

Psychological Separation and Adjustment to College

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We examined the relationship between psychological separation and adjustment to college in freshmen ($N = 130$) and upperclassmen ($N = 123$) samples. Psychological separation was measured with the Psychological Separation Inventory. Adjustment to college was assessed with the College Adjustment Inventory. Freshmen tended to show more psychological dependencies on mother and father, and poorer social and personal-emotional adjustment to college than did upperclassmen. A pervasive relationship was found between separation and adjustment, although separation did not predict adjustment across the board. Separation appears more strongly related to personal-emotional adjustment, particularly functional and emotional independence from mother and conflictual independence from father. Sex effects also emerged, with women showing more psychological dependencies than men. Finally, our results show that advances in separation across the four dimensions are not uniform.

Psychological separation-individuation is a critical developmental task that confronts adolescents. Although the task has been conceptualized in different ways (Blos, 1962; Grotevant & Cooper, 1985; Josselson, 1980, 1988), there is considerable agreement that it minimally involves a gradual resolution of the dialectic between the maintenance of a sense of connectedness in family relationships and the establishment of autonomous ego functioning. The adolescent must strike a balance between enmeshment with parental identifications and complete disengagement and isolation (Cooper, Grotevant, & Condon, 1983). Hence the conquest of autonomy involves the "shedding of family dependencies, the loosening of infantile object ties" (Blos, 1979, p. 149). The adolescent must attempt to disengage from, or to transcend, the internalized object representations formed in infancy and early childhood and establish a sense of self that is distinct and individuated with respect to parental object representations, thereby reducing the psychological dependence on parental introjects for approval, self-esteem, and standards of conduct. The adolescent must learn to take over for him- or herself the tasks of self-esteem regulation and self-definition. Separation-individuation, then, describes a process whereby the adolescent gradually divorces his or her ego functioning from that demanded by parental identifications, and establishes it on independent footing in the context of mutually validating relationships.

Resolution of this important ego developmental task seems crucial for healthy psychosocial functioning (Greenberg, Siegel, & Leitch, 1983; Josselson, 1980). Indeed, impaired ego functioning during adolescence has been linked to narcissistic (Lapsley & Rice, 1988) and borderline personality disorders (Coonerty, 1987; Noam, 1988) and to suicidal ideation (Wade, 1987). Indeed, some researchers now conclude that impaired psychological separation may underlie the emo-

tional problems that are often seen in college counseling centers (Hoffman & Weiss, 1987). According to Blos (1979, p. 146), "Ego disturbances, apparent in acting out, learning disorders, lack of purpose, procrastination, moodiness, and negativism, are frequently the symptomatic signs of crisis or failure in the disengagement from infantile objects, and consequently, they represent a derailment of the individuation process itself."

Although separation-individuation is central to adolescent adaptation, empirical studies of this process are relatively rare. Research in this area has been handicapped by the lack of suitable strategies for assessing psychological separation, although a number of useful approaches have appeared in the literature (Cooper et al., 1983; Hansburg, 1972, 1980; Levine, Green, & Millon, 1986). Of particular interest is a measure of psychological separation developed by Hoffman (1984), the Psychological Separation Inventory (PSI). This measure seems to hold promise for further work in this area. According to Hoffman (1984) psychological separation is a multidimensional construct that can be defined by reference to four dimensions: functional independence, attitudinal independence, conflictual independence, and emotional independence. *Functional independence* refers to the ability to manage and direct one's practical and personal affairs without the aid of mother or father. *Attitudinal independence* concerns the image of oneself as being unique and having one's own beliefs, values, and opinions. *Emotional independence* refers to freedom from excessive need for approval, closeness, and emotional support. Finally, *conflictual independence* is freedom from excessive guilt, anxiety, and resentment. These four dimensions are derived as subscales on the PSI, and separate scores can be calculated for Mother and Father dimensions.

In one study using this assessment Hoffman (1984) found that greater conflictual independence was related to better personal adjustment in college subjects, and emotional independence was related to academic adjustment. Global ratings of personal and academic adjustment were used in this effort. In a second study Hoffman and Weiss (1987) found that the greater the degree of conflictual dependence of the college subject on either or both parents, the more symptoms the

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student reported. Although these data attest to the important relation between psychological separation and late adolescent adjustment, there is some evidence that is not supportive of this relation. For example, Lopez, Campbell, and Watkins (1986) found that psychological separation was unrelated to college adjustment in men and negatively correlated with adjustment in women. This conclusion, however, should be regarded as tentative because of small sample size and because data generated by the four dimensions of psychological separation were not fully considered in the analyses.

The purpose of this project was to more fully address the relation between psychological separation and college adjustment. In contrast to the study by Hoffman (1984), we used a more differentiated assessment of adjustment to college, the College Adjustment Inventory (CAI; Baker & Siryk, 1984). This inventory yields separate scores for a number of dimensions of college adjustment, including academic, personal-emotional, and social adjustment. The use of this measure made it possible to explore the pattern of relations between the four dimensions of psychological separation (from mother and father) and the dimensions of college adjustment. We were thus able to test whether the several dimensions of adjustment to college were equally well predicted by the features of psychological separation. This evidence is not yet available in the literature.

