

## **Social Support and Psychosocial Competence: Explaining the Adaptation to College of Ethnically Diverse Students<sup>1</sup>**

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*Examined relationships among social support, psychosocial competence, and adaptation to college in a sample of 357 African American, Asian American, Latino, and white college students. Social support and active coping were significant predictors of adaptation to college, whereas locus of control was not. However, there was an interaction between ethnicity and locus of control indicating that although internal African American, Latino, and white students had higher adaptation-to-college scores than external students, the opposite was true for Asian Americans. The relationships among social support, internality, and active coping were also explored. Satisfaction with social support and internality were positively related to active coping, but locus of control and social support were unrelated. Active coping and internality were significantly related to each other for all groups except for African Americans. Although most relationships were the same across groups, these findings call attention to the role of ethnicity as a moderator of college adjustment processes.*

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**KEY WORDS:** psychosocial competence; social support; ethnic minorities; active coping; locus of control; adaptation to college.

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Ethnic minority status is considered a risk factor for stress and negative outcomes in areas such as health, education, and psychological well-being (Becker et al., 1992; Moritsugu & Sue, 1983). Psychological well-being may be influenced by an individual's ability to perceive the environment as supportive and to adopt beliefs and engage in behaviors conducive to competent functioning. These contributors to well-being are likely to differ across ethnic groups as a consequence of cultural differences and varying degrees of experience with discrimination.

Negative outcomes for ethnic minorities are evident in the area of educational attainment. For example, Latinos are underrepresented in higher education. Only 51% of Latinos complete high school, and much fewer than half of Latinos enter college (O'Brien, 1993). Retention rates for Latinos who enter college have been estimated to be as low as 20% (Solberg, Valdez, & Villarreal, 1994). Similarly, African Americans are only half as likely as whites to obtain a bachelor's degree (U.S. Census Bureau, 1993), and college dropout rates are 1.5 times higher for African Americans (Carter & Wilson, 1991; Kemp, 1990). By contrast, some Asian American ethnic groups have been more academically successful than whites, Latinos, and African Americans (Sue & Okazaki, 1990). It is unclear what factors are most significant in explaining these disparities in educational outcomes.

Much research on college student adjustment has focused on negative mental health outcomes (e.g., anxiety and depression) rather than on positive outcomes (e.g., adaptation, optimism). In this study, we examined the possibility that satisfaction with social support and psychosocial competence—the ability to function effectively and have a moderate sense of control—contribute to adaptation to college (a positive outcome) among ethnic minority and nonminority college students. We examined the moderator role that ethnicity may play in the way college students from different ethnic categories cope with college.<sup>3</sup> Research suggests that internality and active coping, two components of psychosocial competence, and social support differ across ethnic groups (Jay & D'Augelli, 1991; Jung & Khalsa, 1989; Liang & Bogat, 1994). However, ethnic differences in the patterning of relationships among these variables have not been examined sufficiently. Therefore, we also examined interrelationships among satisfaction with social support, locus of control, and active coping, as well as the ethnic differences in such interrelationships. We controlled socioeconomic status

<sup>3</sup>In this study, to ensure sufficient statistical power, we analyzed differences between ethnic categories, each of which includes several ethnic groups (see Uehara, Takeuchi, & Smukler, 1994). For instance, Chinese Americans, Japanese Americans, and Filipino Americans, although distinctive, are grouped together in the Asian American ethnic category. These categories are not representative of the distribution of ethnic minority populations within the United States.

(SES), age, and gender because past studies have demonstrated their impact on locus of control (Liang & Bogat, 1994; Zea & Tyler, 1994), on coping styles (Fondacaro & Moos, 1987; Hobfoll, Dunahoo, Ben-Porath, & Monnier, 1994), and on social support (Cauce, Felner, & Primavera, 1982; Liang & Bogat, 1994).

The aims of this study were to (a) investigate the joint roles of social support and psychosocial competence in predicting adaptation to college; (b) examine the relationship between social support and psychosocial competence; and (c) explore differences in the relationships among these variables for the four ethnic categories represented in this college sample.

### *Predicting Adaptation to College*

Adaptation to college is a stressful and challenging process for students. In this study, successful adaptation is defined as being socially integrated with other students, participating in campus activities, responding to academic requirements, and being attached and committed to the educational institution. A successful adaptation to college has typically been defined by such criteria as remaining in college, enjoying psychological well-being, and performing well academically (Baker & Siryk, 1984; Gerdes & Mallinckrodt, 1994).

Both cognitive and noncognitive factors are related to college adjustment. Cognitive factors include high school grades, SAT scores, and scores on tests of abilities. Noncognitive variables (e.g., social support, perception of discrimination) are related to college attrition (Gerdes & Mallinckrodt, 1994; Tracey & Sedlacek, 1987, 1989) but the importance of these variables differs between nonwhite and white students (Arbona & Novy, 1990; Bennett & Okinaka, 1990; Tracey & Sedlacek, 1985). Different factors also appear to influence the adaptation of white and African American college students (Pascarella, 1985; Tinto, 1987; Tracey & Sedlacek, 1985, 1987). Tracey and Sedlacek (1985, 1987), for example, found that noncognitive factors such as positive self-concept, realistic self-appraisal, academic familiarity, and planfulness predicted the graduation of African American students better than they predicted the graduation of white students. Arbona and Novy (1990) found the opposite. Noncognitive factors were related to the graduation of White students but not of African American or Mexican American students.

