Word from Home: The Impact of Child-Parent Contact on Chinese International

Students' Daily Psychological Distress

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Abstract

To advance the field of adolescent development, the present study investigated the association between Chinese international students' contact with parents and their daily psychological distress. This paper asked two questions: Who contacts their parents more frequently?; and Does contacting parents relieve or increase distress? Fifty undergraduate Chinese international students (female = 82.0%; Mage = 21.78 years, SD = 1.18) from 22 universities and colleges in the United States (US) participated in a ten-day diary study. Correlational and regression analyses revealed that securely-attached Chinese students contacted their parents more frequently. Chinese students also are more likely to contact their parents when parents expect frequent contact. Hierarchical linear modeling (HLM) results indicated that contact with parents was not associated with lower distress for Chinese international students. Parent support did not help reduce stress, but additional stress introduced by parents during the conversation predicts more psychological distress. However, parents' expectations for childparent closeness and warm family relationships were protective and reduced stress. Together, these findings demonstrated the important role of child-parent contact in Chinese international students' daily experiences in the US. Implications for parenting practice and future research are discussed.

Keywords: Chinese international students, attachment, stress, child-parent contact

Introduction

International students account for a still-growing, large student body. According to the *Open Doors Report*, the globalization of education led to a rapidly expanded student flow to the United States (US) in the past two decades, and the US hosted 1,075,496 international students in the 2019-2020 academic year (Institute of International Education [IIE], 2020). International students are an important source of US revenue and accounted for more than \$44 billion in the US national economy in 2020 (IIE, 2020). However, NAFSA: Association of International Education found that there was a diminution of 1.8% in the number of overall international students from 2018 to 2019, the first time since the 2005-2006 academic year (2020). More importantly, the decline of almost 2% in the international student population comes with a loss of \$1.8 billion (NAFSA, 2020). This decline in US revenue demonstrated the importance of ensuring international students' well-being in the US so they do not choose an alternative path.

Chinese international students represent the largest body of international students studying in the US, with 372,532 Chinese students making up 34.6% of the entire international student population in the US in the 2019-2020 academic year (IIE, 2020). Aside from the normative stress of going to college, Chinese international students also experience acculturative stress from the process and experience of a newcomer interacting with a different culture (Akhtar, 2012; Han et al., 2017). Chinese students often are under higher levels of acculturative stress than European students due to little similarity between host and home cultures, lower English language proficiencies, and a long distance from home (Han et al., 2017; Yeh & Inose, 2003). Also, undergraduate Chinese international students tend to experience greater acculturative stress than graduate students due to lower levels of life quality (Su et al., 2021). In addition, people who study stress distinguish between stressors and distress. This is how this paper is going to use the language: stressors are stimuli or events that produce the stress response, and distress refers to the negative stress response (Kabat-Zinn, 2013).

Moreover, while international students are an understudied population, the lack of research is particularly pronounced among Chinese international students (Su et al., 2021). The small number of existing literature on Chinese students studying in the US mainly focused on their experiences as sojourners and overlooked their roles as adolescents and children. Except for Su, Lin, and McElwain (2021), rarely any prior research has looked at how family relationships back in China impact Chinese international students' experiences in the US. Su, Lin, and McElwain (2021) examined parents' role in Chinese international students' loneliness and stress. They found that frequent contact with parents predicted lower levels of loneliness, but negative parenting practices (e.g., helicopter parenting) were associated with higher levels of loneliness and stress (Su, Lin, & McElwain, 2021). Their findings support the important role of parents in Chinese international students' psychological adjustment. The critical importance of looking at Chinese international students' contact with parents also was supported by Lian, Wallace, and Fullilove (2020). Lian, Wallace, and Fullilove looked at the mental health helpseeking intentions among Chinese international students (2020). They found that Chinese international students reported their parents as one of the three primary help-seeking resources (the other two sources were intimate partners and friends in China; Lian, Wallace, & Fullilove, 2020). In sum, prior studies on parents' role in Chinese international students' experiences in the US have found that while child-parent contact and parental support are protective and

desired, ineffective parenting practices could be harmful and become a source of stress (Lian, Wallace, & Fullilove, 2020; Su, Lin, & McElwain, 2021). Thus, a better understanding of how child-parent relationships and contact impact Chinese international students' psychological adjustment and daily experiences in the US holds theoretical and practical significance.

The Present Study

A fundamental way of thinking about child-parent relationships is through the attachment framework (Bretherton, 1994). Based on the attachment theory, parents are children's primary attachment figures and support providers – two roles closely relevant to understanding Chinese international students' experiences as they leave home and explore a new culture and environment (Bretherton, 1994). Students who are securely attached to their parents can use parents as a secure base for exploration, and parents can provide support and comfort when their children experience stress. The present study asks about will Chinese international students be able to use their parents as a secure base when they are experiencing stress far from home.

Addressing the gaps in the existing literature, this research aims to explore Chinese international students' daily contact with their parents, their interaction during the contact, and how child-parent contact impacts Chinese international students' psychological distress. The research hypothesis is three-fold. First, it is hypothesized that securely-attached Chinese students who experience high acculturative and normative stress are more likely to contact their parents. The author also expected to find that Chinese international students contact parents more frequently when their parents expect more contact. In addition, it is predicted that,

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regardless of the attachment style, support from parents during contact relieves students' feelings of distress, whereas stress introduced during contact increase students' stress levels.

Method

This research was approved by the Oberlin College Institutional Review Board.

Procedure

This study's design consisted of a preliminary survey followed by a two-week structured daily diary study. After providing informed consent, each participant completed the preliminary survey on Sunday before diary surveys started and filled out two daily diary surveys from Monday to Friday for two consecutive weeks. Participants were asked for their time zones in the preliminary survey to ensure that each participant received the morning survey at 10 a.m., the evening survey at 10 p.m., and a reminder message at midnight regardless of geolocation. Ideally, each participant would provide a completed preliminary survey response and ten diary survey responses (see Appendix for complete surveys). Data was collected in three cohorts.