We were particularly interested in examining the separation and adjustment patterns of college freshmen. For many adolescents attendance at college is one of the first major life transitions. Living apart from parents and friends, adjusting to the academic regimen, assuming responsibility for the tasks of daily living, and developing a new array of social relationships with peers and faculty confront the college freshman with adaptational challenges (Henton, Lamke, Murphy, & Haynes, 1980). Consequently, we wanted to determine if the potential crisis of the freshman transition is mediated by progress in psychological separation. We expected that college freshman would be more poorly adjusted than would a comparison sample of upperclassmen and that freshmen would also evidence a greater number of psychological dependencies than would upperclassmen. We hypothesized that adjustment to college would be related to indices of psychological separation from parents.

Finally, we wanted to explore the extent of sex differences in psychological separation and its effect on college adjustment. As previously indicated, there is some reason to believe that sex may mediate the relation between separation and adjustment (Lopez et al., 1986; Schwartz & Getter, 1980). In addition Moore (1987, p. 306) noted, "Males may have greater difficulty than females in maintaining positive parental ties through renegotiation of their relationships with parents in order to allow for the greater autonomy and self-governance of adulthood." Indeed, there is some evidence to suggest that men have less mature relationships with their parents than do women (White, Speisman, & Costos, 1983). On the other hand, others have argued that the language of "separation" does not adequately capture the individuating process for females, whereas the language of communion, connectedness, and the like does (Josselson, 1988). We explored these possibilities by examining sex main effects on the indices of separation

and adjustment to college and by comparing patterns of correlations between separation and adjustment between men and women.

Method

Subjects

Subjects included 130 (78 male and 52 female) freshmen and 123 (70 male and 54 female) upperclassmen (juniors and seniors). The freshmen were recruited from a first-semester introductory psychology section. The comparison sample was recruited from an upper division course in child development. All of the subjects attended a private, Catholic university in the midwest. Students generally come from upper-middle-class backgrounds. Admission is selective. The median SAT scores generally average 1,240 and 1,270. The mean age of the freshmen sample was 18.47 ($SD = 2.28$) and the mean age of the upperclassmen sample, 20.26 ($SD = 1.93$). Although subjects were recruited from psychology courses, they were broadly representative of the general student body. The freshman group consisted of 33 liberal arts majors, 6 preprofessional, 38 business, 8 engineering, 23 physical science, and 22 undecided majors. The upperclassmen group consisted of 52 liberal arts majors, 13 preprofessional, 36 business, 4 engineering, and 19 physical science majors. The student attrition rate from the freshman to senior year has ranged between 6% and 8%. Subjects received extra credit for their participation.

Instruments and Procedure

Separation-individuation was assessed by the PSI, developed by Hoffman (1984). The PSI consists of 138 items that subjects respond to in a 5-point Likert format from *not at all true of me* to *very true of me*. Sixty-nine of the items are worded to yield information about psychological separation from mother and 69 items refer to separation from father. Four scales (for both Mother and Father dimensions) are derived from the items: Functional Independence (FI; the ability to manage and direct one's practical and personal affairs without the aid of mother or father), Attitudinal Independence (AI; the image of oneself as being unique, having one's own attitudes, beliefs, and so on), Conflictual Independence (CI; freedom from excessive guilt, anxiety, mistrust, and resentment), and Emotional Independence (EI; freedom from excessive need for approval, closeness, and emotional support). High scores on the PSI represent "better" separation. The PSI seems to possess adequate psychometric properties (see Hoffman, 1984). The measure enjoys an excellent factor structure, good internal consistency (coefficient alpha) across subscales (range = .84-.92) and test-retest stability (.69-.96). Validity has been established by correlations with the Personal Adjustment subscale of the Adjective Check List and by global ratings with indices of academic and relational adjustment (Hoffman, 1984).

Adjustment to college was assessed by the CAI (Baker & Siryk, 1986). The CAI is a 67-item self-report measure that attempts to assess four features of college adjustment, namely, academic, social, and personal-emotional adjustment, and goal commitment-institutional attachment. The instrument also yields an overall adjustment score that is derived from the four subscales. In this study we restricted our attention to the academic, social, and personal-emotional subscales. The academic adjustment subscale consists of 24 items that refer to the educational demands of the college experience. The social adjustment subscale contains 20 items that assess how well adolescents deal with interpersonal experience (e.g., meeting people, making friends, and joining groups). Finally, the personal-emotional scale

consists of 15 items that refer to whether the student is experiencing general psychological distress or the somatic consequences of distress.

Each item on the CAI is a statement that asks subjects to indicate how well the subject is managing various experiences and affects. Subjects respond to the statements in a 9-point Likert format from *applies very closely to me* to *doesn't apply at all to me*. High scores on the subscales represent better adjustment. Internal reliabilities for the subscales and full scale are impressive. On the basis of two separate administrations of the CAI to different samples, Baker and Siryk (1986) reported the following coefficient alpha scores: full scale = .91 and .92, academic adjustment = .82 and .87, social adjustment = .88 and .88, and personal-emotional adjustment = .82 and .87. Criterion-related validity was established by demonstrating theoretically consistent relationships between the subscales and several independent variables (e.g., attrition, appeals for psychological services, grade point average, and social activities checklist) that are differentially relevant to the subscales. In addition, the CAI appears to accurately predict subjects' concerns with adjustment as indicated in an interview procedure, and it appears to have promise as a basis for counseling intervention (Baker & Siryk, 1986).

