

## Academic Achievement and Socioemotional Adjustment Among Chinese University Students

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Chinese Americans have been considered as high achievers and excellent students. In this study, the academic performance, majors, study habits, and socioemotional adjustment of 177 Chinese university students were examined. Data were collected through official university records, questionnaires, and inventories. Students were divided into three groups, depending on place of birth and length of residency in the United States. Results indicated that the image of the high achieving, well-adjusted Chinese student is tempered when examining criteria other than grade point average. Although grades received by the three groups of Chinese exceeded the university average, recent immigrants apparently used certain strategies to compensate for limited English proficiency by taking reduced course loads, studying more hours, and limiting career majors. There also was evidence that the recent immigrants were less socio-emotionally adjusted than were other Chinese students. Implications for counseling and research are discussed.

Extraordinary educational success has been attributed to Chinese and other Asian minority groups in the United States. This success has been the topic of two major magazine features: "Asian-Americans: Are They Making the Grade?" (*U.S. News and World Report*, April 2, 1984) and "A Formula for Success" (*Newsweek*, April 23, 1984). The United States Commission on Civil Rights (1978) reported that during the years 1960, 1970, and 1976, the percentage of Chinese persons in the United States who were high school graduates exceeded the percentage of the "majority" (Caucasian) group who were high school graduates. Even more striking were the data on college graduates for individuals from 24 to 29 years of age. In 1976, fully 60% of the Chinese men and 44% of the Chinese women had completed 4 years of college, compared with 34% and 22%, respectively, for the majority group. Although more recent

figures specific to the Chinese are not yet available, the 1980 United States Census ("Phenomenal Success," 1983) reveals that Asian Americans (largely because of Chinese, Japanese, and Korean individuals) have the highest level of college education of any ethnic or racial group in the country. Similarly, statistics on occupational achievements and mental health have often been interpreted as suggesting that the Chinese as a group are faring well in American society.

It is beyond the scope of this article to examine in detail the validity of these findings on the successful adaptation of the Chinese. S. Sue and Morishima (1982) have argued that gross statistics on the Chinese are misleading. A relatively large proportion of Chinese individuals have little education, live in poverty, and exhibit mental health problems, and stereotypes of the Chinese and methodological-conceptual flaws in previous research have hindered an accurate assessment of their adjustment. The primary purpose of the present research was to examine the achievement and adaptation of Chinese university students. Researchers have typically assumed that because of the high proportion of graduates from institutions of higher education, the Chinese are successful in their educational pursuits. Although consensus exists over the educational achievements of Chinese

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people, three explanations have been proposed to account for their achievements and adaptation: cultural determinism, inherent cultural strengths, and interactive adaptation.

The cultural determinism approach is based on the notion that cultures vary in the extent to which the skills learned in one culture are adaptive in another culture (Gordon, 1978). In the case of the Chinese, their upward mobility has been attributed to cultural traditions of hard work, abstemious habits of consumption, and high esteem for education (Chan, 1981; Petersen, 1978; Sung, 1979). These characteristics are assumed to be compatible with the ideals of the Protestant ethic, traditionally emphasized in the United States.

The inherent cultural strengths approach emphasizes the ability of Chinese culture to satisfy basic human needs rather than the congruence of Chinese and American values. Individuals from cultures that better meet these human needs are more adjusted and successful than persons from cultures that do not meet these needs. A proponent of this view, Hsu (1971), argued that social and emotional intimacy is a basic human need. He believes that Chinese culture, with its emphasis on family bonds and continuity, can more effectively satisfy the need for intimacy than Western cultures that emphasize individualism, independence, and competition.

The interactive adaptation explanation postulates that the status of ethnic minority groups is a function of the interaction between ethnic cultural values and the cultural values and conditions of the larger (American) society. Steinberg (1981) has argued that in the case of Jews, their success in America was a fortuitous match between their cultural values and skills as immigrants and the manpower needs and opportunities available in the United States. Given the same values and skills, immigrant Jews in another society may have fared poorly. Suzuki (1977) also feels that the Chinese succeeded because their emphasis on education proved to be functional. After World War II, there was a need to fill white collar positions because of technological expansion in the United States. Then too, blue collar occupations were con-

trolled by craft and other unions, which frequently discriminated against Chinese people. Regardless of the approach used, investigators have assumed that the Chinese are performing well in the educational system.