Cohort 1

Cohort 1 participated in this study from 02/06/2022 to 02/18/2022. Cohort 1 participants gave informed consent and filled out the preliminary survey on 02/06/2022. They completed the Week 1 daily diary surveys from 02/07/2022 to 02/11/2022 and the Week 2 daily surveys from 02/14/2022 to 02/18/2022.

Cohort 2

Cohort 2 participated in this study from 02/20/2022 to 03/04/2022. Cohort 2 participants gave informed consent and filled out the preliminary survey on 02/20/2022. They completed

the Week 1 daily diary surveys from 02/21/2022 to 02/25/2022 and the Week 2 daily surveys from 02/28/2022 to 03/04/2022.

Cohort 3

Cohort 3 participated in this study from 02/27/2022 to 03/11/2022. Cohort 3 participants gave informed consent and filled out the preliminary survey on 02/27/2022. They completed the Week 1 daily diary surveys from 02/28/2022 to 03/04/2022 and the Week 2 daily surveys from 03/07/2022 to 03/11/2022.

Sample

This study recruited a convenient national sample of 50 undergraduate Chinese international students in the US based on direct recruitment and snowball sampling. All participants completed their pre-undergraduate education in China and are currently in the US for undergraduate education without their families.

Cohort 1

Cohort 1 consisted of 12 participants. All participants in Cohort 1 were recruited from the author's social circle, who were then prompted and asked to recommend individuals from their own social network who may be qualified and interested in participating in this study. As the study focused on the entire undergraduate Chinese international student population, the expectation for using this recruitment strategy was for the final sample to extend beyond a single college or university in the US. Cohort 1 served as a basis for recruiting Cohort 2

participants.

Cohort 2

Cohort 2 consisted of 6 participants. All participants were recruited via recommendations and contact information provided by participants in Cohort 1.

Cohort 3

Cohort 3 consisted of 32 participants. Cohort 3 participants were recruited in three ways: 1) via recommendations and contact information provided by participants in Cohorts 1 and 2; 2) via advertisements and forwards through WeChat posts; 3) via advertisements by student organizations, including Chinese Students Associations from the Pennsylvania State University and the University of Pennsylvania.

Measures

Demographics

Participants were asked to report information about their age in years and months, gender (female, male, non-binary, and prefer not to say); the name of their current university; their city and province of origin; the year they started college in the US and how many months they have been in the US.

Descriptive statistics were calculated for the demographic variables. Because there was only 1 participant who identified as non-binary, the *Gender* variable was recoded into a binary variable for the main analysis (Female = .00, Male = 1.00, and Other = System missing values).

Normative Stress

The 10-item Perceived Stress Scale (PSS10) was adopted from Cohen et al. (1988). The PSS10 is a short version of the PSS14 and measures the degree to which an individual appraises situations in their life as stressful during the last month (Cohen et al., 1988). Sample items include "In the last month, how often have you felt nervous and 'stressed'?" and "In the last month, how often have you felt that things were going your way?". This scale shows adequate reliability and validity ($\alpha = .78$). Participants were asked to rate all items on a 5-point Likert scale ranging from 0 ("Never") to 4 ("Very Often").

A normative stress score was computed by summing up participants' responses to all 10 scale items in the PSS after reverse-coding items 4, 5, 7, and 8. High scores in PSS indicate a high level of normative stress experienced by the participants during the last month as students.

Acculturative Stress

The 41-item Acculturative Stress Scale for International Students (ASSIS) was adopted from Sandhu and Asradabi (1994). Sample items include "I feel uncomfortable to adjust to new foods and/or to new eating habits" and "It hurts when people don't understand my cultural values" (Sandhu & Asradabi, 1994). This scale was designed to measure the acculturative stress of international students and has been tested for reliability and validity ($\alpha = .89$). Participants were asked to rate all items on a 5-point Likert scale ranging from 1 ("Strongly Disagree") to 5 ("Strongly Agree").

An acculturative stress score was computed by summing up participants' responses to all

41 scale items. High scores in ASSIS indicate a high level of acculturative stress experienced by the participants as international students.

English Language Proficiency

Participants' English language proficiency level in daily life communication and within academic settings was assessed using 5 language proficiency items adopted from Akhtar (2012) with slight modifications in wording: "fluent/not fluent" replaced "competent/incompetent." Sample items include "How comfortable/fluent are you reading in English?" (Akhtar, 2012). Participants were asked to rate each item on a 5-point Likert scale; 1 = Very uncomfortable/not fluent, 3 = Neutral, 5 = Very comfortable/fluent.

A language proficiency score was computed by summing up participants' responses to all 5 items. High scores indicate a high level of English language proficiency.

Attachment

The Experiences in Close Relationship Scale (ECRS) was adopted from Brennan et al. (1998). The ECRS contains 36 items on two dimensions (18 items each for *Anxiety* and *Avoidant*; Brennan et al., 1998). The *Anxiety* and *Avoidant* subscales have been tested for internal reliabilities ($\alpha = .91$ and $\alpha = .94$, respectively). Participants were asked to rate all items on a 7-point Likert scale ranging from 1 ("Strongly Disagree") to 7 ("Strongly Agree"). Participants rated their experiences in relationships with two parents separately.

Items 3, 15, 19, 22, 25, 28, 29, 31, 32, 33, 34, and 35 were reversely coded before computed into the *Anxiety* and *Avoidant* subscales for participants' attachment to parents. Participants'

anxious attachment to mother was computed by averaging their responses to items 2, 4, 6, 10, 12, 18, 20, 22^R, 24, 26, 28^R, 30, 32^R, and 34^R. Sample items include "I worry about being abandoned by my mother" and "I worry that my mother won't care about me as much as I care about them". Items 8, 14, and 16 were dropped to improve the internal reliability of the *Anxiety* subscale. High *Anxiety* scores indicate a high level of attachment-related anxiety in participants' relationship with their mother. Participants' avoidant attachment to mother was computed by averaging their responses to items 1, 3^R, 5, 7, 9, 11, 13, 15^R, 17, 19^R, 21, 23, 25^R, 27, 29, 31^R, 33^R, and 35^R.¹ Sample items include "I get uncomfortable when my mother wants to be very close" and "I don't feel comfortable opening up to my mother". High *Avoidant* scores indicate a high level of attachment-related avoidant in participants' relationship with their mother. The same above steps were repeated to compute two subscales for participants' attachment to father.