The timing of the data collection was not an unimportant consideration. We wanted to give our subjects, particularly our freshmen subjects, sufficient time to "settle in" to the college routine and to be exposed to a sufficient range of academic and social experiences before we assessed their adjustment. In addition, we wanted to collect data from our samples before a 10-day fall break, at which time most students return home. Consequently, we commenced data collection in the 2nd week of October, or approximately 1 week before the fall hiatus. By this time all of our subjects would have received one or more grades in their various classes. Subjects responded to these questionnaires in group settings and in accordance with standard instructions. The order of testing was randomized (for each subject) to control order effects. The total time of testing was approximately 35 min.

Results

In our first analysis we estimated scale reliabilities of the PSI and CAI subscales. We next report the tests of group (freshmen vs. upperclassmen) and sex differences on the PSI and CAI. These analyses (multivariate analysis of variance [MANOVA] and post hoc univariate *F* tests) were designed to test our general expectation that freshmen would score lower on these measures than would upperclassmen, and to determine whether sex differences would be evident in the data. Sex differences in psychological separation were further examined to determine if the lower performance of women on some separation measures translated into poorer college adjustment. Finally, two sets of regression analyses are reported. In the first set we attempted to predict adjustment to college on the basis of the Mother and Father dimensions (block entry) of the PSI. The second set examined the differential prediction of college adjustment by the separate Mother and Father dimensions of psychological separation.

Instrument Reliabilities

The first set of analyses estimated instrument reliabilities with Cronbach's coefficient alpha. The reliability coefficients for the PSI subscales for the Mother and Father dimensions were as follows: FI, EI, CI, and AI for Mother, $\alpha = .84, .89, .86,$ and $.83,$ respectively; for FI, EI, CI, and AI for Father, α

$= .86, .73, .80,$ and $.82,$ respectively. Regarding the CAI subscales, for Social Adjustment, $\alpha = .87;$ for Personal-Emotional Adjustment, $\alpha = .73;$ and for Academic Adjustment, $\alpha = .80.$ Hence, all of the measures used in this study demonstrated adequate reliability.

Group Differences and Correlational Analyses

A Grade (freshmen vs. upperclassmen) \times Sex MANOVA was calculated to assess group differences on the measures of psychological separation and adjustment to college. The means and standard deviations for these measures by grade are reported in Table 1. Significant multivariate differences (Pillai) emerged for grade, $F(11, 240) = 7.37, p < .01,$ and for sex, $F(11, 240) = 4.38, p < .01.$ The Grade \times Sex interaction was not significant. Univariate *F* tests were calculated to locate the source of the significant variation. These analyses indicated significant grade effects for FI-Mother, $F(1, 250) = 13.69, p < .001;$ for EI-Mother, $F(1, 250) = 9.21, p < .003;$ and for AI-Mother, $F(1, 250) = 11.81, p < .001.$ In all cases freshmen scored higher on functional, emotional, and attitudinal dependencies on the Mother dimension than did the upperclassmen sample. A sex main effect emerged for FI-Mother, $F(1, 250) = 8.85, p < .003;$ for EI-Mother, $F(1, 250) = 8.32, p < .004;$ and for AI-Mother, $F(1, 250) = 5.72, p < .017.$ In all cases, women scored higher on functional, emotional, and attitudinal dependencies on the Mother dimension than did men. Means and standard deviations for psychological separation, by sex, are reported in Table 2.

Regarding the PSI Father dimension, the results indicated a significant grade effect for FI-Father, $F(1, 250) = 8.75, p < .003;$ for CI-Father, $F(1, 250) = 10.31, p < .001;$ and for AI-Father, $F(1, 250) = 14.34, p < .001.$ For these analyses freshmen scored higher on functional and attitudinal dependencies on the Father dimension than did upperclassmen. However, upperclassmen scored higher on conflictual dependence on the Father dimension than did the freshman

Table 1
Means and Standard Deviations for PSI and CAI Scores by College Level

Measure	College level			
	Freshmen		Upperclassmen	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
PSI Mother				
Functional Independence	27.78	9.58	31.98	9.70
Emotional Independence	39.93	13.09	44.17	12.35
Conflictual Independence	74.08	13.34	74.51	13.39
Attitudinal Independence	23.70	9.14	27.31	9.57
PSI Father				
Functional Independence	29.55	9.92	33.24	10.27
Emotional Independence	38.45	12.02	36.29	6.26
Conflictual Independence	72.06	13.02	68.17	11.04
Attitudinal Independence	24.12	9.45	28.35	8.75
CAI				
Personal-Emotional	87.35	14.89	91.20	15.54
Social	123.71	22.64	137.41	21.34
Academic	141.28	21.13	142.49	21.69

