

## Chapter 5

# Survey Findings

The results of this study are presented in three chapters. Chapter 5 presents the findings of the survey, including demographic data of the respondents. Chapters 6 and 7 present the results from the interviews. Chapter 8 will discuss the findings in the context of the research questions and the literature reviewed in Chaps. 2 and 3.

### Demographic Data

Selected demographic data for the 60 students who completed and returned the Survey of Stressors and Coping Strategies of Mainland Chinese Students (SSCSMCS) are analyzed and are reported as follows:

1. Gender: There were 33 males (53.3%) and 27 females (46.6%) in this study.
2. Age: The subjects were requested to place themselves in one of three age categories. Nineteen (31.6%) students were under age 25, 29 students were between the age of 26 and 31 (41.6%), and 12 students (20%) were 32 or older. As subjects were not asked to provide their exact age, a mean age cannot be calculated.
3. Academic Status: Of the 60 survey respondents, 7 (11.7%) were in master degree programs and 53 (88.3%) were in doctoral degree programs.
4. Marital Status: 19 of the 60 survey respondents (31.7%) were married, and 41 (68.3%) were single.
5. Majors: 24 students were engineering students, 16 were natural science majors, 12 were social science majors, and 8 were business school students.

## Survey Findings

### *Stressors*

Findings reveal that the life of Chinese students in the United States has never been easy and they have had to endure multifaceted life stresses. Results indicate that job opportunities, visa, and immigration concerns ( $M = 4.50$ ,  $SD = 0.74$ ), academic pressure ( $M = 4.32$ ,  $SD = 1.45$ ), language barrier ( $M = 3.78$ ,  $SD = 1.10$ ), and culture shock ( $M = 3.60$ ,  $SD = 0.99$ ) rank the highest, followed by dating or marriage pressure ( $M = 3.58$ ,  $SD = 1.02$ ) and financial concern ( $M = 3.56$ ,  $SD = 0.62$ ). Results are presented in Table 5.1.

### *Coping and Help-Seeking Behaviors*

Chinese students prefer to cope with their stress by enduring the problem ( $M = 3.37$ ,  $SD = 1.21$ ) or just letting the stress go ( $M = 3.01$ ,  $SD = 1.20$ ). When seeking help from others, they primarily turned to their family ( $M = 2.85$ ,  $SD = 1.37$ ) or other Chinese students ( $M = 2.85$ ,  $SD = 1.11$ ). Going to church for religious comfort ( $M = 1.55$ ,  $SD = 1.03$ ) and consulting a counselor or psychologist for professional help ( $M = 1.31$ ,  $SD = 0.62$ ) were the last two choices when it comes to dealing with their stress (see Table 5.2).

**Table 5.1** Rank order, means, *SD* of stressors

Rank	Categories	<i>N</i>	<i>M</i>	<i>SD</i>
1	Job opportunities, visa, and immigration concerns	60	4.50	0.74
2	Academic pressure	60	4.32	1.45
3	Language barrier	60	3.78	1.10
4	Culture shock	60	3.60	0.99
5	Dating or marriage pressure	60	3.58	1.02
6	Financial concern	60	3.56	0.62
7	Homesickness and loneliness	60	2.48	1.44

**Table 5.2** Rank order, means, *SD* of coping behavior, and help sources

Rank	Coping strategy	<i>N</i>	<i>M</i>	<i>SD</i>
1	Endurance	60	3.37	1.21
2	Let it go	60	3.01	1.20
3	Friends	60	2.85	1.11
4	Parents	60	2.85	1.37
5	Church	60	1.55	1.03
6	Counselors/psychiatrists	60	1.31	0.62

**Table 5.3** Rank order, means, *SD* of academic concerns

Rank	Academic concerns	<i>N</i>	<i>M</i>	<i>SD</i>
1	Class interaction	60	3.01	1.71
2	Academic paper writing	60	2.73	1.08
3	Adjusting to the American educational settings	60	2.56	1.15
4	Advisor relations	60	2.51	1.09
5	Understanding lectures	60	2.50	0.94

**Table 5.4** Unpaired t-test for differences between social science and engineering students in the level of difficulty of understanding lectures