Contact Expectation

Participants were asked about their parents' expected frequency of contact and the real-life contact frequencies with their parents. The individual questions about contact expectation were:

- (1) How often are you expected to contact your parents? (9 possible answers are provided, ranging from "Never," coded as 1.00, to "Several times a day," coded as 8.00, and "No specific expectation." Through mean substitution, the average value of all responses coded 1.00 to 8.00, i.e., from "Never" to "Several times a day," was used in place of participants who responded "No specific expectation.")
- (2) Who do you contact more often? (4 possible answers were provided: "I contact my

¹ Note. ^R indicates recoded variable.

mother more frequently," "I contact my father more frequently," "I contact them about the same frequency," and "I usually contact them both at the same time.")

Contact with Parent

Contact with parents was measured using 8 items. Participants were asked about contact frequency with their parents and contact experience during the span of the study.

Contact Frequency

Item 1, "Did you contact your parents today?", recorded participants' daily contact with their parents and was responded to as "Yes," coded as 1.00, or "No," coded as .00.

Participants' contact frequency with parents during the 10-day diary survey was calculated by summing up the days in which they reported having contacted their parents, i.e., they responded "Yes" to item 1.

Contact Experience

Item 2 to 8 asked about support and stress experienced by participants during contact with parents and were responded to on a 5-point Likert scale; 1 = Not at all, 3 = Moderate, 5 = Fully supported. Support and stress items included examples (e.g., "providing money, putting you in contact with someone who could help" were examples of instrumental support provided by parents) to establish a shared definition of terms used in questions.

Two subscales were created for participants' experiences throughout contact: Parent *Support* and *Stress*. Item 3 to 5 asked about support participants received through contact

with parents and were averaged to build a parent *Support* subscale. The three items were "How much instrumental support did you receive from your parents?"; "How much emotional support did you receive from your parents?"; and "How much helpful advice did you receive from your parents?". High scores in the *Support* subscale indicate that participant received more support from parents as the outcome of their contact. Item 2, 6, 7, and 8 asked about stress induced through participants' contact with their parents. Item 6 to 8 were averaged to build a parent *Stress* subscale. The three items were "How did your parents boss you around?"; "How much emotional stress did your parents add to your day?"; and "How much extra stress did you receive from your interaction with your parents?". Item 2 was dropped to improve the internal reliability of the *Stress* subscale. High scores in the *Stress* subscale indicate that participant experienced more stress from parents as the outcome of their contact.

Daily Distress

In one question, "How stressed are you feeling right now?", participants were asked to rate their distress level at the moment using a 5-point Likert scale ranging from 1 ("Not at all") to 5 ("Almost more than I can handle").

Daily Local Stress

In one question, "Has today been better or worse than usual?", participants were asked to rate whether their day has been better or worse than usual on a 5-point Likert scale; 1 = Much worse than an average day, 3 = An average day, 5 = Much better than an average day.

		Week 1 (MonFri.)		Week 2 (N	MonFri.)
Mangura	Preliminary	Morning	Evening	Morning	Evening
Weasure	survey	survey	survey	survey	survey
Demographics					
Gender	\checkmark				
Age	\checkmark				
University	\checkmark				
Month in US	\checkmark				
English language proficiency	\checkmark				
Normative stress	\checkmark				
Acculturative stress	\checkmark				
Attachment	\checkmark				
Contact expectation	\checkmark				
Daily distress		\checkmark	\checkmark	\checkmark	\checkmark
Daily local stress			\checkmark		\checkmark
Contact with parent					
Contact or not			\checkmark		\checkmark
Contact experience			\checkmark		\checkmark

Table 1 demonstrates how the above measures were incorporated into the study design.

Plan of Analysis

Table 1

Study Design

All statistical procedures were performed using SPSS Version 27.

This paper used a threefold analytic strategy to address the questions of 1) Who contacts their parents, and 2) Whether contacting parents relieves or increases stress. First, descriptive statistics were examined, and Cronbach's alpha coefficients were computed for internal validity purposes. Next, correlational and multiple linear regression analyses were carried out to explore the nature and strength of the relationship between the various measures used and participants' frequency of contact with parents. Finally, hierarchical linear modeling (HLM)

was used to assess the extent to which daily distress levels varied depending upon general distress experienced in life (i.e., normative and acculturative stress), attachment to parents (anxious and avoidant), parents' expected frequency of contact, and experiences during contact with parents on a day-to-day level (support provided by parents and stress induced by parents).

Result

Descriptive Analyses

Demographics

The age of the participants ranged between 19 and 24 years (M=21.78, SD=1.18). 82% of the participants were female (N=41). 38% of participants were Oberlin College students (N=19). On average, participants have been in the US for around 21 months. The complete demographic characteristics by cohorts and total sample are reported in Table 2.