Note. PSI = Psychological Separation Inventory; CAI = College Adjustment Inventory

Table 2
Means and Standard Deviations for PSI Scores by Sex

Measure	Men		Women	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
PSI Mother				
Functional Independence	31.24	9.04	27.79	10.56
Emotional Independence	43.88	11.25	39.43	14.52
Conflictual Independence	74.98	12.45	73.24	14.51
Attitudinal Independence	26.72	8.98	24.02	10.08
PSI Father				
Functional Independence	30.53	9.86	32.43	9.91
Emotional Independence	38.92	9.84	35.28	9.07
Conflictual Independence	71.10	12.49	69.66	11.66
Attitudinal Independence	25.68	9.09	26.76	9.92

Note. PSI = Psychological Separation Inventory.

sample. One significant sex effect emerged, for EI-Father, $F(1, 250) = 8.68, p < .004$, indicating that women were more emotionally dependent on their fathers than were men.

Regarding the CAI measures, significant grade effects were evident for Social Adjustment, $F(1, 250) = 18.89, p < .001$, and marginally for Personal-Emotional Adjustment, $F(1, 250) = 2.78, p < .08$, indicating that upperclassmen were better adjusted in these areas than were freshmen. There were no significant sex effects evident for any of the CAI measures.

The intercorrelation among the PSI and CAI measures for the freshmen and upperclassmen samples are reported in Tables 3 and 4, respectively. Within the freshmen sample (Table 3) the average correlation among the three college adjustment measures (Academic Adjustment, Social Adjustment, and Personal-Emotional Adjustment) was .33. The strongest correlation was between Personal-Emotional Adjustment and Social Adjustment ($r = .39$), and the weakest was between Academic Adjustment and Social Adjustment ($r = .23, p < .01$). Academic Adjustment and Social Adjustment were not well correlated with any of the PSI measures, with the exception of the modest correlation between Social Adjustment and EI-Father ($r = .18, p < .05$). However, Personal-Emotional Adjustment was positively correlated with four domains of psychological separation, namely, FI EI, and CI for the Mother dimension, and CI for the Father dimension ($M_r = .25$).

In general there were moderate correlations among the PSI subscales. For the four scales of psychological separation (i.e., FI, EI, CI, and AI) across the Mother and Father dimensions (e.g., FI-Mother vs. FI-Father), $M_r = .54$. The average correlation across scales was .30. The average correlations within the Mother and Father dimensions were .35 and .38, respectively. The CI scale showed the poorest pattern of correlation to the other scales. There was a positive relation between CI-Mother and EI-Father ($r = .18, p < .05$). However, two negative correlations emerged, between CI-Father and AI-Father ($r = -.28, p < .01$), and between FI-Father and CI-Father ($r = -.25, p < .01$).

Analysis of Sex Differences

The analysis of group differences revealed that women showed more functional, emotional, and attitudinal depend-

encies on mother, and emotional dependency on father, than did men. The next set of analyses attempted to determine if this pattern of dependencies was related to a poorer profile of adjustment to college for women (vs. men). Table 5 reports the correlations among the indices of psychological separation and adjustment to college by sex. As one can see, there were more similarities than differences in the pattern of correlations between indices of psychological separation and college adjustment for men and women. However, we statistically evaluated (after r to z transformations) selected contrasts (in the magnitude of the correlation coefficients) between men and women for those indices in which sex differences emerged in the test of group differences. These contrasts are denoted in Table 5. No significant differences emerged between men and women in the correlations between psychological separation and adjustment to college. This indicates that although women showed more psychological dependencies on parents than did men, this did not necessarily translate into poor college adjustment. Indeed, the lack of sex differences in college adjustment scores also supports this finding.

Regression Analyses

Two sets of multiple regression analyses were calculated to more rigorously assess the pattern of relations among the PSI and CAI subscales. In the first set of analyses we attempted to predict scores on the Academic Adjustment, Social Adjustment, and Personal-Emotional Adjustment subscales of the CAI on the basis of the Mother and Father dimensions of the PSI. These predictor subscales were entered in two blocks. The first block contained the four Mother subscales (AI-Mother, CI-Mother, EI-Mother, and FI-Mother) and was entered first in the regression equation. The second block contained the Father subscales (AI-Father, CI-Father, EI-Father, and FI-Father) and was entered second into the regression equation. This order of entry was suggested by several findings in the literature that suggest that the adolescent-mother relationship may be particularly crucial for adolescent adjustment (e.g., Baranowski, 1981; Lapsley, Harwell, Olson, Flannery, & Quintana, 1984; Steinberg, 1981; Sullivan & Sullivan, 1980). Analyses were run separately for the freshmen and upperclassmen samples. These analyses are summarized in Table 6.

For the freshmen sample Academic Adjustment scores were not significantly predicted by the first block of Mother variables, accounting for only 2.9% of the variation in Academic Adjustment. The addition of Father variables did not significantly improve the prediction ($\Delta R^2 = .075$). The prediction of Social Adjustment scores by the Mother and Father scores was particularly poor. Both blocks of measures were only able to account for about 2% of the variation in Social Adjustment. A different picture emerges, however, with the prediction of freshmen Personal-Emotional Adjustment scores. In this analysis the block of Mother variables yielded a significant prediction of Personal-Emotional Adjustment scores, $F(4, 121) = 4.88, p < .01$, accounting for approximately 14% of the variance. The addition of Father variables significantly improved the prediction of Personal-Emotional Adjustment scores ($\Delta R^2 = .063$).