Major	<i>n</i>	<i>M</i>	<i>SD</i>	<i>Mean diff</i>	<i>t</i>	<i>p</i>
Social science	12	2.83	0.57	0.66	2.58	0.014*
Engineering	24	2.16	0.96			

Note: \* $p < 0.05$

**Table 5.5** Unpaired t-test for differences between single and married students in the level of difficulty of adjusting to the American educational settings

Marital status	<i>n</i>	<i>M</i>	<i>SD</i>	<i>Mean diff</i>	<i>t</i>	<i>p</i>
Single	41	2.80	1.07	0.75	2.44	0.018*
Married	19	2.05	1.17			

Note: \* $p < 0.05$

### ***Academic Stress and Academic Coping Strategy***

As for the academic stress, I asked respondents to rank on a 5-point scale, from 1 not a challenge at all to 5 a critical challenge, the extent of challenges of four factors in American academic settings. Results indicated that the classroom interaction (speaking up, making presentations, and asking questions) ( $M = 3.01$ ,  $SD = 1.71$ ) and academic paper writing ( $M = 2.73$ ,  $SD = 1.08$ ) rank the highest. Regarding the difficulty of understanding the lectures, significant difference is observed across majors ( $t = 2.58$ ,  $p = 0.014 < 0.05$ ). Social science students ( $M = 2.83$ ,  $SD = 0.57$ ) felt it was much more difficult to understand professors’ lectures than the engineering students did ( $M = 2.16$ ,  $SD = 0.96$ ). With respect to the difficulty of adjusting to the American educational settings, a significant difference is identified between married and single students ( $t = 2.44$ ,  $p = 0.018 < 0.05$ ). Married students ( $M = 2.80$ ,  $SD = 1.07$ ) felt much easier to adjust to the American academic settings than single students ( $M = 2.05$ ,  $SD = 1.17$ ) did. One possible explanation is that married students might get more information and support from their spouses who came earlier and were more familiar with American academic settings (see Tables 5.3, 5.4 and 5.5).

**Table 5.6** Rank order, means, *SD* of academic coping strategy

Rank	Academic coping strategy	<i>N</i>	<i>M</i>	<i>SD</i>
1	Spending more time studying	60	3.71	1.02
2	Seeking advices from friends	60	3.28	1.09
3	Practicing English	60	3.08	1.23
4	Anticipating and preparing to avoid problems	60	3.06	1.19
5	Increasing reading after class	60	3.03	1.24
6	Observing American academic settings and other American students to make behavior adjustments	60	2.21	1.13

In order to understand the coping strategies students used to overcome their academic difficulties, a question was asked about the relative frequency of six strategies. Answers were given on a 5-point scale with 1 being very seldom and 5 being very often. Among the six strategies, Chinese students prefer to cope with their stress by spending more time or effort on studying to enhance academic strength ( $M = 3.71$ ,  $SD = 1.02$ ) and seeking insights or suggestions from friends or classmates ( $M = 3.28$ ,  $SD = 1.09$ ). These two strategies were followed by the other three coping strategies, practicing English ( $M = 3.08$ ,  $SD = 1.28$ ), anticipating and preparing to avoid potential problems ( $M = 3.06$ ,  $SD = 1.19$ ), and increasing reading after class to compensate for weaknesses in listening comprehension during lectures ( $M = 3.03$ ,  $SD = 1.24$ ), all three of which have a similar frequency rating (see Table 5.6).

The strategy of observing American students and making behavior adjustments in American class settings ( $M = 2.21$ ,  $SD = 1.19$ ) ranks the lowest among the six strategies. This suggests that most Chinese students normally choose not to adopt the strategy of behavior adjustment. Behavior adjustment, according to Greer (2005), refers to the strategy of incorporating the conduct that is generally linked to the American culture into their available behaviors and discarding the thoughts or behaviors that is related to Chinese culture if they prove a hindrance to their academic success. Most Chinese students in this study obviously give high priority to enhancing their academic strength by working hard or seeking suggestions from friends as opposed to adopting American behaviors. One possible reason is that, for Chinese students, the new educational environment is so confusing, ambiguous, and overwhelming that they tend to wrap themselves up in their academic struggles and appear indifferent to other aspects of academic life on campus.