Little is known about factors influencing adaptation to college among Latino and Asian American students, and more research including all ethnic groups is warranted to clarify discrepant findings. It is essential, in establishing the validity of any theoretical model of adaptation to college, to

determine whether relationships observed in one ethnic group hold true for others. Little research has been conducted assessing the generalizability of research conducted with white college students to other ethnic groups. Such work can help us determine which influences on adjustment are generalizable and which are group-specific and, as a result, how theoretical models must be modified in order to be applicable across ethnic groups.

### *Ethnicity, Social Support, and College Adaptation*

Research suggests that social support positively affects college outcomes such as retention (Mallinckrodt, 1988), quality of college life (Abbey, Abramis, & Caplan, 1985), ability to deal with academic stress (Reifman & Dunkel-Schetter, 1990), satisfaction with social and academic aspects of college life (Riggio, Watring, & Throckmorton, 1993), and college adjustment (Hays & Oxley, 1986; Robbins, Lese, & Herrick, 1993). Only a few studies have used ethnically diverse samples, however (cf. Mallinckrodt, 1988; Reifman & Dunkel-Schetter, 1990; Robbins et al., 1993), and only one made cross-ethnic group comparisons (Mallinckrodt, 1988). Mallinckrodt found that perceived social support was an important predictor of retention of African American students, and to a lesser extent, of white students.

However, several studies suggest that the relationship between social support and college adaptation is likely to vary depending on culture and ethnicity. For instance, Felsten and Wilcox (1992) found that satisfaction with social support had no impact on well-being and academic performance in a predominantly white college sample. Liang and Bogat (1994) found that social support predicted maladjustment among Chinese college students but buffered stress among white college students in the United States. Latinos and African Americans appear to utilize family support more than whites (Mindel, 1980; Stewart & Vaux, 1986), but there are no ethnic group comparisons involving Asian Americans. This study contributes to the literature by examining the relationship between social support and adaptation to college in four ethnic groups (African Americans, Latinos, Asian Americans, and whites). Based on previous research, we hypothesized that satisfaction with social support would be related to adaptation to college for African American, white, and Latino students. Based on Liang and Bogat's (1994) findings for Chinese students this relationship was not expected for Asian American students because they may rely more on coping strategies of self-discipline rather than on seeking social support.

*Ethnicity, Psychosocial Competence, and College Adaptation*

Psychosocial competence has been defined as an individual's belief in his or her ability to control outcomes, belief in the world as a predictable place, and corresponding behavioral tendency to engage in active coping (Tyler, 1978; Tyler, Brome, & Williams, 1991). This psychosocial competence model calls attention to positive resources not only to help people cope with stressful events but to contribute to goal achievement and well-being even in the absence of stress (Zea, Reisen, & Tyler, in press). This model is offered as an alternative to models that identify psychological deficiencies as the cause for ethnic minority educational underachievement. Tyler and his colleagues have utilized Rotter's (1966) locus of control scale to assess the self-attributes dimension, Rotter's (1967) Interpersonal Trust scale to assess the self-world dimension, and Tyler's (1978) Behavioral Attributes of Psychosocial Competence Scale (BAPC) to assess active coping, the behavioral-attributes dimension. Active coping is defined as the tendency to rely on initiative, goal setting, planning, and effort in accomplishing goals, which is proactive and not merely reactive to stress. Because the relationships between the trust dimension and the other two dimensions have not been strong (Tyler, 1978), this study assessed only the locus of control and active coping components of psychosocial competence, and instead included social support in the model examining adaptation to college among ethnically diverse college students.

Although no studies have examined psychosocial competence and adaptation to college among North American students, both locus of control and active coping have been found to predict low levels of psychological symptomatology and high academic performance among Puerto Rican college students (Otero, Tyler, & Labarta, 1986), as well as positive adaptation to college among Indian students (Tyler, Dhawan, & Sinha, 1988).

Tyler et al. (1988) surveyed Indian college students and operationalized adaptation as the need to excel or achieve, as well as persistence, in a variety of situations. They found that active coping correlated positively with persistence for all students, but correlated with need for achievement only among students whose parents were college-educated. Locus of control—the second component of psychosocial competence—failed to predict persistence, but was related to need for achievement among students whose parents were college-educated. This last finding is not surprising given that internal locus of control has been frequently associated with high SES (Dyal, 1984). That is, people who control resources also feel more in control than those who do not.

Mooney, Sherman, and Lo Presto (1991) detected significant relationships between academic locus of control and adaptation to college in a sample of white female college students. Moreover, academic locus of con-

rol was a stronger predictor than self-esteem. In a prospective study, though, Zea (1990) found that psychosocially competent Colombian students (internally controlled, active copers) were rated as less adapted by their faculty than students low in psychosocial competence (externally controlled, low in active coping). Faculty perceptions may differ from student perceptions, however, which may explain these contradictory findings; faculty may not know the students well, and, in this particular cultural context, may not value internality.