Table 3
Correlation Matrix for the PSI and CAI for Freshmen

Variable	PSI Mother				PSI Father				CAI		
	1	2	3	4	5	6	7	8	9	10	11
PSI Mother											
1. FI	—	.75**	-.08	.65**	.56**	.49**	-.06	.48**	.01	.25**	-.04
2. EI		—	.02	.57**	.51**	.69**	.01	.35**	-.04	.31**	-.00
3. CI			—	-.06	.05	.18*	.26**	.05	.14	.17*	-.02
4. AI				—	.37**	.41**	-.12	.65**	-.02	.09	-.08
PSI Father											
5. FI					—	.73**	-.25**	.51**	-.07	.08	-.03
6. EI						—	-.14	.43**	-.14	.17*	-.01
7. CI							—	-.28**	.15	.25**	-.07
8. AI								—	-.13	.02	-.08
CAI											
9. AA									—	.35**	.23**
10. PEA										—	.39**
11. SA											—

Note. PSI = Psychological Separation Inventory; CAI = College Adjustment Inventory; FI = Functional Independence; EI = Emotional Independence; CI = Conflictual Independence; AI = Attitudinal Independence; AA = Academic Adjustment; PEA = Personal-Emotional Adjustment; SA = Social Adjustment.

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

In contrast to the freshmen analysis, in which no significant predictors emerged for Academic Adjustment and for Social Adjustment, we found several predictors in the upperclassmen data. Academic Adjustment scores were significantly predicted by the Mother variables, $F(4, 114) = 4.86, p < .01$, and the addition of Father variables significantly improved the prediction ($\Delta R^2 = .087$), with both blocks jointly accounting for 23% of the variance. For Social Adjustment the Mother variables again emerged as a significant predictor, $F(4, 114) = 2.77, p < .05$, accounting for 8.5% of the variance. The addition of Father variables did not improve the prediction ($\Delta R^2 = .033$). The Mother variables also accounted for a significant amount of variation in Personal-Emotional Adjustment, $F(4, 114) = 8.30, p < .01$ ($R^2 = .218$). Once again, the block of Father variables did not improve the prediction

of Personal-Emotional Adjustment scores in the upperclassmen sample ($\Delta R^2 = 0.53$).

In the aforementioned analyses we attempted to determine if blocks of Mother and Father PSI scores (FI, EI, AI, and CI) were differentially predictive of academic, social, and personal-emotional adjustment to college. The results indicated that the Personal-Emotional Adjustment scores of freshmen were significantly predicted by scores on both the Mother and Father dimensions of the PSI. Scores on the PSI Mother were also a significant predictor of the Academic Adjustment, Social Adjustment, and Personal-Emotional Adjustment of upperclassmen, with the block of Father variables also contributing to the prediction of Academic Adjustment Scores in the upperclassmen sample. A question that is left unaddressed by these analyses concerns the differential prediction of ad-

Table 4
Correlation Matrix for the PSI and CAI for Upperclassmen

Variable	PSI Mother				PSI Father				CAI		
	1	2	3	4	5	6	7	8	9	10	11
PSI Mother											
1. FI	—	.78**	.14	.58**	.49**	.16*	.18*	.27**	.13	.34**	.02
2. EI		—	.18*	.55**	.39**	.16*	.24**	.28**	.22**	.39**	.12
3. CI			—	-.09	.26**	.08	.28**	.12	.26**	.24**	.09
4. AI				—	.28**	.04	.21*	.25**	-.06	.06	-.10
PSI Father											
5. FI					—	.25**	.08	.68**	-.00	.20*	-.06
6. EI						—	-.13	.13	-.08	.11	-.06
7. CI							—	-.18*	.31**	.29**	.09
8. AI								—	-.12	.08	-.17*
CAI											
9. AA									—	.55**	.44*
10. PEA										—	.52**
11. SA											—

Note. PSI = Psychological Separation Inventory; CAI = College Adjustment Inventory; FI = Functional Independence; EI = Emotional Independence; CI = Conflictual Independence; AI = Attitudinal Independence; AA = Academic Adjustment; PEA = Personal-Emotional Adjustment; SA = Social Adjustment.

