supportive were better socially, and personally-emotionally adjusted to college.

Therefore, as is evident from past research we expect the adolescents' positive perceptions of their relationship with their parents to be positively related to academic adjustment to college (Strage and Brandt, 1999). We also investigate whether the parent-adolescent relationship is positively related to personal-emotional and social adjustment.

In operationalizing adjustment over the transition to college, we control for expectations of adjustment to test whether parent-adolescent relationship acts as an important factor for college adjustment, over the course of the freshman year. By controlling for expectations we also test the influence of expectations on *actual* adjustment, which needs further exploration, according to Baker & Siryk (1984). Those researchers reported that college students rate their expectations of adjustment much higher than their actual adjustment, which can negatively influence their adjustment to college.

Parents as support figures

To further study the adolescent-parent relationship we also investigate whether students will rate their parents amongst the first people they go to for support in times of stress. It is expected that most college students will continue to identify their parents as their support figures in times of stress. Arnstein (1980) was among the first people to note that college students remain emotionally and psychologically influenced by their parents, and Sullivan and Sullivan (1980) demonstrated that the move to college was related to increased affection, communication and satisfaction with the students' relationship with their parents. Moreover, the college transition experience, like any other major transition in ones' life, can be risky, and close, supportive relationships may help students adjust to their new and demanding college life

(Arnstein, 1980; Sullivan & Sullivan, 1980; Rice et al., 1995). Previous research has shown that the students that are able to cope better with life transitions are the ones who perceive a high level of support from their parents and are satisfied with the level of support they currently receive (Bartholomew & Horowitz, 1991). We posit that parents act as a secure base that students use to explore and adjust to their new college life, while returning to them during times of stress. This hypothesis derived from attachment theory, which defines attachment as a significant and enduring emotional bond between two people (notably parent and child) that facilitates exploration by providing security and support during times of stress (Ainsworth, 1969, 1989; Bowlby, 1982, 1988). For the present study the students were asked to rank the persons that they go to for support in times of stress on a scale from first to tenth.

Mothers and fathers

This study also investigates relationships with mothers and fathers separately. The parent-child literature is replete with instances where mothering and fathering differ. Infants' preferred attachment figures and the persons who they seek out when under stress are their mothers, since mothers tend to be the primary care providers and spend more time with their infants (Lamb, 1976a; 1976b; 1997). Furthermore, mothers and fathers differ in terms of the types of experiences they offer to their infants with mothers being more emotionally available than fathers (Lamb, 1997).

This pattern continues into childhood and adolescence with mothers engaging in more frequent interactions with their children than fathers (Lewis & Lamb, 2003), and with fathers having more distant relationships with their children than mothers (Hosley & Montemayor, 1997; Montemayor & Brownlee, 1987; Younnis & Ketterlinus, 1987). Moreover, during adolescence mothers are more responsive and fathers are more demanding (Baumrind, 1991).

Furthermore, both male and female adolescents report that they are closer to their mothers than their fathers (Hosley & Montemoyor, 1997; Langford et al., 2001). Differences between mothers and fathers have also been found during the transition to adolescence, when children experience the ecological transition of middle school. Baumrind (1991) reported that the correlations between parenting characteristics and different social, personal/emotional and academic adjustment variables during the transition to middle school were stronger and more consistently significant for mothers than for fathers.

Like middle school, the transition to college is an important time to explore the differences between mothers' and fathers' effects on the adolescents' adjustment because it is considered to be a new, challenging, and stressful experience for adolescents, and also because it represents the transition to a new developmental stage (young adulthood) (Henton, et al., 1980; Kenny, 1990; Sullivan & Sullivan, 1980). One previous study found measures of the mother-adolescent relationship to be more predictive of college adjustment than were measures of the father-adolescent relationship (Lapsey et al., 1989). However, to our knowledge, there is no other study examining the differences between mother and father during the transition to college; other studies incorporate an overall measure of parenting (Lapsey et al, 1983, Rice et al., 1990, Strage and Bandt, 1999).

Based on findings from other developmental transitions we hypothesize (1) that mother-adolescent quality of relationship will be more strongly related to the different facets of adjustment than father-adolescent quality of relationship. We also hypothesize (2) that more college students will report that they go to their mothers for support in times of need than their fathers. This study samples students from Georgia State University (GSU), which has a large number of commuter students. Because of this, we also compare commuters to dormitory

residents. Those two groups of students have been found to differ in terms of their relationship with their parents (Sullivan & Sullivan, 1980), and in terms of how they perceive the college environment and how they cope during the transition to college (Fisher & Hood, 1987; Kazantzis & Flett, 1998; Lu, 1990; McAndrew, 1998; Pennebaker et al., 1990).