There is a significant difference across the majors with regard to behavior adjustment ( $t = 3.34$ ,  $p = 0.002 < 0.05$ ). Students in social science ( $M = 3.41$ ,  $SD = 0.99$ ) have a higher tendency to overcome their academic problems by observing American academic settings and other American students to make behavioral adjustment than students in engineering departments do ( $M = 2.79$ ,  $SD = 1.14$ ). Gender difference is observed as well. Female students ( $M = 3.5$ ,  $SD = 0.84$ ) more prefer to use the strategy of observing American students and making behavioral adjustments than male students do ( $M = 2.5$ ,  $SD = 1.14$ ) (see Tables 5.7 and 5.8).

**Table 5.7** Unpaired t-test for differences between social science and engineering students in the frequency of using the strategy of observing American students and making behavior adjustment

Major	<i>n</i>	<i>M</i>	<i>SD</i>	<i>Mean diff</i>	<i>t</i>	<i>p</i>
Social science	12	3.41	0.99	1.04	3.34	0.002**
Engineering	24	2.79	1.14			

Note: \*\**p* < 0.01

**Table 5.8** Unpaired t-test for differences between female and male students in the frequency of using the strategy of observing American students and making behavior adjustments

Gender	<i>n</i>	<i>M</i>	<i>SD</i>	<i>Mean diff</i>	<i>t</i>	<i>p</i>
Female	27	3.50	0.84	1.00	3.88	0.000**
Male	33	2.50	1.14			

Note: \*\**p* < 0.01

In order to know which factors are important in motivating Chinese students to study hard in the United States, on a 5-point scale, with 1 being not important at all and 5 very important, I asked respondents to rank the relative importance of five factors.

Results indicate “good grades bring the feeling of self-esteem and self-worth” (*M* = 3.38, *SD* = 1.66) and “education is the only hope for social acceptance and financial security in the United States” (*M* = 3.20, *SD* = 1.22) were the most important factors motivating Chinese students to study hard in the United States. These two factors were followed by the other three motivators, “high expectation from parents” (*M* = 2.95, *SD* = 1.17), “feeling guilty about parental sacrifices” (*M* = 2.90, *SD* = 1.10), and “social comparison with other Chinese students in terms of educational achievement” (*M* = 2.88, *SD* = 1.22), all of which have a similar rating of importance.

### ***Sociocultural Challenges***

In order to gain information about students’ social life on an American campus, I asked respondents to rank their difficulties in four different social scenarios on a 5-point scale, with 1 being not challenging at all and 5 a critical challenge.

Results show that “making good friends with Americans” (*M* = 3.73, *SD* = 1.10) and “successfully communicating with Americans” (*M* = 3.50, *SD* = 1.28) were the most difficult things for Chinese students to adjust on an American campus. This confirms general discussions about Chinese international students’ social challenges in the United States. Cho (1990), for instance, found the general lack of social skills among Chinese students often led to feelings social isolation. On the other hand, in contrast to previous findings, the current findings indicate that American sociocultural values, such as individualism, competitiveness, and assertiveness (*M* = 2.61, *SD* = 1.23), are the least difficult for Chinese students to

**Table 5.9** Rank order, means, *SD* of sociocultural concerns

Rank	Sociocultural concerns	<i>N</i>	<i>M</i>	<i>SD</i>
1	Making good friends with Americans	60	3.73	1.10
2	Successfully communicating with Americans	60	3.50	1.28
3	Knowing how to participate and behave in American social situations	60	3.25	1.03
4	Accepting American sociocultural values such as individualism and competitiveness	60	2.61	1.23

**Table 5.10** Unpaired t-test for differences between female and male students in the severity of social concerns about how to behave in social settings

Gender	<i>n</i>	<i>M</i>	<i>SD</i>	<i>Mean diff</i>	<i>t</i>	<i>p</i>
Female	27	2.92	0.87	0.59	2.32	0.02*
Male	33	3.51	1.09			

Note: \* $p < 0.05$

**Table 5.11** Unpaired t-test for differences between engineering school and business school students in the severity of social concerns about how to behave in social settings

Major	<i>n</i>	<i>M</i>	<i>SD</i>	<i>Mean diff</i>	<i>t</i>	<i>p</i>
Engineering	24	3.58	0.92	0.83	2.22	0.03*
Business	8	2.75	0.88			

Note: \* $p < 0.05$

accept. Previous studies (Sun and Chen 1997; Frank 2000) found that American values of individualism and assertiveness are one of the most difficult things for PRC students to adjust to due to cultural differences. This discrepancy suggests that Chinese students' value system changed from previous generations. China's open-door policy and the increased cultural exchange between the United States and China might account for the changes (see Table 5.9).