Demographics C	haracteris	stics						
	Coh	ort 1	Coł	nort 2	Coh	ort 3	Full s	ample
	(N=	=12)	(N	/=6)	(N=	=32)	(<i>N</i> =50)	
	n	%	n	%	n	%	n	%
Gender								
Female	10	83.3%	3	50.0%	28	87.5%	41	82.0%
Male	1	8.3%	3	50.0%	4	12.5%	8	16.0%
Non-binary	1	8.3%					1	2.0%
University								
Oberlin	6	50.0%	3	50.0%	10	31.3%	19	38.0%
Other	6	50.0%	3	50.0%	22	68.8%	31	62.0%
		Age (1	V=49)		Month in US (<i>N</i> =36)			
	М	SD	Min	Max	М	SD	Min	Max
Cohort 1	21.83	.58	21	23	20.50	10.37	10	37
Cohort 2	22.67	1.03	21	24	28.20	13.22	13	48
Cohort 3	21.58	1.31	19	24	19.60	14.78	5	48
Full sample	21.78	1.18	19	24	20.94	13.93	5	48

Table 2

Measures

The composite scores and reliability of measures of stress, attachment, and contact with parent items are found in Table 3. All measures showed good internal consistencies with Cronbach's α coefficients ranging from .80 to .90 for the attachment subscales, from .71 to .77 for the contact experience subscales, and from .86 to .93 for the remaining measures. It is important to note that not all respondents completed each item.

Table 3

Summary of Measures

Measure	М	SD	Min	Max	N	Cronbach's α
Normative stress	20.64	6.66	8.00	36.00	47	.868
Acculturative stress	110.60	23.26	62.00	157.00	48	.925
English language proficiency	19.46	4.24	5.00	25.00	50	.916
Attachment						
Anxious (mother)	2.25	.83	1.00	3.79	47	.802
Avoidant (mother)	3.44	1.05	1.72	5.61	47	.872
Anxious (father)	2.79	1.09	1.00	5.64	47	.871
Avoidant (father)	3.88	1.12	2.06	6.17	47	.898
Contact experience						
Support						.715
Stress						.767

Predicting Contact

How often did participants contact their parents?

Participants reported contacting their parents on average 4.38 days of 10 days (*SD*=2.86, range=0-10). 46% of them contacted their parents 2 to 4 days during the 10-day diary study (N=23). 4 participants did not contact their parents at all. 2 participants contacted their parents every day (see Figure 1).

Figure 1





Whom are they contacting?

30 of the 47 participants who responded to this question contacted their mother more often (63.83%). 13 participants reported contacting both parents at the same time (27.66%). Only 2 participants reported contacting their father more often (4.26%). Mothers were involved in the



Figure 2

Participants' Preferred Parent to Contact (N=47)

Who contacted their parents most frequently?

Simple correlations were calculated between the measures and participants' frequency of contact with their parents during this study (see Table 4). For demographics, women contacted their parents more than men, r(47) = -.42, p = .002. For measures of stress, participants under less normative stress were more likely to contact their parents than those experiencing high normative stress, r(45) = -.32, p = .028. For attachment, securely-attached participants call their mothers more frequently than anxious and avoidant students (anxious: r(45) = -.45, p = .002; avoidant: r(45) = -.48, $p \le .001$). Securely-attached participants call their fathers more frequently than avoidant participants, r(45) = -.32, p = .030. As would be expected, the more the parents expect their children to call, the more often their children will contact them, r(45)

=.30, p = .41.

A multiple linear regression was calculated to look at the individual effects of each variable on the contact frequency when controlling for other variables. The multiple linear regression assessed the influence of gender, age, stress measures, English language proficiency, anxious and attachment maternal attachment subscales, and contact expectation. Because all 4 attachment subscales are positively intercorrelated and participants contacted their mothers far more frequently than fathers, attachment to father subscales were dropped to reduce collinearity in the model since participants talk to their mothers more often (see Table 5). Results are reported in Table 6. Age, gender, and measures of stress did not predict the frequency of contact $(p \ge .10)$. Students who are low on anxious attachment contacted their parents more frequently, as did those whose parents expected frequent contact (anxious: B = -1.31, t(41) = -.1.99, p = .055; contact expectation: B = .67, t(41) = 1.87, p = .070).

Measure	Pearson's r	Sig (2-tailed)	Ν
Male	424**	.002	49
Age	.187	.197	49
Months in US	027	.878	36
Normative stress	321*	.028	47
Acculturative stress	.030	.840	48
English language proficiency	.107	.461	50
Attachment			
Anxious (mother)	445**	.002	47
Avoidant (mother)	476**	<.001	47
Anxious (father)	275#	.061	47
Avoidant (father)	317*	.030	47
Contact expectation	.299*	.041	47

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** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

[#]Correlation is significant at the 0.1 level (2-tailed).

Note. The *Gender* variable was recoded into a binary variable with Female = .00 and Male = 1.00.

Table 5

Correlation Matrix of Attachment Subscales

<u> </u>					
Measure	1	2	3	4	
1. Anxious (mother)	—				
2. Avoidant (mother)	.694**	—			
3. Anxious (father)	.497**	.181**	_		
4. Avoidant (father)	.410**	.524**	.656**	_	

** Correlation is significant at the 0.01 level (2-tailed).

Table 6

Multiple Linear Regression Predicting Contact Frequency (N=43)

	Unstandardized	Coefficients	Standardized Coefficients		
	В	SE	β	t	Sig.
(constant)	4.354	7.557		.576	.568
Male	-1.416	1.113	175	-1.273	.212
Age	031	.341	013	091	.928
Normative stress	.000	.071	001	007	.995
Acculturative stress	.026	.017	.216	1.504	.142
English language proficiency	059	.096	086	621	.539
Attachment					
Anxious (mother)	-1.307	.657	379	-1.989#	.055
Avoidant (mother)	492	.512	190	960	.344
Contact expectation	.671	.359	.245	$1.870^{\#}$.070

^{a.} Dependent Variable: Frequency of contact with parents over the 10-day survey.

[#] *t*-value is significant at the 0.1 level.

Note. The *Gender* variable was recoded into a binary variable with Female = .00 and Male = 1.00.

Predicting Daily Distress

Hierarchical linear modeling (HLM) parses variance into between-person variance (predicting individual differences in mean distress from stable characteristics like attachment) and within-person variance (day to day variations in stress around an individuals' mean stress predicted from characteristics that vary from day to day).