The present research addresses several questions. First, how well are the Chinese actually succeeding? Here, the interest is not on the proportion of college graduates (which has been used as the primary indicator of success) but focused on academic performance. Second, do recent immigrant Chinese individuals show differences from American-born Chinese individuals in terms of achievement and socioemotional adjustment? Third, are there differences in adaptation strategies used by immigrant and American-born Chinese? Do these strategies reveal the appropriateness of the particular approaches used to explain Chinese people's success? Fourth, what kinds of implications can be drawn for counseling and education policies? The study was part of a larger investigation of the achievements, correlates of achievement, attitudes, values, socialization experiences, and mental health of Chinese students. The project represented the most comprehensive study of Chinese students to date.

## Method

### *Subjects*

The subjects were 177 students enrolled at the University of California, Los Angeles (UCLA). In terms of sex and class, there were 21 male and 24 female freshmen, 23 male and 21 female sophomores, 22 male and 21 female juniors, and 24 male and 21 female seniors. Of 177 students, 94 (53%) were foreign born. Of the foreign born, 44% were from Taiwan, 37% from Hong Kong, 4% from mainland China, and 4% from Burma, and the remaining were from other parts of the world. The 83 American-born Chinese students included 57% from the second generation, 31% from the third generation, and 12% from the fourth generation in the United States. Foreign students (with student visas) were included in this study. However, only 10% of the Chinese at the University are visa students.

### *Measures*

Data were collected from two sources: university records and questionnaires. From the former, transcripts indicating courses taken and grades received at UCLA were obtained. Cumulative grade point aver-

ages and total units taken (courses) were calculated for students. Records also yielded Scholastic Aptitude Test scores obtained prior to admission to UCLA.

It is always problematic to select or develop questionnaires for use with ethnic or minority group populations. For each instrument the investigators and five research assistants who represented American- and foreign-born Chinese students (Cantonese and Mandarin speaking) reviewed questionnaire content and format to determine which items might need explanation or be difficult for some students to understand. All students were told to ask research assistants for definitions if words or phrases were unclear. Ample time was scheduled to allow for an explanation of difficult items and to minimize any time pressure felt by the students.

Questionnaires assessed a great deal of information. As part of a larger study, only those instruments relevant to our current interests are reported.

*Demographic information.* Subjects were asked for demographic information, including sex; place of birth of self and other family members; parents' occupation, income, and educational level; and number of years in the United States.

*Selection of majors.* Subjects were asked to indicate their academic majors. Then they were asked to rate the extent to which several factors influenced their choice of majors. The factors included parental preferences, personal interest in the major, English language skills, prestige of field of the major, and financial considerations (i.e., salary and employment opportunities). Ratings were made on 4-point Likert scales ranging from *not at all* to *very much* and reflected the degree to which the five factors determined the selection of majors.

*Study habits.* The Study Habits Checklist was used to assess the kinds of study habits that students practiced. This 38-item questionnaire has been used in previous studies (Office of Los Angeles County Superintendent of Schools, 1981) to measure how students prepare for tests, use various studying strategies, organize their lecture and reading notes, and budget their studying time in their course work. Subjects indicated how frequently they performed each study habit by using a 5-point Likert scale ranging from *almost always* to *almost never*. Also asked were the hours per week spent on studying.

*Dimension of Self-Concept (DOSC).* The DOSC is a self-report measure designed to assess five dimensions of self-esteem or self-concept in school settings. For this study three of the five dimensions were used: level of aspiration, anxiety, and academic interest and satisfaction. The level of aspiration measure reflects the degree to which students strive to maximize achievement in academic tasks and assignments. The anxiety measure consists of behavioral patterns and perceptions associated with nervousness, tension, and exaggerated concern over taking tests, answering questions in class, and performing other related activities. The satisfaction dimension measures the extent to which students enjoy and derive intrinsic satisfaction from doing academic work and studying new material. Essentially, this measure reflects students' desires to pursue studies out of curiosity and for the sheer pleasure of learning for its own sake. Each scale consisted of 14 items. Each item contained a 5-point

Likert scale ranging from *always* to *never*, indicating the degree to which subjects exhibited the various attitudes and feelings related to the academic work. The DOSC also includes items related to the dimensions of leadership and of identification, which were not administered to subjects. The measure is highly reliable, and empirical studies have demonstrated fairly good internal and factorial validity (Michael & Smith, 1976; Michael, Smith, & Michael, 1978).