Since no studies in the United States have examined relationships between generalized locus of control, active coping, and adaptation to college, this study attempts to contribute to the existing literature by doing so. Based on most previous research, a positive relationship between active coping and adaptation to college was expected for all groups. In addition, it was expected that internally controlled students would manifest better adaptation to college than their external counterparts across ethnic groups.

*Relationships Between Social Support, Locus of Control, and  
Active Coping in Different Ethnic Groups*

Although it has been more than 15 years since the construct of psychosocial competence was conceptualized, little is known about whether a relationship between psychosocial competence and satisfaction with social support is evident across varied ethnic groups. Psychosocially competent individuals, who cope actively with life circumstances and believe they are able to control their life outcomes, should be more likely to access social support when they need it. At the same time, individuals who enjoy good social support are likely to be in a better position to develop active coping skills and internal beliefs of control because their relationships provide them with a sense of security. However, there is no empirical evidence of the relationships among these variables.

Earlier studies of psychosocial competence revealed ethnic differences in the strength of the relationship between locus of control and active coping. These studies have found significant relationships between active coping and internality among Colombian college students (Zea, Tyler, & Franco, 1991) and white Americans (Tyler, 1978), but not among African Americans (Gatz, Gease, Tyler, & Moran, 1982). A plausible explanation for the different patterns for blacks and whites in the U.S. is that African Americans have not had control of many life outcomes, especially in social and political arenas. Consequently, internality may not be adaptive for African Americans (Aruffo, Coverdale, Pavlik, & Vallbona, 1993; Tashakkori & Thompson, 1991; Wenzel, 1993). However, African Americans have had

to cope actively with difficult problems such as racism and to anticipate and plan for their future. Based on studies by Gatz et al. (1982), Tyler (1978), Tyler et al. (1988), and Zea et al. (1991), we hypothesized that the relationship between locus of control and active coping would be moderated by ethnicity in our sample. Specifically, we predicted that locus of control and active coping would be related for Latinos, Asian Americans, and whites, but not for African Americans.

Research involving predominantly white samples suggests that there is also a positive relationship between social support and locus of control. Most of these studies have found that internals are better able than externals to use social support in dealing with stress (Cummins, 1988, 1989; Eckenrode, 1983; Lefcourt, Martin, & Saleh, 1984; Sandler & Lakey, 1982; Stevens, 1988). Individuals who attribute outcomes to themselves may be more efficient mobilizing social support as a means of coping with stress than those who attribute their outcomes to chance or powerful others. Until recently, research had failed to examine whether this relationship varies as a function of ethnic or cultural group. Liang and Bogat (1994) found that for whites with an internal locus of control, the perception of social support acted as a buffer against stress. However, among internal Chinese students, social support was not beneficial in counteracting the effect of stress. In addition, although the receipt of social support was associated with high levels of stress among Chinese externals, the perception of available support was associated with low levels of stress. These findings point to the importance of testing for ethnic differences in the relationship between locus of control and social support. Based on previous findings, we hypothesized locus of control and social support would be positively related for whites but not for Asian Americans. A lack of previous research with Latinos and African Americans prevented us from hypothesizing a relationship for these two groups.

In summary, this study hypothesized that (a) satisfaction with social support, internality, and active coping would be overall linked to a successful adaptation to college; (b) ethnicity would moderate the relationship between these variables and adaptation to college, with Asian American students not benefiting from social support, consistent with Liang and Bogat's (1994) findings; (c) positive relationships among social support, locus of control, and active coping would be found for all groups; and (d) ethnicity would moderate the relationships between locus of control and coping, with African Americans exhibiting an opposite pattern as in Gatz et al. (1982) findings; and between locus of control and social support, with Asian Americans differing from other groups as in Liang and Bogat's (1994) findings. Ethnicity would not moderate the relationship between active coping and social support given that no previous studies have suggested ethnic differences in this relationship.

## METHOD

### Participants

Three hundred fifty-seven college students from diverse ethnic backgrounds attending a private university in a large northeastern city were recruited for this study. Participation in the study was completely voluntary and not a course requirement. Thirty-one participants who did not complete all the measures due to time constraints were not included in the study. No differences in major measures were found between students with complete and students with incomplete measures. The ethnic distribution of the remaining sample was 56 (18.80% of the final sample) African Americans, 66 (22.15%) Latinos, 71 (23.83%) Asian Americans, 105 (35.23%) Caucasians, and 28 who answered "other" to ethnicity (e.g., Middle-Eastern).<sup>4</sup> To ensure accuracy in identifications of ethnicity, participants were asked to define their ethnicity both by using U.S. Census Bureau categories and by defining it in their own words. This second type of information was used to clarify discrepancies (e.g., checking Native American when the student meant born in the United States) and to obtain more specific information, such as the student's specific ethnic group within their ethnic category. In order to allow for comparisons among the four main ethnic categories, those who responded "other" were excluded from the analyses. The final sample included 203 (68.12%) women and 95 (31.88%) men,<sup>5</sup> of which 103 were Freshmen, 74 Sophomores, 68 Juniors, and 52 Seniors.