A series of HLM analyses were run predicting student distress. First, a baseline model was computed, calculating the percentage of variance attributable to between and within-person differences in distress. Next, within-person, day-to-day differences in distress level (i.e., how stressed they were feeling by the end of the day) were predicted from participants' reports of that day's stress measured in the morning (i.e., how stressed they were feeling in the beginning of the day), their contact with parents, and the support and stress they received from their parents that day, which were averaged (Level 1). These analyses control for individuals' mean distress level. Third, mean differences in distress were predicted from anxious and avoidant maternal attachment and their parents' expectation for contact (Level 2). Finally, the interaction between contact and attachment was examined to determine whether the relationship between contact with parents and daily distress varied as a function of maternal attachment (anxiety and avoidance). HLM results are reported in Table 7.

The baseline estimate shows that 43.9% of the variance is associated with between-person differences, and 56.1% is associated with day-to-day variations plus error. Predicting withinperson differences, students who reported high morning stress were more likely to report high distress in the evening (Level 1, t(275) = 8.33, $p \le .001$). Students were also more likely to report high evening distress if their parents introduced stress during their conversations (Level 1, t(321) = 2.42, p = .016). Neither contact nor parent support predicted day-to-day variations in stress (contact: t(324) = -.93, $p \ge .10$; support: t(320) = .91, $p \ge .10$). Together, these variables explained 4.0% of the 56.1% of the variance associated with within-person differences plus error. Predicting between-person differences, there is a trend indicating that students with avoidant attachment to their mother were more stressed (Level 2, t(44) = 2.01, p = .051). Another trend indicates that students who are under higher expectation for contact were less stressed (Level 2, t(37) = -2.00, p = .053). The interaction model shows no significant interaction $(p \ge .10)$.²

Table 7

Total

Variance explained

	Deseline	Laval 1	Level 2	Level 3
	Dasenne	Level I	(Trimmed)	(Intersect)
Parameter	Estimate (SE)	Estimate (SE)	Estimate (SE)	Estimate (SE)
Intercept	1.167** (.105)	.612** (.104)	.842 (.502)	1.015 [#] (.547)
Within-person day-to-				
day variation				
Baseline stress		.430** (.052)	.402** (.052)	.401** (.052)
Contact		120 (.130)	041 (.129)	328 (.369)
Parent support		.051 (.056)	.067 (.056)	.075 (.057)
Parent stress		.228* (.094)	.216* (.092)	.205* (.935)
Between-person				
differences				
Anxious (mother)			009 (.107)	033 (.131)
Avoidant (mother)			$.170^{\#} (.085)$.141 (.105)
Contact expectation			137# (.069)	139# (.069)
Anxious attachment				0.42(161)
mother * Contact				.043 (.101)
Avoidant attachment				054(125)
mother * Contact				.034 (.123)
Variance components				
	Baseline	Baseline Lev		vel 2 (Trimmed)
	Variance	% Variance	% Var	riance %
Within	.549	.527		505
Between	.430	.127		101

Results of HLM Analysis Predicting Daily Distress

.439 ** Parameter estimate is significant at the 0.01 level (2-tailed).

.979

* Parameter estimate is significant at the 0.05 level (2-tailed).

43.9%

.654

.040

4.0%

.606

.042

4.2%

² Note. Exploratory analyses in which demographics, measures of stress, and English language proficiency were tested as potential predictors revealed no significant result (p \geq .10), and these terms were dropped from the final trimmed models.

[#]Parameter estimate is significant at the 0.1 level (2-tailed).

^{a.} Dependent Variable: How stressed are you feeling right now? (Evening survey).

Note. Baseline stress: How stressed are you feeling right now? (Morning survey); Contact: Did you contact your parents today? (Responses were coded with Yes = 1.00, No = .00).

Discussion

General Discussion

In the 2019-2020 academic year, 372,532 Chinese students made up 34.6% of all international students in the US (IIE, 2020). In addition to the normative stress experienced by all students, Chinese international students also experience acculturative stress as they adjust to an environment culturally distinct from their home environment. This paper looked at the association between undergraduate Chinese international students' contact with parents and their daily feelings of emotional distress. It addresses two questions: Who contacts their parents more frequently?; and Does contacting parents relieve or increase distress?

Fifty undergraduate Chinese international students studying in 22 different universities and colleges across the US participated in a ten-day diary study. After completing a preliminary survey, each student completed a morning report of their distress and an evening report on their contact with parents and evening distress for ten consecutive days. Chinese international students made frequent contact with their parents, talking to them an average of 2 to 3 times per week, with mothers being the most frequent contact. Only 8% of students did not contact their parents during the 10 days of the diary study. It was hypothesized that securely-attached students would contact their parents when they experienced more distress. Results partially supported the study hypothesis. Students who were low in anxious attachment contacted their parents more frequently. Parents' expectations were also important. Students whose parents expected more frequent contact were, indeed, in contact more often. Avoidant attachment to parents, normative and acculturative stress, gender, age, and time in the US did not predict students' frequency of contact with parents.

Did contacting parents reduce emotional distress?

Contrary to the study hypothesis, contact with parents was not associated with lower distress, either directly or controlling for stress earlier in the day, prior to contact. In addition, parents' support did not predict lower distress. Rather, stress introduced by parents during contact significantly increases their children's feelings of distress. In other words, parent support did not help reduce stress, but additional stress introduced by parents during the conversation could make things worse. Both secure attachment and expectation for contact predicted lower distress.

Why was talking to parents not as helpful?

Previous research on Chinese international students' primary help-seeking resources suggested that parents are considered a significant source of support for Chinese students in the US (Lian, Wallace, and Fullilove, 2020). However, the present study found that neither parental contact nor support reduced distress, and stressful interactions with parents increased distress. Differences between prior research findings and what was found in the current study may be explained by the distinct study designs. For example, while Lian, Wallace, and Fullilove (2020) is a global study that asked Chinese international students to rate their overall sources of support, the present study is a diary study that looked at students' daily experiences of support. There is a clear difference between having a good child-parent relationship in general and having a helpful interaction with parents on a specific day. Having supportive parents, in general, help with students' overall development, but it does not mean that parents will

necessarily not introduce new stressor during a single interaction and cause a temporary rise in their children's feelings of emotional distress during a single day.