*Happiness and satisfaction.* As one measure of socioemotional status, students were asked, "Taking all things together, how would you say things are these days—Would you say you're *very happy*, *pretty happy*, or *not too happy* these days?" Satisfaction was also ascertained in the same manner. These single-item measures have been used extensively in large-scale survey research and demonstrate good test-retest reliability. They correlate well (and in expected directions) with marital status (married vs. divorced or widowed), employment (vs. unemployment), income (high vs. low), social adjustment, and anxiety (Robinson & Shaver, 1973).

*Omnibus Personality Inventory—Form F (OPI).* This 385-item, true-false inventory assesses selected attitudes, interests, and values primarily relevant to normal ego functioning and intellectual activity. Developed at the University of California, the OPI contains 14 scales: Thinking Introversion, Theoretical Orientation, Estheticism, Complexity, Autonomy, Religious Orientation, Social Extroversion, Impulse Expression, Personal Integration, Anxiety Level, Altruism, Practical Outlook, Masculinity-Femininity, and Response Bias. Norms for the OPI have been developed using over 7,000 men and women from 37 colleges and universities; numerous reliability and validity studies have been conducted (Heist & Yonge, 1968). In general, the OPI was used in this study because the reliability and validity are fairly good, and it has been found in previous studies of Chinese Americans to have convergent validity (D. Sue & Frank, 1973).

## Procedure

From the official university list of Chinese students, a systematic sampling procedure was used so that every *n*th name was chosen until approximately equal numbers of men and women were obtained in each class level (i.e., freshman, sophomore, junior, and senior). Selected students were contacted by telephone and asked to participate. The purpose, procedures, and confidentiality of students' responses and school records were explained. Students were given the following information during the telephone conversation and on the questionnaire booklet:

The purpose of this study is to conduct research on the factors related to academic achievement at UCLA. For example, we are interested in finding out whether grades received in courses are related to Chinese students' backgrounds, levels of assimilation, personality patterns, and family environments. The results of the study may help us to gain a better understanding of the factors that influence achievement and of the means to improve achievement among Chinese students.

As noted earlier, the present study was part of a larger investigation, so the stated purpose was primarily relevant to the larger investigation.

Students were paid \$12 for completing questionnaires and for giving permission to collect copies of their school records. A total of 231 students were contacted. Of these, 192 (83%) agreed to participate. Because 177 students participated (92% of those agreeing actually participated), the overall response rate was 77%. Subjects were scheduled in groups of 4 to 15 individuals. It typically took 2 hours to complete questionnaires and to sign permission forms. Subjects were informed that they were free to decline to answer any questions and that individual names and responses would be kept confidential.

### Analysis

Because we were particularly interested in achievement and adaptation for foreign-born Chinese, the sample was divided into three groups: (a) American-born (AB) Chinese students (44 men and 39 women), (b) early immigrant (EI) Chinese students (23 men and 25 women residing more than 6 years in the United States), and (c) recent immigrant (RI) Chinese students (20 men and 23 women residing 6 or less years in this country). Three students failed to indicate their birth place. Six years was used as a cutoff point for immigrant Chinese because Tsang and Wing (1984) have found that Asian immigrants residing in the United States for more than 6 years are much more similar to Caucasian American students in achievement test performances than are immigrants residing in this country for fewer years.

Most comparisons involved a  $2 \times 3$  (Sex  $\times$  Chinese Group) analysis of variance (ANOVA). When an instrument comprised a set of multiple measures of scales (e.g., OPI, selection of majors items), a  $2 \times 3$  multivariate analysis of variance (MANOVA) was performed. If significant multivariate effects occurred, univariate effects on each separate measure were assessed using ANOVAs. Significant Chinese group differences on the ANOVA were further examined using Tukey tests for paired comparisons with significance set at  $p < .05$ .