Family income was distributed as follows: Under 20,000 (9.51%); 20,000 to 40,000 (19.01%); 40,000 to 60,000 (21.48%); 60,000 to 80,000 (21.48%); and above 80,000 (30.63%). Parental education consisted of five categories: Elementary school, high school, technical school, college, graduate or professional school.

<sup>4</sup>Most African Americans (73.21%) were born in the United States, but some had Caribbean origins (7.15%), recent African roots (8.95%), and "other" backgrounds (e.g., Canada, England). Among the Latino group, 48.44% were born in the United States, 32.82% in South America, 4.69% in Central America, 4.69% in the Caribbean, and 9.36% "other". Many U.S.-born Latinos did not further specify their ethnicity (e.g., Mexican American, Puerto Rican, Cuban American). Approximately 72% Asian Americans were U.S.-born, of Chinese, Korean, Vietnamese, and Filipino origins. Among the foreign-born, 18.31% were born in Korea, and 9.86% in the Philippines. Approximately 20% of the students enrolled at this particular University are ethnic minorities. Ethnic minority students were oversampled in order to allow for statistical comparison among groups.

<sup>5</sup>Gender distributions by ethnic group were: For Asian Americans, 44 women and 27 men; for African Americans, 34 women and 22 men; for Latinos, 44 women and 22 men; and for whites, 81 women and 24 men.



## Measures

### *Social Support*

The *Arizona Social Support Interview Schedule* (ASSIS; Barrera, 1981) asks participants to enumerate the number of persons from whom they obtain the following six types of social support: emotional, guidance or appraisal, material or financial, feedback, physical or instrumental, and social interaction. They are also asked to indicate on a 5-point Likert scale whether the support they receive from each person named in each area is *about right* (5) or whether they *would like a lot more* support (1). A composite satisfaction score is obtained by adding individual satisfaction scores and dividing by the number of people in the person's network. For purposes of this study, only overall satisfaction with social support was employed in the analyses, as perception of social support is typically more important than the actual size of the social support network (Barrera, 1981, 1986; de Jong-Gierveld, 1986; Stokes, 1983; Ward, Sherman, & LaGory, 1984). The internal consistency for the overall satisfaction score was .87.

### *Psychosocial Competence*

The *Behavioral Attributes of Psychosocial Competence Scale* (BAPC) Form AR developed by Tyler (1978) was utilized to assess active coping. The BAPC Form AR consists of 36 forced-choice items and three fillers. This measure assesses active coping (e.g., "I look for possibilities that will help me improve my career goals"), autonomy (e.g., "I usually follow my own course as a person"), and self-maintenance (e.g., "When I don't do as well as I expect at something, I usually turn to some other job without getting too upset"). The BAPC has been used extensively in research with ethnically diverse populations. Tyler validated this scale with counselors' ratings. The scale discriminated between well-adjusted and marginal students. He obtained discriminant validity using the Crowne-Marlowe Social Desirability Scale, Scholastic Achievement Tests, and grade point average. Reliabilities ranged from .84 to .86. Full descriptions of the scale and its validity are reported by Tyler (1978). In the present study, the internal consistency obtained for this measure was .82.

The *Internal-External Locus of Control Scale* (IE), developed by Rotter (1966) was utilized to assess the self-attributes component of psychosocial competence. This scale, which has been extensively researched, consists of 23 forced-choice items and six fillers. Each of the forced-choice items contains an internal and an external option. High scores indicate externality and low

scores internality. The internal consistency reported for this measure is .66 (Rotter, 1966). In the present sample, the internal consistency was .75.

### *Adaptation to College*

The *Student Adaptation to College Questionnaire (SACQ)*, developed by Baker and Siryk (1984) consists of 67 five-point Likert items that form four subscales: academic adjustment, social adjustment, personal/emotional adjustment, and general institutional attachment. The Likert response scale ranges from 1 (*strongly disagree*) to 5 (*strongly agree*). This scale was validated with academic grade-point average, ratings of institutional attachment and attrition, use of psychological services, and involvement in campus activities. Baker and Siryk reported an internal consistency of .93 for the overall scale. In the present sample, the internal consistency was also .93. Because of multicollinearity among the subscales (subscales intercorrelations ranged from .44 to .87), only the overall score was used in the analyses.

### **Procedure**

Volunteers were recruited from psychology classes and from the Department of Psychology's subject pool. Participation in the study was voluntary and confidentiality was guaranteed. Research assistants were trained to administer the measures. Data collection took place in small groups so that assistants could answer any questions participants had. On the average, it took an hour to complete these measures.

## **RESULTS**

### *Descriptive Statistics*

To make valid ethnic group comparisons, Marin and Marin (1991) emphasize, it is important to ensure that the reliability of instruments is comparable across groups. Internal consistencies obtained for each ethnic group separately ranged from .70 to .78 for locus of control, .79 to .86 for the BAPC, .78 to .89 for the ASSIS, and .86 to .93 for the SACQ. These alpha coefficients are within the acceptable range and appear to be comparable across ethnic groups.