In terms of social skills such as how to participate and behave in an American social situation, such as at parties, happy hour, receptions, or ceremonies, significant difference is identified across gender and majors among the subjects. Male students feel it is much more challenging than female students do ( $t = 2.32$ ,  $p = 0.02 < 0.05$ ). Engineering students feel more challenged than students in business school do ( $t = 2.22$ ,  $p = 0.03 < 0.05$ ) (see Tables 5.10 and 5.11).

### ***Language Barrier and Strategies***

One question was asked about how often each of the linguistic scenarios is making Chinese students feel depressed or stressed. This question was on a 5-point scale: 1 being seldom and 5 being very often. Results indicate that Chinese students are

**Table 5.12** Rank order, means, *SD* of language concerns

Rank	Language concerns	<i>N</i>	<i>M</i>	<i>SD</i>
1	Writing research-based papers	60	3.01	1.71
2	Making presentations	60	2.73	1.08
3	Casual chatting with Americans	60	2.56	1.15
4	Talking to advisors	60	2.51	1.09

**Table 5.13** Unpaired t-test for differences between social science and engineering students in the severity of language concerns about talking to advisors

Major	<i>n</i>	<i>M</i>	<i>SD</i>	Mean diff	<i>t</i>	<i>p</i>
Social science	12	3.08	1.08	0.875	2.29	0.03*
Engineering	24	2.20	1.06			

Note: \**p* < 0.05

stressed most when writing research-based papers or projects which will be judged and evaluated by American professors (*M* = 3.28, *SD* = 1.21) and making presentations where the majority of the audience is made up of native speakers (*M* = 3.15, *SD* = 1.10). The other two scenarios, “casual chatting with Americans” (*M* = 2.60, *SD* = 1.16) and “talking to advisors” (*M* = 2.41, *SD* = 1.14), are less stressful for them. In terms of talking to advisors, significant difference was identified across majors among subjects. Unpaired t-test indicates that subjects who majored in social sciences were more stressed to talk to their advisors than their counterparts in the engineering departments (*t* = -2.29, *p* = 0.03 < 0.05). The possible reason might be that natural science majors do not require as high competence in language skills as do social sciences. Additionally, social sciences require better understanding of American culture, values, and social systems (see Tables 5.12 and 5.13).

Another question was asked to evaluate how important those factors are in explaining Chinese students’ language difficulties. Answers were on a 5-point scale with 1 being not important at all and 5 very important. Results indicate that lack of contextual knowledge or cultural background (*M* = 3.62, *SD* = 1.10), infrequent chances to practice English (*M* = 3.25, *SD* = 1.39), and inadequate language training (*M* = 3.10, *SD* = 1.28) rank the highest among the factors. Significant difference across majors shows that language demands vary from major to major and high language demands for a particular major explain some students’ difficulties (*t* = 2.259, *p* = 0.03 < 0.05). Social science students think their majors significantly accounted for their language barrier (*M* = 3.50, *SD* = 1.31), while engineering students think their language difficulties were less influenced by their majors (*M* = 2.54, *SD* = 1.14) (see Tables 5.14 and 5.15).