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

Table 5
Correlations Among Indexes of the Psychological Separation Inventory Mother and Father Dimensions and College Adjustment Inventory by Sex

Index	Men	Women
Functional Independence: Mother		
Academic Adjustment	.06	-.03
Personal-Emotional Adjustment ^a	.3542*	.2736*
Social Adjustment	.1045	.0135
Functional Independence: Father		
Academic Adjustment	-.04	-.0028
Personal-Emotional Adjustment	.1980*	.1387
Social Adjustment	.0180	-.0144
Conflictual Independence: Mother		
Academic Adjustment	.2180*	.2103*
Personal-Emotional Adjustment	.2070*	.2251*
Social Adjustment	.0210	.0922
Conflictual Independence: Father		
Academic Adjustment	.2279*	.2821*
Personal-Emotional Adjustment	.2938*	.2620*
Social Adjustment	-.0481	.0221
Emotional Independence: Mother		
Academic Adjustment	.1190	.0550
Personal-Emotional Adjustment ^a	.4410*	.2495*
Social Adjustment ^a	.1810**	.0722
Emotional Independence: Father		
Academic Adjustment	-.0870	-.1332
Personal-Emotional Adjustment ^a	.1690*	.0420
Social Adjustment	-.0120	-.0696
Attitudinal Independence: Mother		
Academic Adjustment ^a	.0500	-.1745*
Personal-Emotional Adjustment	.1100	.0411
Social Adjustment	-.0160	-.0496
Attitudinal Independence: Father		
Academic Adjustment	-.0926	-.1082
Personal-Emotional Adjustment	-.0788	.0972
Social Adjustment	.0937	-.0633

^a Contrast selected for test of the difference between correlations. All contrasts are nonsignificant (see text).
* $p < .05$.

justment to college by the separate Mother-Father dimensions of the PSI. A second set of multiple regression analyses was conducted to address this question. For these analyses the Mother and Father scores for each dimension (e.g., FI-Mother and FI-Father) were simultaneously entered as predictors for each index of college adjustment. This permitted us to determine whether the Mother or Father variable for each dimension (FI, EI, AI, and CI) made differential contributions to the prediction of Academic Adjustment, Social Adjustment, and Personal-Emotional Adjustment. These analyses were conducted for both the freshmen and upperclassmen samples and are summarized in Table 7.

Note that Table 7 reports only the significant effects for the Mother and Father variables entered jointly into the regression equation. For example, in the freshmen sample, the joint effect of FI-Father and FI-Mother was a significant predictor of Personal-Emotional Adjustment. What we shall report here is the subsequent F test of significance of the Mother and Father standardized β coefficients. Hence, in the freshmen sample, FI-Mother was a significant predictor of Personal-Emotional Adjustment, $\beta = .297$, $F(8, 121) = 8.25$, $p < .01$, but FI-Father was not. Similarly, EI-Mother was the

significant source of the prediction of Personal-Emotional Adjustment, $\beta = .359$, $F(8, 121) = 9.42$, $p < .01$. However, CI-Father was the better predictor of Personal-Emotional Adjustment, $\beta = .294$, $F(8, 121) = 10.95$, $p < .01$, than was CI-Mother. Hence, the Personal-Emotional Adjustment scores of the college freshmen were significantly predicted by FI-Mother, EI-Mother, and CI-Father. No significant predictors emerged for the Social Adjustment and Academic Adjustment scales.

In the upperclassmen sample Personal-Emotional Adjustment was significantly predicted by FI-Mother, $\beta = .317$, $F(8, 114) = 10.44$, $p < .01$; EI-Mother, $\beta = .369$, $F(8, 114) = 18.66$, $p < .01$; CI-Mother, $\beta = .188$, $F(8, 114) = 4.49$, $p < .05$; and CI-Father, $\beta = .260$, $F(8, 114) = 8.59$, $p < .01$. Academic Adjustment was significantly predicted by EI-Mother, $\beta = .228$, $F(8, 114) = 6.43$, $p < .05$; CI-Mother, $\beta = .200$, $F(8, 114) = 5.20$, $p < .05$; and CI-Father, $\beta = .276$, $F(8, 114) = 9.94$, $p < .01$. Hence, the Personal-Emotional Adjustment scores of upperclassmen were related to FI, EI, and CI for the Mother dimension and also to CI for the Father dimension. In addition, CI-Mother, CI-Father, and EI-Mother were associated with Academic Adjustment in the upperclassmen.

Convergent-Discriminant Relation

One final issue was the possibility that our indices of psychological separation and of adjustment to college were essentially measuring the same construct, say, "emotional

Table 6
Summary of Regression Analyses Predicting Scores on the College Adjustment Inventory Scales by Mother and Father Psychological Separation Inventory Scores

Dependent variable/ block entered	Total R^2	Increase in R^2	F for increase in R^2	p
Freshmen				
Academic Adjustment				
Mother separation	.029	.029	0.94	<i>ns</i>
Father separation	.104	.075	2.53	<.05
Social Adjustment				
Mother separation	.010	.010	0.30	<i>ns</i>
Father separation	.016	.006	0.20	<i>ns</i>
Personal-Emotional Adjustment				
Mother separation	.135	.135	4.88	<.01
Father separation	.198	.063	2.37	.0558
Upperclassmen				
Academic Adjustment				
Mother separation	.140	.140	4.86	<.01
Father separation	.227	.087	3.23	<.05
Social Adjustment				
Mother separation	.085	.085	2.77	<.05
Father separation	.118	.033	1.08	<i>ns</i>
Personal-Emotional Adjustment				
Mother separation	.218	.218	8.30	<.01
Father separation	.272	.054	2.11	<i>ns</i>

Note. Blocks of separation variables include Functional Independence, Emotional Independence, Conflictual Independence, and Attitudinal Independence scales on Mother and Father dimensions.