A chi-square analysis of family income category by ethnic category was significant,  $\chi^2 = 49.19, p < .0001$ . Whereas only 4% of the Asian Americans

and 4% of the white students reported a family income of less than \$20,000, 20% of the African Americans and 15% of the Latinos fell in this category. Those with the highest income (above \$80,000) included 9% of the African American, 25% of the Latino, 29% of the Asian, and 47% of the white group. Thus, white students had the highest family incomes and African Americans the lowest. We also found significant differences in parental education,  $\chi^2 = 33.29, p < .001$ , with fewer African-American parents (25%) having achieved the highest educational level than Asian American (46%), Latino (56%), and white (44%) parents. Family income and parental education, in their categorical or discrete form, were consequently included in the model as control variables. There were no differences between men and women in ethnicity, family income, or parental education. The only significant gender difference we found was in satisfaction with social support, with women ( $M = 3.86$ ) scoring higher than men ( $M = 3.57, t = 3.15, p < .01$ ).

Table I presents correlations, means, and standard deviations for satisfaction with social support, locus of control, active coping, and adaptation to college in each ethnic group. An analysis of variance revealed differences in satisfaction with social support among the four ethnic groups,  $F(3, 297) = 6.41, p < .001$ . Scheffé post hoc comparisons ( $p < .05$ ) indicated that whites ( $M = 3.93$ ) and African Americans ( $M = 3.86$ ) were more satisfied with social support than Asian Americans ( $M = 3.45$ ), while Latinos ( $M = 3.79$ ) did not differ significantly from the other three groups. There were also differences in locus of control among ethnic groups,  $F(3, 297) = 6.02, p < .001$ . Scheffé tests indicated that Latino ( $M = 10.41$ ) and African American students ( $M = 10.85$ ) were more internal than white students ( $M = 12.96$ ). There were no significant differences among ethnic groups in either active coping or adaptation to college. Later we return to an examination of these ethnic differences in analyses that control for other variables.

Bivariate correlations among the variables of interest are also included in Table I. Because these relationships may reflect group differences in demographic factors, the next set of analyses controlled for family income, parents' educational level, age, and gender.

### *Social Support and Psychosocial Competence as Predictors of Adaptation*

The hypothesis that satisfaction with social support, locus of control, and active coping would be related to a successful adaptation to college across all groups was examined by performing an analysis of covariance using SAS generalized linear models (GLM). We chose analysis of covariance because the model includes both categorical and continuous variables.

**Table I.** Means, Standard Deviations, and Correlations for Satisfaction with Social Support, Psychosocial Competence, and Adaptation to College Variables

Variables	Whites ( <i>N</i> = 105)				African Americans ( <i>N</i> = 56)			
	1	2	3	4	1	2	3	4
1. Social Support	—				—			
2. Locus of Control	-.26 <sup>b</sup>	—			-.11	—		
3. Active Coping	.33 <sup>c</sup>	-.46 <sup>d</sup>	—		.23	-.01	—	
4. Adaptation to College	.34 <sup>c</sup>	-.34 <sup>c</sup>	.51 <sup>d</sup>	—	.29 <sup>a</sup>	-.23	.43 <sup>c</sup>	—
<i>M</i>	3.93	12.96	22.75	3.44	3.86	10.85	23.29	3.49
<i>SD</i>	0.57	4.34	5.77	0.53	0.72	3.96	6.01	0.49
Variables	Latinos ( <i>N</i> = 66)				Asian Americans ( <i>N</i> = 71)			
	1	2	3	4	1	2	3	4
1. Social Support	—				—			
2. Locus of Control	-.04	—			-.01	—		
3. Active Coping	.25 <sup>a</sup>	-.51 <sup>d</sup>	—		.04	-.44 <sup>d</sup>	—	
4. Adaptation to College	.29 <sup>a</sup>	-.43 <sup>c</sup>	.55 <sup>d</sup>	—	.21	-.10	.55 <sup>d</sup>	—
<i>M</i>	3.79	10.41	23.47	3.40	3.45	12.19	20.87	3.34
<i>SD</i>	0.60	4.66	6.25	0.55	.99	4.00	7.12	0.44

<sup>a</sup>*p* < .05.<sup>b</sup>*p* < .01.<sup>c</sup>*p* < .001.<sup>d</sup>*p* < .0001.

Statistically, this analysis is comparable to a regression in which the discrete variables are transformed into sets of dummy variables and entered as sets (Cohen & Cohen, 1983).

Family income, parental education, age, gender, and ethnicity, were included in the model. A unique-sums-of squares approach was used for analyses such that tests of significance are performed controlling for all other variables in the model. The control variables included three discrete or categorical variables (family income, parental education, gender) and one continuous variable (age). The first hypothesis was partially confirmed. As Table II indicates, satisfaction with social support ( $p < .01$ ) and active coping ( $p < .0001$ ) significantly predicted adaptation to college. Locus of control did not contribute to the prediction model as a main effect. The second hypothesis, that ethnicity would moderate the relationship between satisfaction with social support, locus of control, and active coping and adaptation to college, was tested in the same model by including the interactions of ethnicity with social support, locus of control, and active coping. We did not find support for the interaction between ethnicity and social support in predicting adaptation to college. However, the significant interaction between ethnicity and locus of control partially confirmed our sec-

**Table II.** Analysis of Covariance Predicting Adaptation to College on the Basis of Satisfaction with Social Support, Psychosocial Competence, Ethnicity, and Interactions Involving Ethnicity