## Results

### *Scholastic Aptitude Test (SAT)*

On the whole, Chinese students achieved average percentile scores of 52 on the verbal and 77 on the quantitative portions of the SAT. A  $2 \times 3$  ANOVA of the verbal scores revealed a significant main effect for group,  $F(2, 148) = 52.10, p < .0001$ . Neither the main effect for sex nor the Sex  $\times$  Group interaction was significant. Tukey tests between the three groups yielded significant differences in the following manner: AB ( $M = 69$ )  $>$  EI ( $M = 47$ )  $>$  RI ( $M = 18$ ).

Only one significant difference emerged from the  $2 \times 3$  ANOVA for quantitative performance. Men ( $M = 81$ ) had a higher percentile score than women ( $M = 73$ ),  $F(1, 148) = 5.85, p < .02$ . In general, Chinese students performed exceedingly well on quantitative performance.

### *Academic Grades*

Chinese students were performing well at UCLA. Their cumulative grade point average was 2.99, which exceeded the university cumulative average of 2.87,  $t(176) = 3.07, p < .01$ . Furthermore, a  $2 \times 3$  ANOVA on grades failed to reveal a main effect for sex,  $F(1, 168) = 0.39$ , or for group,  $F(2, 168) = 0.50$ , or an interaction effect,  $F(2, 168) = 1.21$ .

### *Units Taken*

Number of units is an indicator of the academic course load taken. The  $2 \times 3$  ANOVA yielded only one significant effect, a main effect for group,  $F(2, 168) = 7.09, p < .01$ . Tukey tests revealed that AB ( $M = 77.0$ ) = EI ( $M = 69.8$ )  $>$  RI ( $M = 43.3$ ). Thus, recent immigrant Chinese students took a reduced course load in comparison with American-born or early immigrant Chinese. Such a finding may be due to at least two possibilities. First, RI students may be overrepresented with freshmen and sophomores, who would understandably have fewer academic units than juniors and seniors. Second, perhaps RI Chinese students come from lower socioeconomic families, so they take fewer units in order to work part-time. To test these possibilities, an analysis of covariance was performed on the three groups, controlling for class (freshman, sophomore, etc.) and for socioeconomic status. Socioeconomic background was assessed by Duncan's index (Reiss, Duncan, Hatt, & North, 1961), which combines occupational status, educational level, and income of parents. Results of the analysis of covariance indicated that the effect of group was still significant,  $F(2, 156) = 5.38, p < .01$ . Thus, RI Chinese take a lighter course load even after controlling for class and socioeconomic status. The adjusted means for RI, EI, and AB

groups were 44.5, 70.6, and 74.6, respectively.

### Academic Majors

Table 1 shows the percentage of students declaring a particular academic major within each group and within each sex. Many comparisons can be generated by analyzing groups for particular majors. A decision was made to focus only on the social sciences and mathematics/computer sciences because a previous study of Asian Americans found that choice of these majors is highly related to English/quantitative skills (D. Sue & Frank, 1973). Two significant differences emerged when examining one group versus the other two for a particular major versus all others, using a  $2 \times 2$  chi-square with Yates's continuity correction. The AB students were more likely than EI and RI students to major in the social sciences,  $\chi^2(1, N = 174) = 5.23, p < .025$ . In addition, fully 42% of the RI students selected mathematics or computer sciences and significantly differed in the choice of these majors in comparisons with AB and EI students,  $\chi^2(1, N = 174) = 10.98, p < .005$ . In view of the high quantitative and low English verbal skills of RI students, the selection of mathematics and computer sciences as academic majors may be a means of capitalizing on strengths and minimizing weaknesses.

Sex differences occurred in two areas. Men more often than women chose engineering (versus all other majors),  $\chi^2(1, N = 174) = 14.96, p < .001$ , and were less likely to select humanities,  $\chi^2(1, N = 174) = 10.83, p < .005$ .