Table 7
Summary of Regression Statistics Predicting Scores on the College Adjustment Inventory Scales by Psychological Separation Inventory Scores for Freshmen and Upperclassmen

Measure	Freshmen			Upperclassmen		
	Total R ²	F	p	Total R ²	F	p
Functional Independence						
Academic Adjustment	.01	0.54	ns	.03	1.63	ns
Social Adjustment	.00	0.11	ns	.01	0.37	ns
Personal-Emotional Adjustment	.07	4.57	<.05	.12	8.21	<.01
Emotional Independence						
Academic Adjustment	.03	1.67	ns	.05	3.49	<.05
Social Adjustment	.00	0.01	ns	.02	1.51	ns
Personal-Emotional Adjustment	.10	6.87	<.01	.14	10.25	<.01
Attitudinal Independence						
Academic Adjustment	.03	1.98	ns	.01	0.54	ns
Social Adjustment	.01	0.55	ns	.03	1.77	ns
Personal-Emotional Adjustment	.01	0.87	ns	.01	0.91	ns
Conflictual Independence						
Academic Adjustment	.04	2.70	ns	.15	10.57	<.01
Social Adjustment	.00	0.14	ns	.02	1.47	ns
Personal-Emotional Adjustment	.11	7.55	<.01	.13	9.14	<.01

adjustment," so that any observed relation between psychological separation and college adjustment was circular. This possibility is difficult to rule out in the absence of further validation work on the principal measures. However, we can descriptively address the issue by examining the overall pattern of convergent and discriminant correlations among our measures. If psychological separation and adjustment to college are indeed correlated, but distinct, constructs, the within-domain correlations could be expected to be higher than between-domains correlations. The average within- and between-domains correlations for the freshmen and upperclassmen groups are reported in Table 8. In the freshmen sample the correlations among the adjustment to college measures (within domain) accounted for about 10% of the variance. In contrast, the within-domain correlations for the PSI Mother and Father variables accounted for 42% and 31% of the variance, respectively. An examination of the between-domains correlations shows that the correlations between CAI scales and PSI Mother and Father dimensions accounted for 5% and 6% of the variance, respectively. Hence the psychological separation variables accounted for five to eight times more variance within domain than between separation and college adjustment. A somewhat weaker convergent-discriminant pattern obtained in the upperclassmen sample. Here the within-domain correlations for the PSI Mother dimension accounted for approximately four times the variance as the between-domains correlations between PSI Mother and CAI. A clear discriminant pattern was more difficult to discern, however, for the PSI Father dimension and CAI scales relation. Overall, then, no strong claims can be made for convergence between the adjustment and separation constructs.

Discussion

Separation-individuation is an ego developmental process that is widely considered to be the principal developmental

task of adolescence. Indeed, Douvan and Adelson (1966, p. 119) noted that separation from the family "is one of the universals of the adolescent experience." The purpose of this study was to examine the relation between psychological separation and adjustment to college in freshmen and upperclassmen samples.

As expected, college freshmen reported more psychological dependencies on mother and father than did upperclassmen. Freshmen showed more functional and attitudinal dependence on both mother and father, and more emotional dependence on mother, than did upperclassmen. Upperclassmen, on the other hand, revealed more conflictual dependencies on father than did freshmen. Although separation-individuation is thought to begin in early adolescence (Lapsley & Rice, 1988), possibly in association with the onset of puberty (Blos, 1962), these results indicate that separation-individuation is a task far from resolved by late adolescence. Indeed, difficulties with excessive guilt, anxiety, and resentment (i.e., with conflictual dependence) may still be evident well into the last years of college. One source of this conflictual dependence may lie in the fact that although the upperclassman has made considerable progress in other areas of separation-individuation, he or she is still necessarily bound to the parental orbit because of the financial exigencies of attending college. Hence, for the student who manages and directs his or her affairs with some facility (functional independence), who has a self-image of being a unique individual with self-chosen attitudes and values (attitudinal independence), and who is free from an excessive need for approval and closeness (emotional independence), the fact of financial dependence on parents, with the control that financial dependence invites, may be a troubling source of resentment, anxiety, or guilt. One might expect, then, that the full attainment of conflictual independence may have to await the full entry into adult society that comes with college graduation. The present results indicate, at the very least, that the resolution of separation tasks across the four dimensions is not uniform.