The sample is also diverse in terms of gender, ethnicity, and parental marital status, which are other variables that have been linked to college adjustment (Alfeld-Liro, Sigelman, 1998; Cooney, 1988; Luepnitz, 1979; Oderberg, 1986; Schwitzer et al., 1999; Watson & Kuh, 1996). Therefore, this study explores whether hypothesized associations between parent-adolescent relationship and college adjustment are moderated by those demographics variables.

Method

Participants

The sample consisted of 88 (26% males) freshman college students at Time 1 (during the beginning of the Fall semester) and 44 (23% males) at Time 2 (during the end of the Spring semester). Our sample consisted of Georgia State University (GSU) students. GSU is an urban university with more than 20,000 undergraduate students enrolled, and around 2,000 traditional freshman students (students who enroll in college immediately after high school) enrolled each year. GSU is characterized by constant enrollment growth (GSU Action Plan, 2004). During both times approximately half of the students were residing in the Georgia State University dormitories and the other half with their parents or other family. The participants were 18 years old on average (M = 18.10, SD = .46), and enroll in college immediately after high school. The majority of the participants at both times were African Americans (51% African-American, 2% Latino, 24% White, 13% Asian, 10% other during Time 1; 66% African-American, 2% Latino, 21% White, 9% Asian, 2% other during Time 2). GSU is a diverse university, and its population

consists of 32% African-American, 3% Latino, 46% White, 10% Asian, and 9% other ethnic background. According to a chi-square test our sample ($X^2(4, N = 88) = 20.30$, $p=.00$) was not representative of the overall GSU racial/ethnic makeup, in that it is represented by a higher percentage of African American students and a lower percentage of white students.

Procedure

During the first assessment (Time 1; August/September, 2003), consent was obtained from the students to take a part on this longitudinal study and a survey was administered. At the second assessment (Time 2; March/April, 2004), the same participants (7-8 months later) were asked to fill out a similar questionnaire. The study was introduced to students in introductory psychology classes through experimentrix. Experimentrix allows students to choose and sign-up for experiments through the internet for the exchange of credits. The students who agreed to participate were asked to meet with the research team in a pre-determined room located in the psychology department. Questionnaires were group administered, and a member of the research team introduced the questionnaire before each session. The questionnaire was 142 questions long and it took the students 25 minutes on average to complete it. During Time 2 the same participants were contacted and invited to fill out the questionnaire in a pre-determined room in the psychology department. Pizza and refreshments were offered as inducements at both time points. The research team stayed in touch with the participants through e-mail throughout the duration, and participants were conducted during holidays, etc.

Attempts were made to contact all of the students during Time 2 (by e-mail and phone), but due to unknown reasons only 65% of the initial sample of students replied, and the majority of those students (50% of the initial sample) completed the second part of the study. The first attempt was contacting the students through e-mail. If the students replied to the initial e-mail, an

appointment was set to meet with the experimenter. A total of three e-mails were sent to the students, and 40% of the initial sample replied to our e-mails and filled out the second assessment. In an attempt to locate the remaining group of students who did not replied to their e-mails, two telephone calls were made to each, and another 10% of the initial sample was recruited and filled out the second assessment. The 15% of the students who replied to either the e-mail or the phone calls, but did not take a part in the study, showed interest for the study but were unable to show up for testing. Most of those students made more than two appointments and did not attend their study appointment. Therefore, their reasons for not participating, other than being too busy with classes, are unknown. A final attempt was made during June, but only one of the students replied who was not available until after September. Attrition analyses are presented in the results section.

Measurement

At Times 1 and 2, identical self-report measures were used to assess demographics, and quality of relationship to parents. One questionnaire was used to measure expectations for college adjustment at Time 1 and another to measure the actual adjustment to college at Time 2.

Demographic variables. College students were asked to report their gender, age, ethnicity, parental marital status, and their current place of residence (e.g. GSU dorms, parents' house).

Academic achievement. Academic achievement consisted of the adolescents' self-reported Grade Point Average (GPA) at Time 2, and self-reported GPA during their senior year in high school for Time 1.

Support figure. The students were asked to identify the persons who they go to for support in a scale from 1 to 10 (rank order). For the purposes of this study the first three persons

that the students identified were of interest because we inferred that those are the people to whom the college students would feel closest.