Students were asked to indicate the extent to which their choice of majors was influenced by English skills, parental preferences, financial considerations (e.g., salary), personal interest, and prestige of the field of major. A  $2 \times 3$  MANOVA on the five factors revealed a significant effect for group,  $F(10, 328) = 6.06, p < .0001$ , but not for sex or the interaction. Univariate ANOVAs were then used to determine which of the five factors yielded significant effects for group. Main effects for group were found for English skills,  $F(2, 168) = 26.5, p < .0001$ , and for prestige of field,  $F(2, 168)$

Table 1  
Academic Majors (in Percentages) by Group and by Sex

Major	Group			Sex	
	AB	EI	RI	Male	Female
Engineer	20.5	16.7	18.6	30.0	8.0
Math-computer	12.0	22.9	41.9	24.1	20.7
Physical-biological sciences	24.1	20.8	14.0	14.9	26.4
Economics-business	8.4	14.6	11.6	11.5	10.3
Social sciences	19.3	6.2	7.0	13.8	11.5
Humanities	7.2	10.4	2.3	0	13.8
Other-undecided	8.4	8.3	4.6	5.7	9.2

Note. Figures represent percentages of column totals. AB = American born; EI = early immigrant; RI = recent immigrant.

$= 5.67, p < .005$ . Tukey tests revealed that RI group ( $M = 2.02$ ) took English into consideration more than EI ( $M = 1.31$ ) and AB ( $M = 1.14$ ) groups in the selection of majors. Furthermore, the following results were found with respect to prestige of field using Tukey tests: RI ( $M = 3.00$ ) = EI ( $M = 2.85$ ) > AB ( $M = 2.42$ ).

### Study Skills

To examine the study skills and habits of students, scores on the Study Habits Checklist and self-reported average number of hours per week spent studying were analyzed. As indicated by the  $2 \times 3$  ANOVA, sex yielded a significant main effect,  $F(1, 168) = 6.71, p < .05$ ; group and the interaction effects were nonsignificant. Women ( $M = 137.16$ ) endorsed more study practices than did men ( $M = 130.00$ ). This indicates that women tended to use more systematic procedures (e.g., organizing notes, budgeting time, proofreading work, etc.). The  $2 \times 3$  ANOVA for study hours showed a significant effect only for group,  $F(2, 168) = 3.25, p < .05$ . The RI students ( $M = 27.6$ ) spent more hours studying than AB ( $M = 23.04$ ) and EI ( $M = 22.10$ ) students ( $p < .05$  on the Tukey test); the last two groups did not differ from each other. Thus, in terms of study habits, women were more likely than men to be systematic in

approaching their course work, and the recent Chinese immigrants reported that they spent more hours studying than did American-born or early immigrant Chinese students.

### *Socioemotional Adjustment*

Three measures of socioemotional adjustment were used: the happiness and satisfaction measure, Dimensions of Self-Concept (DOSC), and Omnibus Personality Inventory (OPI). Because each of the measures yielded more than one dimension, a MANOVA was first performed.

*Happiness and satisfaction.* A  $2 \times 3$  MANOVA on the happiness and satisfaction measure revealed only one significant effect: For group,  $F(4, 334) = 3.00, p < .05$ . The  $2 \times 3$  ANOVAs (one for happiness and one for satisfaction) showed a group effect for happiness,  $F(2, 168) = 5.25, p < .01$ , with RI students ( $M = 1.88$ ) being significantly less happy (on the Tukey test) than AB ( $M = 2.22$ ) or EI ( $M = 2.10$ ) students. The ANOVA for satisfaction approached significance in the case of group ( $p < .06$ ), with RI students being the least satisfied.

*DOSC.* On the  $2 \times 3$  MANOVA, significant main effects were found for group,  $F(6, 332) = 4.66, p < .001$ , as well as for sex,  $F(3, 166) = 4.63, p < .004$ . The interaction was nonsignificant. The ANOVAs for the three dimensions (level of aspiration, test or

school anxiety, and academic satisfaction) were performed. The only significant findings involved groups on the anxiety dimensions,  $F(2, 168) = 13.78, p < .0001$ , and sex on the satisfaction dimension,  $F(1, 168) = 10.73, p < .005$ . The paired comparison Tukey test indicated that RI students ( $M = 43.93$ ) were more anxious than AB ( $M = 36.06$ ) and EI ( $M = 39.00$ ) students. On the academic satisfaction dimension, men ( $M = 44.25$ ) were significantly less satisfied than women ( $M = 47.12$ ).