As for the strategies used to deal with language difficulties, one question was asked to evaluate how frequently Chinese students used each of the strategies to deal with their language difficulties. Answers were given on a 5-point scale with 1 being seldom and 5 very often. Results reveal that Chinese students prefer using circumlocution (*M* = 3.95, *SD* = 0.89), repetition (*M* = 3.76, *SD* = 1.01),

**Table 5.14** Rank order, means, *SD* of factors accounting for language barrier

Rank	Factors accounting for language barrier	<i>N</i>	<i>M</i>	<i>SD</i>
1	Lack of contextual knowledge or cultural background	60	3.62	1.10
2	Infrequent chances to practice English	60	3.25	1.39
3	Inadequate language training	60	3.10	1.28
4	The influence of Chinese language	60	3.05	1.28
5	Language demand is pretty high in my major	60	2.88	1.29

**Table 5.15** Unpaired t-test for differences between social science and engineering students in the importance of the factor “Language demands are various from major to major, and language demand is pretty high for my major”

Major	<i>n</i>	<i>M</i>	<i>SD</i>	<i>Mean diff</i>	<i>t</i>	<i>p</i>
Social science	12	3.50	1.31	0.95	2.259	0.03*
Engineering	24	2.54	1.14			

Note: \* $p < 0.05$

**Table 5.16** Rank order, means, *SD* of strategies dealing with language barriers

Rank	Strategies	<i>N</i>	<i>M</i>	<i>SD</i>
1	Circumlocution	60	3.95	0.89
2	Repetition	60	3.76	1.01
3	Approximation	60	3.68	0.98
4	Self-solving	60	3.43	1.18
5	Appealing for assistance	60	3.30	1.12
6	Confirmation check	60	2.95	1.19
7	Smiling and pretending to understand	60	2.75	1.36
8	Keeping quiet to avoid problems	60	2.71	1.12

approximation ( $M = 3.68$ ,  $SD = 0.98$ ), and self-solving (e.g., practicing language) ( $M = 3.43$ ,  $SD = 1.18$ ). Keeping quiet to avoid problems ( $M = 2.71$ ,  $SD = 1.12$ ) and smiling and pretending to understand ( $M = 2.75$ ,  $SD = 1.36$ ) were least cited resources (see Table 5.16).

### ***Financial Pressure and Strategies***

Regarding financial pressure, a question was asked about the relative importance of five factors in explaining students’ financial pressure. Answers were given on a 5-point scale with 1 being not important at all and 5 very important. Among the five factors, the income gap between China and the United States ( $M = 3.31$ ,  $SD = 1.25$ ) and lack of support mechanisms (e.g., loans available to American students are not as relevant or as available to Chinese students) ( $M = 3.00$ ,  $SD = 1.32$ ) rank the



**Table 5.17** Rank order, means, *SD* of factors accounting for financial pressure

Rank	Factors	<i>N</i>	<i>M</i>	<i>SD</i>
1	The income gap between China and the United States	60	3.31	1.25
2	Lack of support mechanisms	60	3.00	1.32
3	Unavailability of assistantships in my major	60	2.85	1.16
4	Chinese students are not allowed to seek off-campus employment	60	2.75	1.14
5	The currency gap between China and the United States	60	2.68	1.20

**Table 5.18** Unpaired t-test for differences between social science and engineering students in the importance of the factor “illegal to seek off-campus employment”

Major	<i>n</i>	<i>M</i>	<i>SD</i>	<i>Mean diff</i>	<i>t</i>	<i>p</i>
Social science	12	3.58	1.38	1.00	2.28	0.03*
Engineering	24	2.58	1.16			

Note: \* $p < 0.05$

highest, followed by the factors of “unavailability of scholarship in my major,” “not allowed to seek off-campus job,” and “the currency gap between China and the United States” (see Table 5.17).

As to how important the factor of “Chinese students are not allowed to seek off-campus employment” is in explaining financial pressure, there is significant difference across majors among respondents ( $t = 2.28$ ,  $p = 0.03 < 0.05$ ). Social science students ( $M = 3.58$ ,  $SD = 1.16$ ) think this factor significantly accounts for their financial pressure more than engineering students do ( $M = 2.58$ ,  $SD = 1.16$ ) (see Table 5.18). This probably is because research assistantships or teaching assistantships were more widely available in the fields of science and technology than in the humanities and social sciences. The unavailability of assistantship means most students in the social sciences must seek part-time jobs. As such, Chinese students in social sciences suffer a double frustration by not being able to legally work off-campus and not being permitted to apply for student loans.