Current quality of relationship to parents. The 75-item Inventory of Parent and Peer Attachment (IPPA; Armsden & Greenberg, 1987) is a self administered questionnaire with 25 items on each of 3 scales measuring attachment to the mother, the father, and peers. The IPPA assesses affective and cognitive dimensions of the current attachment of college students and adolescents, and is based on Bowlby's (1969) conceptualization of attachment theory. The IPPA assesses individual differences and their relationship to psychological well being in adolescence, and perceived quality of attachment to attachment figures based on three subscales measuring the adolescents' reports of trust, communication, and alienation with their parents and peers. The peer attachment scale was not administered. For the present study college students were instructed to describe their feelings about their mother (father), or the woman (man) they feel closest to. Current quality of parental relationship was measured based on the communication, alienation, and trust between college students and their parents, and an overall measure of the late adolescents' positive perceptions of their relationship with each parent was created. The reports of the students on the alienation subscale were reversed coded to indicate closeness to parents and therefore an overall measure of positive parent-adolescent relationship was created. The IPPA has been used in several studies of late adolescent attachment and research suggested that it does not measure attachment per se, but a related construct, which is the adolescent's perceptions of quality of relationship to parents (Armsden & Greenberg, 1987; Brack, Gay & Matheny, 1993; Leadbeater, Kuperminc, Blatt & Hertzog, 1999; Lopez & Gover, 1993; McCarthy, Moller & Fouladi, 2001; Papini, Roggman & Anderson, 1991). Internal consistency estimates (Cronbach's alphas) that ranged from .86 to .91, and test-retest reliability values over a

3-week period of .93 for scores on the overall parental attachment scale were previously obtained. Internal consistency estimates (Cronbach's alphas) for scores from the separate mother and father scales have been reported at .89 and .88 respectively. Cronbach's alphas for scores on the maternal attachment scale and the paternal attachment scale were .93 and .95, respectively, and for the present study were .92 and .95 respectively. Evidence were obtained for the convergent and concurrent validity of scores from the IPPA with significant correlations between the IPPA parent attachment scores and measures of family support, conflict and cohesiveness, self esteem, life satisfaction, affective status, depression and anxiety, resentment and alienation. Individuals classified as securely attached reported greater satisfaction with themselves, a higher likelihood of seeking social support and less symptomatic response to stressful life events (Armsden et al., 1990).

Actual college adjustment. College adjustment was assessed during Time 2 with the Student Adaptation to College Questionnaire (SACQ; Baker & Siryk, 1984). SACQ is a 67-item measure that assesses goal commitment, and academic, social, and personal/emotional adjustment to college. The Academic Adjustment subscale consists of 24 items and measures how well college students manage the educational demands of the college experience. The Social Adjustment subscale consists of 20 items and measures how well the late adolescent is dealing with interpersonal experiences (meeting people, making friends, joining groups) and social challenges at the university. The Personal-Emotional Adjustment subscale consists of 15 items which measure the general psychological distress or the somatic consequences of distress. The Goal Commitment subscale consists of 15 items that relate to the student's sense of commitment to a college education and to the school that they are attending. The Goal Commitment subscale was not used in this study. Some of the items in the different subscales are shared with other

subscales. Students responded to a 5-point Likert format (applies very closely to me-doesn't apply to me at all), and each item asked participants to indicate how well they are managing various experiences and affects. Higher scores represent better adjustment. Published Cronbach coefficient alphas for the SACQ subscales are uniformly high and generally range from .73 to .90 (Baker & Siryk, 1984, 1986; Lapsley et al., 1990). The alphas for the present study were .91 for academic adjustment, .85 for social adjustment, and .87 for personal-emotional adjustment. Criterion validity was established by positive correlations between the SACQ subscales and student grade point average (GPA) and participation in social events; and negative correlations between SACQ subscales and attrition from college, and appeals for psychological services (Baker & Siryk, 1984, 1986).

Expectations of college adjustment. The Anticipated Student Adaptation to College Questionnaire (ASACQ; Baker, McNeil, Siryk, 1985) was used to measure the participant's anticipated/expected college adjustment and was administered only at Time 1. The ASACQ was adapted from the SACQ. The ASACQ is similar to the SACQ except that each item is prefaced by "I expect to…," to assess anticipation of circumstances in the near future (i.e., after enrollment). Coefficient alphas range from .73 to .94 (Baker et al., 1985; Cooper & Robinson, 1988). The alphas for the present study were .90 for academic expectations, .85 for social expectations, and .80 for personal-emotional expectations. Internal consistency reliability ranged from .83 to .90 for the four subscales (Gerdes & Mallinckrodt, 1994). This measure has not been extensively used, but since is a direct adaptation of the SACQ, reliability and validity measures can be based on the SACQ.