*OPI.* The MANOVA on the OPI yielded significant effects for Group,  $F(28, 310) = 2.60, p < .0001$ , and for sex,  $F(14, 155) = 8.95, p < .0001$ , but not for the interaction. Only 2 (Religious Orientation and Response Bias) of the 14 scales of the OPI failed to show significant group and/or sex differences on the individual ANOVA for each scale. Shown in Table 2 are the 12 OPI scales, type of significant effect, and the precise differences found. In terms of group differences, RI were lower than AB students on Autonomy, Social Extroversion, Personal Integration, and Altruism. They tended to be higher on Anxiety Level and Practical Outlook. Thus, on the two scales most clearly measuring socioemotional adjustment, Anxiety Level and Personal Integration (revealing feelings of hostility, loneliness, and rejection), the recent immigrants fared worse. Interestingly, the mean scores of the three groups were con-

Table 2  
*Significant Difference on the Omnibus Personality Inventory Scales*

Scale	Main effect	F	Paired comparisons <sup>a</sup>
Thinking Introversion	Group	3.12*	RI (22.3) = EI (20.04) = AB (19.07)
Theoretical Orientation	Sex	6.14*	Men (19.02) > women (16.6)
Estheticism	Sex	20.19***	Women (13.58) > men (10.03)
Complexity	Sex	8.11**	Men (14.37) > women (12.68)
Autonomy	Group	19.10***	AB (24.10) > EI (19.65) = RI (17.23)
Social Extroversion	Group	7.31***	AB (21.63) > RI (17.12)
Impulse Expression	Sex	8.13**	Men (27.83) > women (24.83)
Personal Integration	Group	5.05**	AB (32.81) > RI (26.84)
Anxiety Level	Group	3.24*	AB (11.88) > RI (9.72) <sup>b</sup>
Altruism	Group	13.53***	AB (20.40) > EI (17.68) = RI (15.65)
	Sex	4.91*	Women (19.18) > men (17.60)
Practical Outlook	Group	11.62**	RI (20.35) = EI (18.52) > AB (16.10)
Masculinity-Femininity	Sex	64.48***	Men (31.46) > women (24.68)

Note. AB = American born; EI = early immigrant; RI = recent immigrant. For group,  $df = 2, 168$ ; for sex,  $df = 1, 168$ .

<sup>a</sup> Numbers in parentheses are means. <sup>b</sup> High scores indicate low anxiety.

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

sistently ordered on the scales. Immigrants residing in the United States for more than 6 years always fell between American-born Chinese students and those residing for 6 or less years in the United States. The sex differences that occurred were not surprising. Men scored higher than did women on scales involving Theoretical Orientation, Complexity, Impulse Expression, and Masculinity. Women exceeded men on Estheticism and Altruism. With the exception of Altruism, the sex differences among the Chinese students were consistent with those found among a national normative sample (Heist & Yonge, 1968).

The happiness measure, the DOSC, and the OPI offer convergent evidence that recent Chinese immigrants are less happy and more anxious, lonely, and isolated than are early immigrants or American-born Chinese individuals.

### Discussion

The purposes of the present study were to (a) ascertain the achievement level of Chinese students, (b) examine differences in the academic achievements and socioemotional adjustment, (c) compare adaptation strategies used by immigrant and American-born Chinese students, and (d) draw implications for counseling and education. Results of this study indicate that the grades of Chinese students exceeded those of other students at UCLA. The high level of academic performance was true even in the case of recent immigrants who have extremely limited English verbal skills (mean verbal SAT score at the 18th percentile) and who presumably experience some degree of culture shock. How are these immigrants able to successfully compete as students?