The association between contact with parents and Chinese international students' feelings of distress may be explained by Chinese parents' selections of supportive strategies and expressions of parental warmth. Previous literature found that Chinese mothers frequently use unconstructive or non-supportive strategies such as controlling or inhibiting expressions of emotion when dealing with their children's negative feelings (Yang et al., 2020). Researchers also found that Chinese fathers have a strong preference for nonverbal expressions of caring, such as providing instrumental support and actions of physical care rather than verbal expressions of affection (Li, 2020). While nonverbal expressions of parental love such as leisure activities help establish emotional bonds between Chinese parents and their children when they are close in person, a long distance from home limits the warmth international students can feel from their parents' physical gestures (Li, 2020). In addition, having their children studying abroad and being away from home makes maintaining and developing family connections more difficult for Chinese parents.

Another potential explanation for parental support not predicting lower distress lies in the difficulties of bridging cultural differences. As Chinese international students undergo cultural transitions, they may internalize aspects of the host culture into their own identity and value. The cultural gap between the home and host countries thus projects onto different expectations for effective support between children studying abroad and their parents staying at home. Consequently, parents may give advice that is culturally inappropriate for the US. In addition to unhelpful advice, parents may talk about stressful things back home during contact with their

children, such as a close relative who recently became ill or financial difficulties. However, because students are studying abroad, they cannot do anything about the stressful situation or provide help, which may induce guilt and more stress.

Nevertheless, it is important to notice that contact with parents does not necessarily lead to negative outcomes. Rather, talking to parents was not found to be particularly beneficial for Chinese international students in this study. Moreover, there is a trend indicating that parents' expectation for contact helps with stress, suggesting that children may see parents' expectations for contact as desiring closeness and warmth. This trend highlights the protective nature of parents' clearly expressed expectations for family closeness. Specifically, students tend to feel less emotionally distressed knowing that their parents care about their well-being and wish for warm, close family relationships.

Taken together, the present study found results that are mostly consistent with prior research – parents back home impact Chinese international students' experiences at school, and ineffective parenting practices can be harmful to Chinese students' emotional distress (Lian, Wallace, & Fullilove, 2020; Su, Lin, & McElwain, 2021). These results suggest that parents should be mindful of how they interact with their children during contact. Chinese international students experience additional acculturative stress aside from normative stress experienced by all students, which made their time in the US more challenging than others. Thus, because parents are one of Chinese international students' reported primary help-seeking sources, it is particularly important for them to be aware of their contact with children and not introduce new stress sources (Lian, Wallace, & Fullilove, 2020). For example, what parents consider caring questions may be perceived as stressors by their children. Parents should also be mindful

of how distance from home impacts their interactions with children and adjust their parenting approaches accordingly – micromanaging at a distance tends to be ineffective and will likely appear invasive. Finally, parents are encouraged to provide emotional support and verbally express their love and expectations for contact, closeness, and warmth in family relationships.

Limitations and Future Directions

The current study is limited in several aspects. One of the limitations is that the sample used in this study is small, convenient, and predominantly female (N=50; 82%). Results based on 50 students are certainly not representative of the diverse experiences within the Chinese international student population. Another limitation concerns the lag effects. Although morning distress was used to control for changes in distress after contact with parents, this study did not look at the association of evening contact with distress the following morning. Contact and support from parents today may not help students feel less distress immediately but reduce their stress level the next day. In addition, this study talked about attachment but not explicitly about warmth in child-parent relationships and did not collect more detailed information about the content of interaction with parents, such as how parents worded their support and advice or the nature of the additional stressor. More details about the content of contact would allow us to make stronger inferences about why support from parents was not associated with reduced distress and what types of external stressors from parents increased stress.

Future researchers should look at larger, more representative study samples because Chinese international students consist of a highly heterogeneous population. It would also be beneficial to extend the current findings with more detailed diary analyses – for example, detailed analyses on the content of child-parent analyses may help identify significant stressors that parents would want to avoid. Future researchers could also examine the lag effects by predicting the next day's morning stress using today's contact and support. In addition, as the present study suggests, Chinese international students and their parents have different assumptions about helpful support, both instrumental and emotional. Thus, there is a need for future studies to explore forms of support that Chinese international students consider effective and desired. Understanding Chinese students' expectations can be beneficial because Wang (2019) found that adolescents reported higher family relationship satisfaction when the support they received from parents matched adolescents' desired support. Finally, it would also be helpful for future studies to compare parents' expectations for their children's educational success and students' self-reported satisfaction with their current academic work. Chinese students experience higher pressure to succeed academically because educational achievement and attainment are essential values in Chinese home cultures (Han et al., 2017; Yeh & Inose, 2003). Consequently, the more Chinese international students see themselves as doing poorly at school, the more they would worry about failing their families, making their contact with parents more stressful.

Implications

Despite the limitations, the current study advances the field of adolescent development in meaningful ways. Most importantly, there is very little prior research on international students' contact with parents back home and its critical importance in understanding cross-cultural adjustment. To the author's knowledge, the present study is the first one that examines Chinese international students' contact with parents using a diary study. The present study sheds light on the day-to-day experiences of Chinese international students as sojourners and adolescents undergoing the dual challenge of human development and cultural adaptation. Exploring how parental support back home can be protective and buffer against daily distress for Chinese international students holds practical importance in facilitating healthy adolescent development. Finally, for Chinese parents, this study provides suggestions on how parents can develop and maintain family closeness when their children are far away from home – supportive parenting practice is less about what they do but more about how they do it, in a culturally appropriate context, of course.

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Appendix A Preliminary Survey

Default Question Block

Thank you for participating!

This survey will ask you for some of your demographic information and experiences as an individual, an international student, and a child.