Results

Attrition Analyses

Attrition analyses were conducted to determine whether the sub sample of 44 students who remained in the study over the 7 month period differed systematically from the 44 students who did not participate during the second part of the study. The group which remained was compared with the group which dropped out for all the variables under investigation including high school GPA. The results, which are reported in Table 1, did not indicate any significant differences between the two groups, suggesting that attrition was not selective. The group which remained was also compared to the group which dropped out for any demographic differences, and no differences were found for gender ($x^2(1, N = 44) = 1.16, p = .28$), living situation ($x^2(1, N = 44) = .09, p = .76$), and parental marital status ($x^2(1, N = 44) = 3.3, p = .07$). However, we found that the remaining sample was represented by a higher proportion of African American students (65% African American) than the dropped sample (37% African American; $x^2(1, N = 44) = 17, p = .00$).

Table 1

Attrition Analyses (n = 44)

Measured variable	Dropped sample	Remained sample	t	df	p
Quality of mother relationship	3.78 (0.65)	3.88 (0.53)	0.84	87	0.41
Quality of father relationship	3.35 (0.78)	3.48 (0.89)	0.83	85	0.41
High school grade point average	3.43 (0.40)	3.45 (0.42)	0.28	87	0.78
Academic expectations	3.61 (0.55)	3.78 (0.53)	1.51	87	0.14
Social expectations	3.92 (0.47)	3.77 (0.63)	1.25	87	0.22
Personal expectations	3.38 (0.55)	3.50 (0.62)	0.90	87	0.37

Note. Values not enclosed in parenthesis represent the mean of each variable and the values enclosed in parenthesis represent the standard deviation.

Descriptive Analyses

Means and standard deviations of the study variables are presented in Table 2 ($N = 88$ for Time 1, $N = 44$ for Time 2). As indicated by the means in the table, students had higher academic and social expectations than actual academic (t (43) = 2.78, $p < .01$) and social adjustment (t (43) = 2.58, $p < .05$). Students' perceptions of their quality of relationship with their mother were higher than father quality of relationship for both Time 1 (t (85) = 4.34, $p < .01$) and Time 2 (t (40) = 2.39, $p < .05$). Mother quality of relationship did not change over time (t (43) = -.48, p = .64), but father did (t (39) = 2.32, $p < .05$), with students reporting higher father quality of relationship during Time 2.

Table 2

Mean (and Standard Deviations) Scores on each Measured Variable

Measured variable (Time)	Means (SD)	95% C.I. of diff.	
		Lower	Upper
Quality of mother relationship (Time 1)	3.83 (.59)	2.08	4.92
Quality of mother relationship (Time 2)	3.90 (.59)	2.04	4.76
Quality of father relationship (Time 1)	3.42 (.84)	1.08	4.92
Quality of father relationship (Time 2)	3.56 (.80)	1.60	4.84
Academic expectations (Time 1)	3.70 (.54)	1.88	4.79
Social expectations (Time 1)	3.85 (.56)	2.28	5.00
Personal expectations (Time 1)	3.44 (.59)	2.20	5.00
Academic adjustment (Time 2)	3.49 (.62)	2.13	4.63
Social adjustment (Time 2)	3.46 (.73)	1.61	4.78
Personal adjustment (Time 2)	3.59 (.76)	1.65	4.87

Note. Values not enclosed in parenthesis represent the mean of each variable and the values enclosed in parenthesis represent the standard deviation. Time 1 variables are based on the cross-sectional data (n = 88), and Time 2 variables on the longitudinal data (n = 44).

Point-biserial correlations between demographic and main variables. Females had a higher high school GPA than males (r_{pb} = .27, p < .05). African American students rated their relationship with their father during Time 1 (r_{pb} = -.28, p < .01) and Time 2 (r_{pb} = -.35, p < .05) to be higher than students from other ethnicities. Furthermore, African American students rated their academic expectations (r_{pb} = -.22, p < .05) higher than the rest of the students, although their GPA during Time 2 (r_{pb} = .39, p < .05) was lower than the rest of the students. Commuters perceived their relationship to their mother (r_{pb} = -.36, p < .05) and father during Time 2 (r_{pb} = -.43, p < .01) to be more negative than students that were living in the dorms. Furthermore, the students who lived in the dorms reported more positive social expectations (r_{pb} = -.22, p < .05) and social adjustment (r_{pb} = -.26, p < .05) than commuters.

Bivariate correlations. Correlations among the variables under investigation are presented in Table 3. High school GPA was positively related to academic expectations and adjustment, and to college GPA. College GPA was positively related to academic and personal adjustment. The three variables that measure expectations of college adjustment were intercorrelated, and each of them was positively related to the same variables that measures college adjustment at Time 2. The three variables that measure college adjustment were also intercorrelated. Quality of mother relationship during year 1 was positively related to academic and personal expectations, and to all three of the college adjustment variables. Quality of father relationship during year 1 was not related to either expectations or actual adjustment to college.