In addition, I asked students to rate how often is each of the strategies they used to cope with the financial pressure. Questions were formatted in the same fashion as above. Results show that among the five strategies, “trying best to secure a teaching or research assistantship” ( $M = 3.91$ ,  $SD = 1.16$ ) and “living a modest life” ( $M = 3.51$ ,  $SD = 1.26$ ) rank the highest, followed by two other strategies “choosing a university based on how much financial aid they could receive rather than on the academic reputation of the particular institution” ( $M = 3.25$ ,  $SD = 1.15$ ) and “transferring majors to wherever financial aid was available if there is no any financial support provided by current majors” ( $M = 3.13$ ,  $SD = 1.13$ ) (see Table 5.19).

In terms of “securing the assistantship,” significant difference was observed between married and single students ( $t = 2.32$ ,  $p = 0.02 < 0.05$ ). The assistantship security is more important for single students ( $M = 4.14$ ,  $SD = 0.93$ ) than it is for married students ( $M = 3.42$ ,  $SD = 1.46$ ). The possible reason is that married

**Table 5.19** Rank order, means, *SD* of strategies used to cope with the financial pressure

Rank	Factors	<i>N</i>	<i>M</i>	<i>SD</i>
1	Securing the TA or RA	60	3.91	1.16
2	Living a modest life	60	3.51	1.26
3	Choosing a university based on the availability of assistantship	60	3.25	1.15
4	Transferring to the majors whenever financial aid is available	60	3.13	1.13
5	Seeking off-campus employment, even it is illegal	60	2.25	1.31

**Table 5.20** Unpaired t-test for differences between single and married students in the frequency of using the strategy of securing the assistantship

Marital status	<i>n</i>	<i>M</i>	<i>SD</i>	<i>Mean diff</i>	<i>t</i>	<i>p</i>
Single	41	4.41	0.93	0.725	2.32	0.02*
Married	19	3.32	1.46			

Note: \* $p < 0.05$

**Table 5.21** Unpaired t-test for differences between doctoral and master students in the frequency of using the strategy of transferring majors to wherever financial aid was available

Academic status	<i>n</i>	<i>M</i>	<i>SD</i>	<i>Mean diff</i>	<i>t</i>	<i>p</i>
Doctoral	49	3.34	1.33	1.16	3.585	0.002**
Master	11	2.18	0.87			

Note: \*\* $p < 0.01$

students can count on their spouse for financial support if they lose their assistantship, while single students barely have any financial assistance in the United States besides themselves (see Table 5.20).

Regarding “transferring majors to wherever financial aid was available if there is no any financial support provided by the current major,” significant difference is identified across academic status ( $t = 3.585$ ,  $p = 0.002 < 0.05$ ). Doctoral students ( $M = 3.34$ ,  $SD = 1.33$ ) are much more likely to consider using this strategy than masters students are ( $M = 2.18$ ,  $SD = 0.87$ ). The possible reasons for this might be because the doctoral programs are much longer than master’s program and it is difficult for Chinese students to support themselves without any financial aid for 4 or 5 years (see Table 5.21).

Among the five strategies, seeking off-campus jobs is the least used strategy to beat the financial pressure ( $M = 2.25$ ,  $SD = 1.31$ ). Regarding the strategy of seeking off-campus jobs, significant difference across age among the respondents is observed ( $t = 2.14$ ,  $p = 0.04 < 0.05$ ). Older students (above 32) more frequently chose to seek off-campus job to beat their financial pressure ( $M = 2.50$ ,  $SD = 1.50$ ) than younger students did (below 25) ( $M = 1.57$ ,  $SD = 0.90$ ) (see Table 5.22).

**Table 5.22** Unpaired t-test for differences between students above 32 and students below 25 in the frequency of using the strategy of seeking off-campus jobs

Age	<i>n</i>	<i>M</i>	<i>SD</i>	<i>Mean diff</i>	<i>t</i>	<i>p</i>
Above 32	12	2.50	1.50	0.92	2.14	0.04*
Below 25	24	1.57	0.90			