The whole survey should take around 20 minutes.

Participant Contact and Research ID Number

How did the researcher contact you? (Please enter all contact information that applies)

U WeChat

Text

🗌 email

What is your research ID Number?

*Your research ID No. is the last 4 digits of your Chinese citizen ID Number on your People's Republic of China Resident Identity Card, and you will be asked to record it *every time you start a survey*. If your last digit is X, please record it as 10. For example, if your last 4 digits are 162X, your research ID No. will be 16210. 这个实验不会收录其他任何身份认证信息,只有你的身份证后四位会用时识别你的回答,如果最后一位是 X,请列为10,谢谢。

Participants Referral

This study uses snowball sampling (i.e., we ask current participants to recommend friends who are qualified and may be interested in participating in this study). Could you please provide contact information (微信号或是邮箱 + 学校) of one potential participant? Thank you! Just a reminder, this person should be a Chinese international student under US undergraduate education.

Demographics

To which gender identity do you most identify?

-		
	E a ma a	
()	Fema	Ie.
		-

- Male
- O Non-binary

0	Other	

O Prefer Not to Answer

Age (mm/dd/yyyy)

Name of university

What year did you start college in the US?

○ 2018

○ 2019

○ 2020

O 2021

 \bigcirc 2017 or earlier (write in the year)

How long have you been in the US? (in months)

Language Proficiency Items

	Very Uncomfortable/Not Fluent	Uncomfortable/Not Fluent	Neutral	Comfortable/Fluent	Very Comfortable/Fluent
1. How comfortable/fluent are you reading in English?	0	0	0	0	0
2. How comfortable/fluent are you speaking in English with Americans?	0	0	0	0	0
3. How comfortable/fluent are you writing a paper in English?	0	0	0	0	0
4. How comfortable/fluent are you taking a test in English?	0	0	\bigcirc	0	0
5. How comfortable/fluent area you filling out a formal document in English?	0	0	0	0	0

The following questions are intended to assess your English language proficiency.

Acculturative Stress Scale for International Students

As foreign students have to make a number of personal, social, and environmental changes upon arrival in a strange land, this cultural shock experience might cause them acculturative stress. This scale is designed to assess such *acculturative stress* you personally might have experienced, there are no right or wrong answers.

Because of my different cultural background as a foreign student, I feel that:

	Strongly Disagree	Disagree	Unsure	Agree	Strongly Agree
1. Homesickness for my country bothers me.	0	0	0	0	0
2. I feel uncomfortable to adjust to new foods and/or to new eating habits.	0	0	0	\bigcirc	0
3. I am treated differently in social situations.	0	\bigcirc	0	\bigcirc	\bigcirc
4. I feel rejected when people are sarcastic toward my cultural values.	0	0	0	\bigcirc	0
5. I have difficulties in selecting the groceries, clothing and other supplies which suit me.	0	0	0	0	0
6. I feel sad living in unfamiliar surroundings here.	0	0	0	\bigcirc	0
7. I fear for my personal safety because of my different cultural background.	0	0	\bigcirc	0	\bigcirc
8. I feel intimidate to participate in social activities.	0	0	0	\bigcirc	0
9. Others are biased against me.	0	0	0	\bigcirc	0
10. I feel guilty to leave my family and friends behind.	0	0	0	\bigcirc	0
11. Many opportunities are denied to me.	0	0	0	\bigcirc	0

	Strongly Disagree	Disagree	Unsure	Agree	Strongly Agree
 I found necessary supplies costly and have no knowledge of how to get them cheaply. 	0	0	0	0	0
13. I feel angry that my people are considered inferior here.	0	\bigcirc	0	\bigcirc	\bigcirc
14. I have difficulty in finding a suitable accommodation for myself.	0	0	0	0	\bigcirc
15. I feel overwhelmed that multiple pressures are placed upon me after my migration to this society.	0	0	0	0	0
16. I feel that I receive unequal treatment.	0	0	0	0	\bigcirc
17. People from some ethnic groups show hatred toward me nonverbally.	0	0	0	0	0
 It hurts when people don't understand my cultural values. 	0	\bigcirc	0	0	0
 I have difficulty in adjusting my appearance to the new life style. 	0	0	0	0	\bigcirc
20. I am denied what I deserve.	0	\bigcirc	\bigcirc	\bigcirc	\bigcirc
21. I have to frequently relocate for fear of others.	0	\bigcirc	0	0	\bigcirc
22. I have difficulties in obtaining necessary documents to be able to work or study.	0	0	0	0	\bigcirc
23. I feel low because of my cultural background.	0	\bigcirc	0	0	0
24. I feel rejected when others don't appreciate my cultural values.	0	0	0	0	\bigcirc
25. I feel uncomfortable to adjust to new cultural values.	0	0	0	0	\bigcirc
26. I feel that my people are discriminated against.	0	0	0	0	\bigcirc
27. People from some other ethnic groups show hatred toward me through their actions.	0	0	0	0	0
 I feel that my status in this society is low due to my cultural background. 	0	0	0	0	\bigcirc
29. I am treated differently because of my race.	0	0	0	0	0
30. I feel insecure here.	0	\bigcirc	\bigcirc	\bigcirc	\bigcirc
31. I don't feel a sense of belonging (community) here.	0	\bigcirc	\bigcirc	\bigcirc	\bigcirc
32. I am treated differently because of my color.	0	\bigcirc	\bigcirc	\bigcirc	\bigcirc
 I feel sad to consider my people's problems. 	0	\bigcirc	0	0	0
 I generally keep to low profile due to fear from other ethnic groups. 	0	0	0	0	0
35. It is really hard for me to establish a home in this new set-up.	0	0	0	0	0