Educational achievements of the Chinese have often been attributed to cultural values (i.e., the cultural determinism explanation), but the results suggest that, particularly in the case of recent immigrants, certain kinds of adaptive strategies are used. In comparison with American-born Chinese students, recent immigrants spend 4.6 more hours per week studying. The average study hours per week of the American-

born and early immigrant Chinese are similar to the 22-hour average found for college students in an earlier study (Gelso, 1969). One could argue that the cultural determinism explanation can account for the longer hours of studying for recent immigrants. Because of the cultural emphasis on hard work, recent immigrants who are presumably less acculturated and more culturally "Chinese" would be expected to study longer. However, early immigrants, who are probably less acculturated than the American-born Chinese, do not study more hours than the American born.

Recent immigrants also take reduced course work and restrict their academic choices to majors that capitalize on their quantitative skills. Mathematics and computer sciences may require less English facility and interpersonal skills that are specific to American culture. The recent immigrants were more likely than the other two groups of Chinese students to report that their choice of majors was influenced by English proficiency. In addition, there is a strong demand in American society for professionals in mathematics and computer sciences. Collectively, these factors tend to support an interactive adaptation perspective rather than a strict cultural determinism view of Chinese students' achievement. The adaptation strategies may be a function of the interaction between cultural values and personal skills-deficiencies and environmental needs-demands.

Despite the fact that recent immigrant, early immigrant, and American-born Chinese students perform equally well (and above the university average), recent immigrants exhibit socioemotional difficulties: They report greater unhappiness and anxiety and show less personal integration than do other Chinese students. Therefore, on one measure of success, university grades, they are doing well but on another, personal adjustment, problems may exist. Some of the observed personality differences between recent immigrants and American-born Chinese appear to be related to level of acculturation. For example, the American born exhibit higher levels of autonomy and social extroversion. In a review of research on Asian Americans, S. Sue and Morishima

(1982) concluded that traditional Chinese values emphasize group centeredness rather than individualism, so that the Chinese are less likely to demonstrate independence, acting-out behaviors, and rebelliousness. Furthermore, Chinese individuals tend to be more reserved and anxious in a variety of social situations. With acculturation, the Chinese would be expected to show more autonomy and extroversion.

Because Chinese students were the only group examined in this study, it is difficult to draw conclusions about how they may differ from other students in personality characteristics. However, a previous study by D. Sue and Kirk (1973) provides a context with which to view the results. In that study, freshman students at the University of California, Berkeley, were administered the OPI. Chinese and Japanese students were compared with all other students ( $N = 2,027$ ). Chinese men and women had significantly lower mean scores than the other students on the following nine OPI scales: Thinking Introversion, Estheticism, Complexity, Autonomy, Social Extroversion, Impulse Expression, Personal Integration, Anxiety Level, and Altruism. They were significantly higher on two scales, Practical Outlook and Masculinity-Femininity.

Inspection of the mean scale scores for Chinese students in this study in comparison with mean scores obtained from the Chinese and other students groups in the Berkeley sample reveals an interesting consistency. Chinese students in the Berkeley study scored lower than the other students on 9 of the scales; the Chinese in the present study also had lower scores than the other Berkeley students. Chinese students scored higher on 2 scales in the previous study; those in the present study scored higher on one of those scales, with the other (Masculinity-Femininity) showing little difference. Thus, Chinese-other student differences were found on 11 scales in the Berkeley study; the same direction for differences would emerge on 10 scales if comparisons were made between the UCLA Chinese students and the other students from Berkeley. It was not possible to subject these comparisons to a statistical analysis, and obvious problems exist in directly comparing this study with the previous one

(e.g., differences in time period, campuses, type of students, etc.). Nevertheless, personality differences between Chinese and other students found in the previous study may continue to exist. (Incidentally, Chinese students in the present study had higher scores on 8 and lower scores on 6 of the scales than did Chinese students in the Berkeley study.)