We also observed a number of sex main effects in this study. In general, women showed more functional, emotional, and attitudinal dependencies on mother and emotional dependence on father, than did men. These results, however, must

Table 8
Average Convergent-Discriminant Correlations Between Psychological Separation and Adjustment to College by College Level

College level	Adjustment to college	Separation-mother	Separation-father
Freshmen			
Adjustment to college	.32	.24	.22
Separation-mother		.65	.55
Separation-father			.56
Upperclassmen			
Adjustment to college	.38	.28	.26
Separation-mother		.53	.26
Separation-father			.27

Note. Within-domain correlations are on the main diagonal. Only statistically significant correlations are included in the averages. See Tables 3 and 4.

be viewed with caution. They should not necessarily be interpreted to indicate that the course of ego development in women is somehow more problematic than it is for men. Indeed, Josselson (1988) and others (Gilligan, 1982; Marcia, 1980) have argued that the feminine orientation to ego identity development revolves around preserving relational bonds, in maintaining ongoing connections with others. In other words, women may define themselves in a context of relationship, and therefore themes of attachment, affiliation, connectedness, communion, and bonding may be more decisive than autonomy, separation, and disengagement (Josselson, 1988). Consequently, women may be more sensitive to relational issues, more attentive to areas of potential conflict, and hence report more areas of concern regarding the relationship to parents than would men. The sex effects observed here may be reflecting this more feminine orientation. That this may be the case is strengthened by the observation that there were no sex-related patterns of college maladjustment. Hence, although women showed more psychological "dependencies" than did men, these dependencies were not associated with impaired adjustment to college. These results are in contrast to findings reported by Lopez et al. (1986), who reported that psychological separation in women was negatively correlated with college adjustment (and unrelated to adjustment to college in men). As noted previously, however, small sample size and the failure to differentiate psychological separation-individuation into dimensions in the latter study may have led to a misreading of the separation-adjustment relationship.

We expected to find that college freshmen would evidence more adjustment problems than would upperclassmen. This hypothesis was supported for social adjustment and (somewhat weakly) for personal-emotional adjustment. We further hypothesized that college adjustment would be associated with psychological independence from mother and father. Our results attest to a more pervasive relation between separation and college adjustment than previously reported in the literature (e.g., Hoffman & Weiss, 1987). The first set of regression analyses revealed that, with some exceptions, psychological separation from mother was more strongly predictive of college adjustment than were father variables. These results were differentiated in the second set of regressions. Here it was shown that functional and emotional independence from mother, and conflictual independence from father, were associated with personal-emotional adjustment in freshmen. In the upperclassmen sample, personal-emotional adjustment was also associated with functional and emotional independence from mother and with conflictual independence from father and mother. Unlike the freshmen sample, academic adjustment was associated with emotional and conflictual independence from mother and conflictual independence from father.

A number of patterns are evident in the results. First, it is clear that the dimensions of psychological separation do not predict adjustment to college across the board. For example, no significant predictors emerged in the second set of regression analyses for social adjustment in either sample (although the block of mother variables was predictive in the upperclassmen sample). Apparently, psychological separation makes only small contributions to the late adolescent's mastery of the interpersonal demands (e.g., meeting people and making

friends) of the college experience. In addition, although psychological separation did not predict academic adjustment in freshmen, several predictors did emerge in the upperclassmen sample (emotional and conflictual independence from mother and conflictual independence from father). The absence of predictors of academic adjustment in our freshmen sample is perhaps not surprising. It may simply reflect the fact that first-semester freshmen have not had as much feedback concerning their academic performance compared with upperclassmen, who can draw on at least two (juniors) or three (seniors) years of feedback to inform their estimation of academic adjustment.

The indices of psychological separation, particularly emotional independence from mother, appeared more strongly related to personal-emotional adjustment, and this was true for both freshmen and upperclassmen. Personal-emotional adjustment concerns the student's report of psychological distress, and the somatic consequences that might accompany such distress. It would appear, then, that psychological independence has mostly intrapsychic benefits, contributing to the student's sense of psychological well-being.

A number of caveats deserve mention. We have interpreted our findings to suggest that advances in psychological separation from parents contributes to the academic, social, and personal-emotional adjustment of late adolescents. Clearly, however, given the correlational nature of the design, the direction of effect could be reversed. In addition, it might be tempting, given the results reported here and elsewhere (e.g., Hoffman & Weiss, 1987), to use psychological separation as a diagnostic category for screening presenting problems in the college counseling situation. We think this would be premature in the absence of both further validation work on the PSI and longitudinal studies of psychological separation and college adjustment. However, we do believe that the concept of psychological separation is important for understanding late adolescent adaptation. Recent developmental theory on adolescent adjustments (e.g., Greenberg et al., 1983; Josselson, 1980; Quintana & Lapsley, 1987) and neopsychoanalytic insights (e.g., Mahler, Pine, & Bergman, 1975) lead us to believe that appropriate intrapsychic representations of parents provide the basis for mastery of adaptational tasks. In order to advance the clinical implications of this research, future research should examine more directly the influence of family dynamics on the separation process. Allison and Sabatelli (1988), for example, have suggested a model of adolescent development that integrates theories of family therapy with theories of individual development. Joint consideration of these literatures should take us further to a more comprehensive understanding of normal and problematic adolescent development.

In sum, the present results show that college freshmen reveal more psychological dependencies on both mother and father and poorer social and personal-emotional adjustment to college than do upperclassmen. A pervasive relation was found between psychological separation and adjustment, although separation did not predict adjustment across the board. Sex effects also emerged, with women showing more psychological dependencies than men, although this did not seem to translate into a poorer profile of adjustment. Finally, our results show that advances in separation are not uniform

and resolution of this crucial psychosocial task is not entirely resolved by late adolescence.

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