Note: \**p* < 0.05

**Table 5.23** Rank order, means, *SD* of job, visa, and immigration concerns

Rank	Job, visa, and immigration concerns	<i>N</i>	<i>M</i>	<i>SD</i>
1	Planning to stay in the United States and find a job after I finish my degree program	60	4.05	1.12
2	F1 students visa will be a barrier to my future employment in the United States	60	3.90	1.14
3	Feeling stressful about the fact that my F1 visa will expire and I have to leave the United States, if I am unable to find a job within a year after my graduation	60	3.30	1.70
4	Feeling stressful about my future job opportunities in the United States	60	3.20	1.73
5	Feeling stressful about my future job opportunities in China	60	2.13	1.22

### ***Job Opportunities and Visa Problems***

In order to gain the information about students’ future intention of staying in America or returning to China, I asked respondents to rank the possibilities in five different statements on a 5-point scale with 1 being unlikely and 5 very likely. Regarding their future job opportunities, visa problems, and immigration concerns, Chinese students tend to remain in the United States to pursue other life goals after graduation (*M* = 4.05, *SD* = 1.12). Most of them view the F1 student visa as a barrier for their future employment in the United States (*M* = 3.90, *SD* = 1.14). They are concerned about the fact that their F1 visa will expire and they will have to leave United States, if they are unable to find a job within a year after their graduation (*M* = 3.30, *SD* = 1.27). They are more worried about their future job opportunities in the United States (*M* = 3.2, *SD* = 1.23) than those available in China (*M* = 2.13, *SD* = 1.22) (see Table 5.23).

In terms of their future job opportunities in China, significant difference across length of stay in the United States among subjects is identified (*t* = 2.23, *p* = 0.03 < 0.05). Students who have been in the United States more than 4 years are more stressed about their future job opportunities in China (*M* = 2.72, *SD* = 2.44) than those students who have been in the United States less than a year (*M* = 1.83, *SD* = 0.92) (see Table 5.24).

**Table 5.24** Unpaired t-test for differences between students staying in the United States more than 4 years and students less than a year in the severity of future job opportunities in China

Length of stay	<i>n</i>	<i>M</i>	<i>SD</i>	<i>Mean diff</i>	<i>t</i>	<i>p</i>
More than 4 years	18	2.72	2.44	0.88	2.23	0.03*
Less than a year	18	1.83	0.92			

Note: \* $p < 0.05$

**Table 5.25** Rank order, means, *SD* of acculturation strategy

Rank	Strategies	<i>N</i>	<i>M</i>	<i>SD</i>
1	Integration	60	4.08	1.09
2	Marginalization	60	2.90	1.39
3	Assimilation	60	2.50	1.09
4	Separation	60	2.25	1.28

### *Acculturation Strategy*

In terms of acculturation strategies, a general question was asked regarding whether students' views of life were more Chinese or American. Respondents were asked to rank four acculturation strategies (integration, marginalization, assimilation, and separation) on a 5-point scale with 1 being not true and 5 being very true. Results indicate that the integration strategy ( $M = 4.08$ ,  $SD = 1.09$ ) ranks the highest among the four strategies, followed by marginalization, assimilation, and separation. Such results suggest that most Chinese students seek daily interaction with Americans while maintaining their cultural identity as Chinese. Regarding marginalization strategy, gender difference is observed ( $t = 3.12$ ,  $p = 0.003$ ). Female students ( $M = 3.48$ ,  $SD = 1.34$ ) perceive themselves as more marginalized than male students do ( $M = 2.42$ ,  $SD = 1.27$ ). This suggests that comparing to male students, female Chinese students vacillate more between Chinese and American cultures, identifying with neither, nor for that matter being accepted by either (see Tables 5.25 and 5.26).

In order to more clearly see whether the acculturation strategies significantly account for Chinese students' overall stress, a regression analysis was conducted. Results indicate that the linear combination of four acculturation strategies were significantly related to the Chinese students' acculturation stress,  $F(60) = 4.32$ ,  $p = 0.004 < 0.05$ . Regression analysis also indicates that among the four strategies (integration, assimilation, separation, marginalization), marginalization is the only significant contributor that explains the variance in the Chinese students' appraisal of their overall pressure ( $t = 2.57$ ,  $P = 0.01 < 0.05$ ). Students who identified themselves as more marginalized were much more stressed than those students who perceived themselves as less marginalized. The other three acculturation strategies (integration, assimilation, and separation) do not account for a significant additional variance in Chinese students' overall stress, which suggests that separation,