Because adjustment and personality patterns were assessed by self-report measures, it is possible that the findings may not be valid, especially for new immigrants. We do not believe this to be the case. In terms of adjustment, the happiness scale, the DOSC, and the OPI findings show a great deal of consensus. The OPI has a response bias scale that assesses tendencies to make a good or bad impression (i.e., test-taking attitude). The three groups of Chinese students did not differ on this scale. Moreover, many cross-cultural psychologists (see Pedersen, Lonner, & Draguns, 1976) have found that recent immigrant and foreign students experience considerable stress.

In conclusion the findings indicate that for some Chinese students, particularly recent immigrants, good academic performance may involve certain academic and psychological costs. It appears that they must study longer, take fewer courses, and restrict their career alternatives to perform as well as other Chinese students. Presumably such differences between recent immigrants and other Chinese students result from adaptive strategies taken by the former to compensate for limited English proficiency. In view of these academic pressures, it is not surprising that recent immigrants report more socioemotional difficulties than do other Chinese students. It is evident from past research that many Chinese persons, particularly recent immigrants, face significant social and academic hardships (S. Sue & Morishima, 1982). Our findings simply reaffirm the ecological reality that such hardships exert some type of impact, adverse or otherwise, on human functioning. This impact has received little attention in recent reports on the Chinese because of reliance on grade point average and graduation as the sole indicators of academic success. It should be noted

that we are not discounting the academic achievement of Chinese students. On the contrary, such achievements assume greater significance in view of the obstacles that many students have had to overcome to do well academically. However, the social and psychological trade-offs that an individual makes to adapt also must be examined. In the case of some Chinese students, the cost of academic adaptation has not been insignificant.

The findings of this study raise some issues for counselors and educators. Many Chinese students may need counseling or mental health services. This need is often overshadowed by their academic achievements. At times it is this paradox of psychological dysphoria and confusion in the face of educational successes that can serve as the focal point in therapy. The results indicate that recent immigrants report being more anxious, lonely, and isolated than other Chinese students. They also have limited English proficiency and must study more hours, factors that can significantly reduce opportunities for participation in social activities and for dating. Consequently, a key concern among such students seeking services may involve problems in socializing or a perceived lack of social effectiveness. In these cases it may be helpful for therapists to assess whether or not such problems actually arise more out of realistic constraints (e.g., very poor English conversational skills, the need to study long periods to obtain good grades) than from a maladaptive perception of one's social efficacy, or both. Because the recent immigrants fared less well socioemotionally, it appears that the process of adapting to a new culture must be explicitly addressed in counseling. Although this point may seem obvious and has been noted repeatedly (e.g., Lee, 1982), it is unclear whether many counselors actually invoke such issues in practice. A counselor can opt to act as a culture broker in that the counselor assists clients in identifying and applying specific adaptation strategies to help smooth the acculturation process.

Normalization and an optimistic outlook in examining such problems are also indicated. In the study it was consistently found that immigrants living in the United States for 6 years or more were quite similar

to American-born Chinese. Thus, it appears that the acculturation process for certain characteristics is rapid. Counselors can help clients assume a realistic time frame in viewing their problems with the realization that with the passage of time many of them eventually learn to adjust to and integrate different life-styles and value systems.

Finally, it is clear that early immigrants represent a valuable but as yet unused source of paraprofessional help. Such students can closely identify with the adaptation difficulties of recent immigrants. They also have had the time and opportunity to develop and refine various adaptation strategies that work. In essence, they can serve as successful adaptation models for other students. An intervention program staffed by early immigrant paraprofessionals may be a more acceptable means, in many ways, of providing clinical help to Chinese individuals who have tended to stigmatize and avoid traditional counseling services.

With respect to research implications, the findings reveal a remarkable degree of heterogeneity among Chinese students. The division of Chinese students into the three groups based on place of birth and years in the United States was meaningful. On many of the measures, scores were consistently ordered according to the length of time in the United States. This suggests that a simple dichotomy between foreign- and American-born Chinese students may not serve as the most useful means of comparing levels of acculturation.

The findings and conclusions must be tempered by the fact that the study was conducted at one institution. A large number of Chinese students apply for admission at UCLA, and the admissions policy is quite selective. Its location on the Pacific coast in a city with a relatively large Chinese population is atypical of universities in general. Nevertheless, because the analysis examined within-group differences, much of the findings may hold for other campuses.

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