Main Analyses

Plan of analysis. Regression analyses with college expectations as the dependent variables were analyzed using the cross-sectional data from the initial sample of 88 students. The

Table 3

Correlations Among the Measured Variables (n=88 during Time 1; n=44 during Time 2).

	Current Mother	Current father	Academic expectat.	Academic adjustment	Social expectations	Social adjustment	Personal expectations	Personal adjustment	High GPA
Father	.27*								
Acad exp	.26*	.20†							
Acad adj	.46**	.08	.56**						
Soc exp	.20†	.05	.42**	.19					
Social adj	.54**	.00	.31*	.61**	.63**				
Pers exp	.31**	.10	.52**	.38*	.44**	.34**			
Pers adj	.48**	.12	.39**	.76**	.30*	.63**	.54**		
HighGPA	-.06	.02	.27**	.43**	-.07	.09	-.04	.28†	
Coll GPA	.03	-.09	.00	.52**	-.24	.05	.05	.33*	.49**

Note. Correlations between Time 1 variables are from the initial sample of 88 students and correlations between the rest of the variables are from the final sample of 44 students. *$p \leq .05$; **$p \leq .01$; †$p \leq .10$

regression analyses with the college adjustment variables as the dependent variables were analyzed using the longitudinal data from the final sample of 44 students. The reason for performing both is to test whether our longitudinal findings were affected by the small sample size. If the cross-sectional findings are similar to the longitudinal findings then this will add some confidence to the longitudinal findings. We performed hierarchical regressions controlling for parental marital status, gender, ethnicity, and place of residence. For the cross-sectional analyses we entered the mother-adolescent and father-adolescent quality of relationship at the second step, and the different interactions between each demographic control variable and mother-adolescent and father-adolescent quality of relationship at the third step. The longitudinal analyses were different in that expectations of adjustment were entered as the second step and mother and father-adolescent quality of relationship were entered at the third step. The different interactions between the demographic variables and mother and father quality of relationship were entered as the fourth step.

Cross-sectional analysis (Table 4).

Academic expectations. For academic expectations the first step explained 28% of the variance, and ethnicity ($\beta = -.27$, $p < .05$), living arrangement ($\beta = .28$, $p < .01$), and parental marital status ($\beta = .21$, $p < .05$) were significantly related to the DV. These results translate to African American college students having higher academic expectations, students living in the dorms having lower academic expectations, and students coming from a two parent household having higher academic expectations. The second step explained 8% of the variance, and the mother-adolescent relationship was positively related to the DV ($\beta = .25$, $p < .05$). The last step explained 19% of the variance, with a significant interaction between parental marital status and father quality of relationship ($\beta = -1.10$, $p < .05$). After splitting the data between students who

Table 4

Cross-sectional regression analyses, n = 88

	Academic expectations		Social expectations		Personal expectations	
	β	ΔR²	β	ΔR²	β	ΔR²
Step 1						
gender	.17		-.02		-.14	
ethnicity	-.27*		-.18		-.18	
parental marital status	.21*		.04		.08	
living arrangement	28**	.18**	-.15	.08	.15	.07**
Step 2						
mother quality of relationship	.25*		.19		.29**	
father quality of relationship	.10	.08**	-.05	.03	.00	.08**
Step 3						
mother x gender	-1.29		-.40		.05	
father x gender	-.01		-.11		-.97	
mother x ethnic.	-1.36		-2.54**		-1.33	
father x ethnic.	-.60		.60		.48	
mother x mar. st.	-.88		-.31		-.21	
father x marit. st.	-1.10*		-.20		-.56	
mother x liv. ar.	-.65		.31		-.72	
father x liv. ar.	.67	.14**	.31	.12	-.55	.10**

Note. *$p \leq .05$; **$p \leq .01$; $^{\dagger}p \leq .10$

come from a two parent household and students who come from a one parent household, we found that the father-adolescent quality of relationship was positively related to academic expectations only for students who come from a two parent household ($\beta = .35$, $p = .01$), but not for students from one parent household ($\beta = -.03$, $p = .87$).

Social expectations. For social expectations the first step explained 8% of the variance and none of the demographic variables were associated with the DV. The second step explained 3% of the variance and neither parent relationship variable had a significant effect. The last step explained 12% of the variance with a significant interaction between ethnicity and mother quality of relationship ($\beta = 2.74$, $p < .01$). After splitting the data between African American students and others, we found that the mother-adolescent quality of relationship was positively related to social expectations for African American students ($\beta = .42$, $p < .01$), but not for others ($\beta = -.12$, $p = .43$).