**Table 5.26** Unpaired t-test for differences between female and male students in the frequency of using the marginalization acculturation strategy

Gender	<i>n</i>	<i>M</i>	<i>SD</i>	<i>Mean diff</i>	<i>t</i>	<i>p</i>
Female	27	3.48	1.34	1.06	3.12	0.003**
Male	33	2.42	1.27			

Note: \*\**p* < 0.01

**Table 5.27** Rank order, means, *SD* of coping strategy

Rank	Coping strategies	<i>N</i>	<i>M</i>	<i>SD</i>
1	Problem-focused strategy	60	4.13	1.09
2	Emotional-focused strategy	60	3.83	1.02
3	Avoidance-focused strategy	60	3.66	0.93

assimilation, and integration are not significantly related to the students’ evaluation of their overall pressure in the United States.

### *Coping Strategies*

As for coping strategies, respondents were asked to rank three-type strategies (problem-focused, emotional-focused, and avoidance-focused) on a 5-point scale with 1 being used seldom and 5 being used very often. Results indicate that problem-focused (*M* = 4.13, *SD* = 1.09) ranked the highest among these three strategies, followed by emotion-focused and avoidance-focused (see Table 5.27).

In terms of coping strategies, there is no significant difference across gender, majors, length of stay, academic status, marital status, age, and other individual variables.

### *Summary of Individual Variables*

Individual variables such as gender, major, age, marital status, and length of stay show significant influences on stress. As for academic pressure, no significant gender differences were observed. Other stressors and concerns, however, varied across gender among the subjects. Female Chinese students expressed more anxiety and frustration in language situations (*t* = 2.69, *p* = 0.009 < 0.05) and dating problems (*t* = 2.18, *p* = 0.03 < 0.05), while male students were more easily subject to the stress of future vocational achievement and immigration issues (*t* = 2.93, *p* = 0.007 < 0.05).

Where significant differences between majors were identified, social science students rated their stress significantly more severe than natural science or

engineering students did. Social science students recorded experiencing more financial stress than students in natural science did ( $t = 3.85, p = 0.001 < 0.05$ ). Language problems and concerns varied across majors among Chinese students as well ( $t = 3.06, p = 0.005 < 0.05$ ), with social science students having more language barriers than natural science students.

Significant differences in stress levels were also observed between married and single students. Married students experienced substantially less stress than single students did when it comes to academic pressure ( $t = 3.11, p = 0.003 < 0.05$ ), loneliness ( $t = 2.20, p = 0.03 < 0.05$ ), dating or marriage problems ( $t = 3.63, p = 0.001 < 0.05$ ), and cultural shock ( $t = 2.17, p = 0.03 < 0.05$ ). With the support of their spouse, married students' adjustment is likely to be less stressful compared to that of single students.

Age showed variable influence on the acculturation process as well. Older students experienced more visa, job, and immigration pressure ( $t = 2.17, p = 0.014 < 0.05$ ), while younger students were more easily subject to academic pressure, homesickness, and loneliness ( $t = 2.73, p = 0.01 < 0.05$ ).

Students' length of stay exerted influences on the stress level as well. Students who have been in the United States for more than 4 years experienced more stress resulting from future vocational opportunities and immigration issues ( $t = 2.17, p = 0.014 < 0.05$ ), while students in the United States less than a year were more easily subject to language issues ( $t = 2.73, p = 0.01 < 0.05$ ).

The follow-up qualitative study provides additional evidence to further validate the result of the quantitative study. For Chinese students, exposure to American higher education is always stressful. Facing the new environment, new culture, academic challenges, linguistic barriers, financial pressures, long separation from families, as well as concerns over visa status and future immigration, students find themselves experiencing a variety of stresses. Chinese students reported having stress and concerns in three major areas: personal, sociocultural, and academic. Personal concerns were divided into four subcategories: (a) loneliness and homesickness, (b) pressure from dating or marriage, (c) job opportunities and visa problems, and (d) financial pressure. Sociocultural concerns included the following categories: (a) interactions with Americans, (b) cultural deficiency, and (c) social isolation. Academic concerns included the following categories: (a) language barrier, (b) achievement, and (c) interactions with faculties.