Predictor variable	$R^2$	$Adj.R^2$	$df$	$F$
Model	.37	.36	25, 283	6.08 <sup>c</sup>
Family income			4	1.54
Parental education			4	0.55
Sex			1	0.01
Age			1	2.80
Ethnicity			3	0.61
Satisfaction with social support			1	7.72 <sup>b</sup>
Psychosocial competence				
Locus of control			1	2.94
Active coping			1	64.86 <sup>c</sup>
Ethnicity × Satisfaction with Social Support			3	0.19
Ethnicity × Locus of Control			3	2.67 <sup>a</sup>
Ethnicity × Active Coping			3	0.21

<sup>a</sup> $p < .05$ .<sup>b</sup> $p < .01$ .<sup>c</sup> $p < .0001$ .

ond hypothesis. To further explore the moderating role of ethnicity indicated by this interaction, comparisons of the linear relationships between locus of control and adaptation to college for the different ethnic groups were performed. Testing for differences in slope we found that the relationship between locus of control and adaptation to college was different for Asian Americans than for other groups. Greater adaptation was associated with externality for this group, whereas internality was linked to adaptation for all other groups (Asian American vs. African American,  $t = -2.73$ ,  $p < .01$ ; Asian American vs. Latino,  $t = -2.44$ ,  $p < .05$ ; Asian American vs. white,  $t = -1.85$ ,  $p < .10$ ). There were no differences in slope among the African American, Latino, and white groups.

These analyses indicated that greater internality was associated with successful adaptation to college for white, Latino, and African American students but not for Asian American students, for whom externality predicted successful adaptation to college. Thus, ethnicity moderated the relationship between locus of control and adaptation to college.

#### *Relationships Between Social Support and Psychosocial Competence*

To examine relationships among active coping, locus of control, and social support more fully, three separate analyses of covariance were per-

**Table III.** Analyses of Covariance Predicting Locus of Control, Active Coping, and Social Support

	Locus of control			
	<i>R</i> <sup>2</sup>	<i>Adj.R</i> <sup>2</sup>	<i>df</i>	<i>F</i>
Model	.29	.27	21, 283	5.03 <sup>d</sup>
Family income			4	1.45
Parental education			4	1.62
Gender			1	2.61
Age			1	0.11
Ethnicity			3	2.76 <sup>a</sup>
Satisfaction with social support			1	0.17
Active coping			1	34.04 <sup>d</sup>
Ethnicity × Satisfaction with social support			3	0.98
Ethnicity × Active Coping			3	4.73 <sup>a</sup>
	Active coping			
Model	.26	.24	21, 283	4.44 <sup>d</sup>
Family income			4	0.86
Parental education			4	0.68
Gender			1	0.33
Age			1	0.36
Ethnicity			3	2.51
Satisfaction with social support			1	14.77 <sup>c</sup>
Locus of control			1	31.05 <sup>d</sup>
Ethnicity × Satisfaction with social support			3	1.35
Ethnicity × Locus of Control			3	4.29 <sup>b</sup>
	Satisfaction with social support			
Model	.17	.15	21, 283	2.56 <sup>c</sup>
Family income			4	0.75
Parental education			4	1.50
Gender			1	4.74 <sup>a</sup>
Age			1	0.58
Ethnicity			3	0.52
Locus of control			1	0.15
Active coping			1	11.49 <sup>c</sup>
Ethnicity × Locus of Control			3	0.61
Ethnicity × Active Coping			3	0.14

<sup>a</sup>*p* < .05.<sup>b</sup>*p* < .01.<sup>c</sup>*p* < .001.<sup>d</sup>*p* < .0001.

formed to predict scores on one of these variables as a function of scores on the other two. In these analyses, we tested the hypothesis that there would be significant relationships among these three variables and that ethnicity would moderate the relationships between locus of control and coping and between locus of control and social support. In addition, we controlled for demographic factors.

In the first analysis of covariance, locus of control was examined as a function of satisfaction with social support and active coping. The interactions of ethnicity with satisfaction with social support and with active coping were included in the model. In the second analysis of covariance, satisfaction with social support and locus of control, along with their interactions with ethnicity, were used to predict active coping. The third analysis of covariance examined satisfaction with social support as a function of locus of control and active coping and their interactions with ethnicity. All tests were also done using a unique-sums-of-squares approach and controlling for all other variables in the model.

Results in Table III show that, after controlling for family income, parental education, age, and gender, satisfaction with social support was not related to locus of control. Ethnicity, however, was related to locus of control, with whites ( $M = 13.44$ ) and Asian Americans ( $M = 12.04$ ) being more external than Latinos ( $M = 10.75$ ) and African Americans ( $M = 10.86$ ). Active coping did predict locus of control ( $p < .0001$ ), as did the interaction of ethnicity and active coping ( $p < .05$ ). Hence, we found that ethnicity moderates the relationship between active coping and locus of control. Comparisons of the linear relationships between active coping and locus of control for the different ethnic groups revealed that the slope for African Americans was significantly different from the slopes for the other ethnic groups (African American vs. Asian American,  $t = 2.48$ ,  $p < .05$ ; African American vs. Latino,  $t = 3.18$ ,  $p < .01$ ; African American vs. white,  $t = 3.43$ ,  $p < .001$ ). As hypothesized, for African Americans there was no relationship between active coping and locus of control, whereas for the Asian American, Latino, and white groups active coping was significantly related to locus of control. The strength of the relationship did not differ for these three groups.