Personal expectations. For the regression with personal expectations as the dependent variable (DV), the first step explained 7% of the variance, and none of the demographics had a significant effect. The second step explained 8% of the variance and the only significant relationship was found for the mother-adolescent quality of relationship ($\beta = .29$, $p < .01$). The third step explained an additional 10% of the variance, but no significant interactions were detected.

Longitudinal analyses (Table 5).

Academic adjustment. The first step in the regression analysis with academic adjustment as the DV explained 10% of the variance with no demographic main effects. The second step explained 28% of the variance with expectations of academic adjustment being positively related to the DV ($\beta = .62$, $p < .01$). The third step explained 12% of the variance with the mother-adolescent relationship being positively related to the DV ($\beta = .38$, $p < .01$). The last step

Table 5

Longitudinal regression analyses, n = 44

	Academic adjustment		Social adjustment		Personal adjustment	
	β	ΔR²	β	ΔR²	β	ΔR²
Step 1						
gender	.32		.04		.13	
ethnicity	.05		-.14		-.06	
parental marital status	.08		-.11		-.23	
living arrangement	.07	.10**	-.21	.12	.08	.06**
Step 2						
expectations	.62**	.28**	.70**	.41	.59**	.34**
Step 3						
mother quality of relationship	.38**		.43**		.33*	
father quality of relationship	.11	.12**	-.07	.15	.11	.11**
Step 3						
mother x gend.	1.15		.75		.35	
father x gend.	.04		-.76		-.23	
mother x ethn.	-.68		-.99		-1.07	
father x ethn.	1.07		.48		1.18	
mother x mar.	-.60		-.38		-.30	
father x mar.	-1.11		-.17		-.44	
mother x liv.	-.71		-.29		-1.19	
father x liv.	-2.12**	.21**	-1.53*	.10	-2.25**	.23**

Note. *$p \leq .05$; **$p \leq .01$; $^{\dagger}p \leq .10$

explained 21% of the variance with a significant interaction between living situation and father-adolescent quality of relationship (β = -2.12, p < .01). After splitting the data according to the student's living arrangements, we found that the father-adolescent quality of relationship was significant and positively related to academic adjustment for students living in the dorms (β = .31, p < .05), but it was not significantly related to commuters academic adjustment (β = -.45, p = .06).

Social adjustment. For social adjustment, the first step explained 12% of the variance with no demographic main effects. The second step explained 41% of the variance with social expectations being positively related to social adjustment (β = .70, p < .01). The third step explained 15% of the variance with mother-adolescent quality of relationship being positively related to social adjustment (β = .43, p < .01). The last step explained 10% of the variance with a significant interaction between father quality of relationship and living situation (β = -1.53, p < .05). After splitting the data between students living in the dorms and commuters we found a trend with father quality of relationship being positively related to social adjustment for students living in the dorms (β = .18, p = .37) and negatively for commuters (β = -.22, p = .20), although neither effect was significant.

Personal-emotional adjustment. For the regression analysis with personal adjustment as the DV the first step explained 6% of the variance with no demographic main effects. The second step explained 34% of the variance with expectations of personal adjustment being positively related to the DV (β = .59, p < .01). The third step explained 11% of the variance with mother-adolescent quality of relationship being positively related to the DV (β = .33, p < .05), and the last step explained 23% of the variance with a significant interaction between living situation and father adolescent quality of relationship (β = -2.25, p < .01). After splitting the data between students living in the dorms and commuters, we found that the father-adolescent quality

of relationship was positively related to personal adjustment for students living in the dorms (β = .39, $p < .05$), and not significantly related to commuters personal-emotional adjustment.

Support figures

Table 6 shows the people who students identified as their support figures in Time 1 and Time 2. As the first person to whom students go for support during Time 1, 32% of the students reported their mother, 8% their father, 11% their sibling, 22% their significant other, 5% other family, 3% other adult, and 19% their best friend. During Time 2, 27% of the students reported their mother as the first person to whom they go for support, 11% their fathers, 8% their sibling, 14% their significant other, 3% other family, 11% other adult, and 27% their best friend. During both times approximately half of the students reported one of their parents as the first person they

Table 6

Support Figures

	First support figure		Second support figure		Third support figure	
Support fig.	Year1	Year 2	Year1	Year 2	Year1	Year 2
Mother	32	27	19	32	22	14
Father	8	11	19	5	8	11
Siblings	11	8	11	8	16	30
Sign. other	22	14	5	8	3	5
Other family	5	3	19	11	14	5
Other adult	3	11	3	3	5	3
Best friend	19	27	11	16	14	11
Second best			14	16	5	16
Third best					14	5

Note. The values represent the percentages of the students that reported the same support figure during each time point.

go to for support. Also, more than 70% of the students reported their mother as being amongst the first 3 people that they go to for support in times of stress, and only 30% their father.

The above findings were moderated by living arrangements of the students and their cultural background. During Time 1 45% African American students and 21% students from other ethnicities reported their mother as their first supportive figure ($x^2(1, N = 88) = 15.86, p = .00$), and during Time 2 45% African American students and 13% students from other ethnicities reported their mother as their first supportive figure ($x^2(1, N = 44) = 25.97, p = .00$). Therefore, a higher percentage of African American students reported their mother as their first supportive figure than someone else, for both time points. A high percentage of students from other ethnicities identified either their peers or a significant other as their first supportive figure (60% during Time 1 and 67% during Time 2). More African American students reported their mother (45%) as their first supportive figure than fathers (9%), and the same was true for students from other ethnicities (21% for mother and11% for father).

During Time 1 42% of students living in the dorms and 23% of commuters reported their mother as their first supportive figure ($x^2(1, N = 88) = 9.44, p = .00$), and during Time 2 46% of students living in the dorms and 20% of commuters reported their mother as their first supportive figure ($x^2(1, N = 44) = 10, p = .00$). Therefore, a higher percentage of students living in the dorms reported their mother as their first supportive figure than someone else. Commuters most often reported a peer or a significant other for their first supportive figure (49% during Time 1, and 50% during Time 2). More students living in the dorms reported their mother (41%) as their first supportive figure than fathers (10%), and the same was true for commuters (23% for mother and10% for father).

Discussion

Our findings offer support for our two hypotheses. The first was that close, parent-adolescent relationships, especially with the mother, can help students adjust to their new and demanding college life. The second was that parents continue to be amongst the first people to whom college students go to for support in times of stress during the freshman year, with more students reporting their mother as their first supportive figure than their father. We discuss each of those ideas separately, as well as their implications for the ecological study of transitions. We also discuss our findings on the discrepancy between expectations and adjustment. Finally, we discuss our limitations and offer future directions and implications.

Parent-adolescent quality of relationship and college adjustment.

According to our results current positive mother-adolescent quality of relationship is positively related to academic and personal-emotional expectations at the start of college. Furthermore, mother-adolescent quality of relationship is related to social expectations only for African American students. The mother-adolescent quality of relationship is also related to social, personal-emotional and academic adjustment to college at the end of the freshman year, after controlling for college expectations. By relating the mother quality of relationship to all three facets of college adjustment this study supports previous research that the parental construct might be related to all three facets of adjustment (Bartholomew & Horowitz 1991, Holmbeck & Wandrei, 1993; Kenny & Donaldson, 1991).

The father adolescent quality of relationship was found to be related to the academic expectations only for students from a two parent households, suggesting that fathers need to be present in the household in order to have an effect on how students expect to academically adjust to college. Furthermore, the father-adolescent quality of relationship was found to be related to

the personal-emotional and academic adjustment to college only for students living in the dorms. Sullivan and Sullivan's (1980) results might shed some light to this finding. They found that adolescents who moved away from home had a better and stronger relationship with their fathers after separation, and this finding did not stand for students still living at home. Thus, if students who live in the dorms feel closer to their fathers, according to Sullivan and Sullivan's findings, it might explain the positive influence of the father quality of relationship on the students' academic adjustment and their personal-emotional adjustment. Indeed, students living in the dorms reported higher father quality of relationship than commuters. However, this was only true for the second assessment which might indicates that the difference between commuters and dormitory residents in terms of how they perceive their quality of relationship with father might comes over time.

In comparing the students' reports of their quality of relationship to each parent during both time points we found that students reported feeling closer to their mother than father. This finding is similar to studies showing that children and younger adolescents are closer to their mothers than their fathers (Hosley & Montemoyor, 1997; Langford et al., 2001). Our findings that the mother-adolescent quality of relationship may be more consistently important for college students' adjustment because it is related to all facets of college adjustment for all students no matter their living situation, is similar to those of Baumrind (1991), who reported similar results comparing the effects children relationships with mothers and father on adjustment during the transition to middle school. The similar findings suggest that both the transition to middle school and the transition to college can be similarly affected by parent-quality of relationship and that mothers play a different role than fathers during those transitional periods.

Support Figures.

One third of the students during Time 1 and one fourth of the students during Time 2 reported their mother amongst the first people who they go to for support, and mothers were ranked highest at both time points. Moreover, the majority of students during both times reported their mother as being amongst the first three people who they go to for support. Approximately one tenth of the students during both times reported their father as the first person who they go to for support and approximately one third of the students during both times reported their father amongst the three people who they go to for support.