In the second analysis of covariance, satisfaction with social support was a significant predictor of active coping ( $p < .001$ ), and as expected, locus of control was also related to active coping ( $p < .0001$ ). As determined in the first analysis, active coping and locus of control were unrelated for African Americans but related for the other groups. There was no interactive effect of ethnicity and social support satisfaction on active coping, indicating that the relationship between social support and active coping was similar across groups. In the third analysis of covariance, while active coping predicted satisfaction with social support, locus of control did not. Ethnicity did not play a moderating role in this instance. These findings partially confirmed our third hypothesis, namely, that there would be relationships among social support, locus of control, and active coping. And, consistent with our fourth hypothesis, ethnicity moderated the relationship

between locus of control and coping, although not the relationship between locus of control and social support.

## DISCUSSION

### *Predicting Adaptation to College*

We were able to determine that both active coping and the perception of a supportive social context play an important role in adaptation to college for African American, Asian American, Latino, and white students. Feeling satisfied with the support one has and being predisposed to engaging in active coping may play complementary roles. Each factor, while sharing variance with the other, may directly affect a student's college experience. Conversely, lack of an active planning orientation and a supportive social network may hinder successful adaptation. Our results point to the important function both factors may play in producing desirable outcomes in the academic, social, emotional, and institutional aspects of college adjustment.

These findings are consistent with earlier reports that adaptation to college is favorably affected by social support (Hays & Oxley, 1986; Mallinckrodt, 1988; Robbins et al., 1993) and by an active coping style (Otero et al., 1986; Tyler et al., 1988). Despite the fact that Latino and African American students have higher dropout rates than white and Asian American students (Carter & Wilson, 1991; Kemp, 1990), we found that, after controlling for socioeconomic factors, ethnicity as a main effect was not associated with adaptation to college. By controlling for social class, we may have reduced the variance attributable to ethnicity; in societies where minorities have endured racial discrimination, SES and race or ethnicity are frequently correlated (Betancourt & López, 1993). Other factors that may have contributed to a lack of ethnic differences in adaptation include the selectivity of the university studied, use of a self-report measure of adaptation, and the fact that our sample included students currently in college but not those who had already dropped out (more of whom may have been ethnic minorities).

Of the two components of psychosocial competence explored here, active coping was the stronger predictor of adaptation to college. This finding is consistent with previous research in which active coping predicted persistence but locus of control did not (Tyler et al., 1988). The behavioral component of psychosocial competence, active coping, seems to be a more effective aid in adjusting to college demands than the mere belief that events are in one's control. Adaptation to college most likely requires an



autonomous, actively planful approach, as well as the ability to cope with college stressors.

### *Ethnicity as a Moderator of Adaptation to College*

We found that ethnicity moderated the effect of locus of control on adaptation to college. Internal white, Latino, and African American students tend to be more adapted to college than their external counterparts. On the other hand, external Asian American students obtained higher adaptation to college scores than internals, consistent with Liang and Bogat's (1994) data. These findings may reflect the collectivist values of Asian culture, in which the individual is part of a group and hard work is valued for its contributions to the well-being of the group rather than the individual. It may be hard for Asian American students to endorse internal locus of control items that reflect an individualistic world view in which success is attributed to the "self." Latino and African American cultures are also collectivist, but may place a higher value on the self than Asian culture does. These findings, as well as Liang and Bogat's, suggest that the effects of internal control on adjustment are culturally (or contextually) relative. Groups that value collectivism and therefore respect authority more readily, such as many Asian groups, may be better able to function making external attributions about the causes of events. Among groups such as Anglo-Americans that endorse individualism, on the other hand, internals seem to adjust to college better than externals.

### *Social Support, Psychosocial Competence, and Ethnicity*

The positive relationship we found between satisfaction with social support and active coping may mean that active copers are better able to enlist support from others and therefore are more satisfied with the support they receive. Since this is a cross-sectional study in which direction of causality cannot be inferred, the opposite relationship is also plausible: perceptions of close social bonds may contribute to people's belief that their social network can help them meet important needs and therefore give them more confidence in their own coping capacity.

We did not find a relationship between social support and locus of control, and contrary to Liang and Bogat's (1994) study, we found no ethnic differences in the relationship between social support and locus of control. It is possible, however, that we did not find a relationship between satisfaction with social support and locus of control because active coping was in the model, and the fairly strong relationship between active coping and in-

ternality reduced the variance uniquely shared by social support and internality. Increasingly, more complex models are necessary to further scrutinize and interpret findings previously reported in the literature. In addition, these findings underscore the importance of including diverse ethnic groups in studies of adaptation to avoid generalizing findings based on a single group.