However, the above findings were moderated by living arrangements of the students and their cultural background. Mothers were more often identified as the first supportive figure for students living in the dorms, whereas peer or relationships with significant others were more important for commuters. Aseltine and Gore (1993) found that dormitory residents have more emotional support from parents than commuters, and dormitory residents have fewer conflicts or tensions with parents than commuters. Therefore, moving out of home has positive effects on the parent-adolescent relationship (Graber & Brooks-Gunn, 1996), and this might explain why dormitory residents identify their mother as their support figure more often. In terms of ethnicity, African American students reported more often their mother as their first supportive figures whereas students of other ethnicities reported their peers or their significant other as their first supportive figure. These findings suggest that cultural background might play a role as to whom students identify as their support or attachment figures, and the cultural difference might be explained by the finding that attachment and loyalty to parents is really important for the African American culture (Cauce et al., 1996).

Across all groups however, students reported going to their mothers before going to their fathers. These results suggest that mothers tend to remain more important as secure bases during

the transition to college. The reason for the difference between father and mother is not explored in the literature, but it might be that the students receive more psychological support from their mothers than their fathers, as is reported in the literature for younger ages (Lamb, 1997). Another finding, again reported in the literature for younger ages, is that mothers are more responsive and fathers are more demanding (Baumrind, 1991), and, if that stands true during the transition to college, students might ask their mothers for support more often than fathers.

Expectations of adjustment

This study revealed slightly different patterns of results for expectations of college adjustment and actual adjustment, indicating that the two are independent constructs. Our analyses also found that college students' academic and social expectations were higher than their actual adjustment, which goes along with a phenomenon which was reported in the literature as the "freshman myth." This phenomenon indicates that entering freshman college students expect more from the college environment than they subsequently perceive as gaining (Pervin, 1966; Stern, 1966, 1970). It is imperative to study expectations of adjustment in comparison to actual adjustment because even though the number of students enrolling in US colleges and universities is increasing, and even though those students have high confidence that they will be able to successfully complete their studies, data have shown that the proportion of students who actually graduate from college is declining (Sax et al., 1996; US department of education, 1995). In conclusion, students who have unrealistically high expectations tend to drop out of college more often than the students with more realistic expectations (Baker et al., 1984; Baker & Schultz, 1992; Baker & Siryk, 1989; Shaw et al., 1964), and the differences between those two groups of students need to be further studied.

Limitations and Future Directions

This study only used college students' self-report measures. An additional limitation was this study's 50% attrition; however attrition was for the most part not selective. Also, this study had a small sample size during Time 2, which we tried to overcome by comparing our longitudinal findings to our larger cross-sectional data set. Furthermore, the study's generalizability might be limited to Georgia State University since our sample only consisted of students from that particular university. In order to overcome this obstacle, future studies might need to sample students enrolled in different colleges and universities.

More studies that use separate measures of mother and father quality of relationship should be conducted to show whether the difference between mother and father quality of relationship is valid. Additionally, longitudinal studies that follow traditional freshman students over time might be valuable to test the influence of mother and father constructs over time and to find distinct groups of people who fail to graduate. Moreover, studies that compare traditional freshman students to non-traditional students would be beneficial to test the influence of parenting constructs on those two groups adjustment. Research has shown that those two groups of students differ in their expectations from their classes and their teachers, and differ in terms of their obligations and social lives (Dill & Henley, 1998). Such research will be beneficial for universities whose population consists of a high percentage of non-traditional students, like GSU. Finally, the relation of expectations to actual adjustment needs to be further investigated in order to disentangle the difference between those two variables.

Implications.

Studies of retention have shown that college students as a population might be at risk and therefore it might be beneficial for colleges and universities to take measures like the creation of

outreach programs to increase retention and graduation rates (Gerdes & Mallinckrodt, 1994; Mallinckrodt, 1988). Our findings that current parent-adolescent relationship plays an important role during the transition to college suggest that university-initiated strategies for directly involving parents during the transition to college might make this transitional period a more positive experience for many students. However, our findings for the different effects of mothers and fathers might require different outreach for mothers than for fathers. Previous studies sampling children of younger ages have found that fathers are less involved with their children's schooling than mothers (e.g. Shumow & Miller, 2001), even though fathers report wanting to be involved with their children's schooling (Baker & McMurray, 1998). It might therefore be beneficial for universities to place special emphasis on supporting father involvement.

Finally, interventions during the senior year of high school that address the discrepancy between relatively high expectations vs. lower ratings of actual adjustment might lead to increased college awareness. It might be beneficial for college students if they were given more realistic information of what going to college entails and taught in advance skills to promote their adjustment during this important transition. A final implication of this study is that any interventions to promote the adjustment of college or prospective college students must be sensitive to a number of ecological considerations such as students' living situations and their cultural backgrounds.

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