As in previous studies of psychosocial competence, we found a relationship between internality and active coping (e.g., Tyler, 1978; Zea et al., 1991). However, while internally controlled white, Asian-American, and Latino students are active copers, there is virtually no relationship between internality and active coping for African American students. The finding that ethnicity moderated the relationship between locus of control and coping is consistent with the findings of Gatz et al. (1982): There was no relationship between locus of control and active coping for their African American participants, but the relationship was significant for their white participants. Locus of control appears to be a somewhat unreliable predictor of active coping for African Americans. It is possible that locus of control has some predictive power under some of the circumstances for this group. Gurin, Gurin, and Morrison (1978) factor-analyzed locus of control and found that, while African Americans scored as high in personal control as whites, they did not believe—and realistically so—that they could control political outcomes. Nor did they endorse control ideology items that express an individualistic ethic (e.g., “most misfortunes are the result of lack of ability, ignorance, laziness, or all three,” “capable people who fail to become leaders have not taken advantage of their opportunities”). African Americans are also considered to be more collectivist than individualistic in orientation (Nobles, 1991). They may be active copers without necessarily subscribing to the individualistic ethic characteristic of the culture in which they are immersed.

Findings regarding Latinos are congruent with those of a study of Colombian college students in which internality was positively related to active coping (Zea et al., 1991). Sampling limitations in this study (discussed below) do not allow us to generalize to all Latinos, however. As far as we know, there have been no studies examining the relationship between active coping and locus of control among Asian American college students against which we can compare our finding of a positive relationship between internality and active coping.

Levels of internality varied across ethnic groups in our sample. Past studies reported ethnic and cultural differences in locus of control, generally finding white students to be more internal than nonwhite students (Aruffo et al., 1993; Garza & Ames, 1974; Tashakkori & Thompson, 1991; Wenzel, 1993). In our sample, surprisingly, we found the opposite: African American and Latino students were more internal than white and Asian American

students, even after controlling for demographic variables. It is possible that, in this specific college context, African Americans and Latinos who have remained in college thus far tend to have a strong sense of self-determination. Some researchers have argued that, when ethnic differences in locus of control are detected, they could be a result of social class differences rather than ethnic or racial ones (Garza & Widlak, 1977; Zea & Tyler, 1994), but we controlled for SES. Another possible explanation for our unexpected finding is that the SES of African American and Latino students in this private (and expensive) university is higher than the SES of African Americans and Latinos in previous studies. When socioeconomic conditions are optimal, and African American and Latino students achieve success despite societal prejudice, they may be especially likely to have a strong sense of internal control, attributing their successes to ability. However, when conditions are less favorable, they may more often attribute their failures to external forces such as prejudice, for this would permit them to cope with their circumstances free of the paralyzing effects of self blame. Ethnic group comparisons at both high and low socioeconomic levels could confirm this argument. This issue deserves systematic study in the future.

### *Limitations of the Study*

The cross-sectional nature of this study does not allow for causal relationships to be established between the variables of interest. Longitudinal studies examining the long-term impacts of social support and psychosocial competence on each other and on adaptation, and experimental or quasi-experimental designs manipulating social support or psychosocial competence are needed. Such research may contribute to an understanding of causal relationships between psychosocial competence and social support and between these resources and college adjustment.

Another limitation of this study relates to the sample used. Students who had dropped out prior to the study could not be included. Findings may generalize only to college students with the ethnic backgrounds and demographic characteristics of the ones we studied. These college students are not socioeconomically representative of ethnic minority populations in the United States; upper and middle socioeconomic strata are more represented than lower ones, a function of collecting data in a private university.

Finally, the ethnic categories compared in this study are not representative of ethnic groups across the United States. These categories are broad, and the subtleties of differences among the ethnic groups within each category cannot be captured. For instance, there are many differences among Mexican Americans, Puerto Ricans, Cuban Americans, and South Americans

(Marin & Marin, 1991; Zea, Quezada, & Belgrave, 1994). Even within groups, there is great diversity due to differences in racial and socioeconomic background, as well as migration status and acculturation level. Similar diversity characterizes Asian Americans, African Americans, and Whites.

### *Conclusions*

Adaptation to college among students of diverse ethnic backgrounds is associated with a supportive social context and an active coping style that contributes to mastery of events. While providing a supportive environment may enhance active coping, interventions aimed at promoting active coping may enhance students' abilities to seek help and social support from family and friends and contribute, both directly and indirectly, to a more positive college experience.

Tyler's (1978) psychosocial competence model may be strengthened by including social support, a widely studied contributor to well-being, as an additional component instead of the trust factor. A model of protective factors contributing to adaptation to college for ethnic minority students including locus of control, active coping, and satisfaction with social support, and moderated by ethnicity, should be further examined.

Although the ingredients of successful adaptation to college are in some ways similar for students of different racial and ethnic backgrounds, our findings call attention to ethnic differences in the factors that contribute to college adaptation. We learned that we cannot generalize findings based on whites to other ethnic groups: The relationship between internality and active coping does not hold for every ethnic group; neither does the relationship between locus of control and adaptation to college. Understanding ethnic differences in adaptation to college and its consequences on educational outcomes such as graduation rates continues to be a challenge for researchers. Understanding similarities in adaptation to college is important in order to design attrition-prevention programs for ethnically diverse settings that do not have enough resources to develop ethnic-specific programs.

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