	Strongly Disagree	Disagree	Unsure	Agree	Strongly Agree
36. I feel some people don't associate with me because of my ethnicity.	0	0	0	0	0
37. People from some other ethnic groups show hatred toward me verbally.	0	0	0	0	0
38. I feel guilty that I am living a different lifestyle here.	0	0	0	0	0
39. I feel sad leaving my relatives behind.	0	0	0	\bigcirc	0
40. I worry about my future for not being able to decide whether to stay here or to go back.	0	0	0	0	0
41. I find it difficult to know what to do and where to go when I am ill.	0	0	0	0	\bigcirc

Experiences in Close Relationship Scale (Mother)

	Strongly Disagree	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Strongly Agree
1. I prefer not to show this person how I feel deep down.	0	0	0	0	0	0	0
2. I worry about being abandoned by this person.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
3. I am very comfortable being close to this person.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
4. I worry a lot about my relationship with this person.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
5. Just when this person starts to get close to me I find myself pulling away.	0	0	0	0	0	0	\bigcirc
6. I worry that this person won't ware about me as much as I care about them.	0	0	0	0	0	0	\bigcirc
7. I get uncomfortable when this person wants to be very close.	0	0	0	0	0	0	\bigcirc
8. I worry a fair amount about losing this person.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
9. I don't feel comfortable opening up to this person.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
10. I often wish that this person's feelings for me were as strong as my feelings for him/her.	0	0	0	0	0	0	0
11. I want to get close to this person, but I keep pulling back.	0	0	0	0	0	0	0
12. I often want to merge completely with this person, and this sometimes scares them away.	0	0	0	0	0	0	0
13. I am nervous when this person gets too close to me.	\circ	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
14. When I'm not with this person, I worry about being alone.	0	0	0	0	0	0	\bigcirc
15. I feel comfortable sharing my private thoughts and feelings with this person.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
16. My desire to be very close sometimes when this person is away.	0	0	0	\bigcirc	0	\bigcirc	\bigcirc
17. I try to avoid getting too close to this person.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
18. I need a lot of reassurance that I am loved by this person.	0	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
19. I find it relatively easy to get close to this person.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
20. Sometimes I feel that I force this person to show more feeling, more commitment.	\bigcirc	0	\bigcirc	0	\bigcirc	0	\bigcirc

Think about your relationship NOW with *your mother*. For each person, please use the following scale to indicate how much you agree or disagree with the following statements

	Strongly Disagree	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Strongly Agree
21. I find it difficult to allow myself to depend on this person.	0	0	0	0	0	0	0
22. I do not often worry about abandoned by this person.	0	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
23. I prefer not to be too close to this person.	0	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
24. If I can't get this person to show interest in me, I get upset or angry.	0	\bigcirc	\bigcirc	\bigcirc	0	\bigcirc	\bigcirc
25. I tell this person just about everything.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
26. I find that this person doesn't want to get as close as I would like.	0	0	0	\bigcirc	0	0	\bigcirc
27. I usually discuss my problems and concerns with this person.	0	0	\bigcirc	\bigcirc	0	\bigcirc	\bigcirc
28. I feel comfortable depending on this person.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
29. I get frustrated when this person is not around as much as I would like.	0	0	0	0	0	0	\bigcirc
30. I don't think about asking this person for comfort, advice, or help.	0	0	0	\bigcirc	0	0	\bigcirc
31. I get frustrated if this person is not available when I need them.	0	0	0	0	0	0	0
32. It helps to turn to this person in times of need.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	0	\bigcirc	\bigcirc
33. When this person disapproves of me, I feel really bad about myself.	0	0	0	0	0	0	\bigcirc
34. I turned to this person for many things, including comfort and reassurance.	0	0	0	0	0	0	\bigcirc
35. I resent it when this person spends time away from me.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc

Experiences in Close Relationship Scale (Father)

Think about your relationship NOW with *your father*. For each person, please use the following scale to indicate how much you agree or disagree with the following statements

	Strongly Disagree	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Strongly Agree
1. I prefer not to show this person how I feel deep down.	0	0	0	0	0	0	0
2. I worry about being abandoned by this person.	0	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
3. I am very comfortable being close to this person.	0	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
4. I worry a lot about my relationship with this person.	0	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
5. Just when this person starts to get close to me I find myself pulling away.	0	0	\bigcirc	0	0	\bigcirc	\bigcirc

	Strongly Disagree	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Strongly Agree
6. I worry that this person won't ware about me as much as I care about them.	0	0	0	0	0	0	0
7. I get uncomfortable when this person wants to be very close.	0	0	0	\bigcirc	0	0	0
8. I worry a fair amount about losing this person.	0	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
9. I don't feel comfortable opening up to this person.	0	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
10. I often wish that this person's feelings for me were as strong as my feelings for him/her.	0	0	0	0	0	0	0
11. I want to get close to this person, but I keep pulling back.	0	0	0	0	0	0	\bigcirc
12. I often want to merge completely with this person, and this sometimes scares them away.	0	0	\bigcirc	\bigcirc	\bigcirc	0	\bigcirc
13. I am nervous when this person gets too close to me.	0	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
14. When I'm not with this person, I worry about being alone.	0	0	0	\bigcirc	0	0	0
15. I feel comfortable sharing my private thoughts and feelings with this person.	0	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
16. My desire to be very close sometimes cares this person away.	0	\bigcirc	\bigcirc	\bigcirc	\bigcirc	0	\bigcirc
17. I try to avoid getting too close to this person.	0	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
18. I need a lot of reassurance that I am loved by this person.	0	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
19. I find it relatively easy to get close to this person.	0	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
20. Sometimes I feel that I force this person to show more feeling, more commitment.	0	\bigcirc	\bigcirc	0	\bigcirc	0	\bigcirc
21. I find it difficult to allow myself to depend on this person.	0	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
22. I do not often worry about abandoned by this person.	0	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
23. I prefer not to be too close to this person.	0	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
24. If I can't get this person to show interest in me, I get upset or angry.	0	0	0	\bigcirc	0	0	\bigcirc
25. I tell this person just about everything.	0	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
26. I find that this person doesn't want to get as close as I would like.	0	\bigcirc	\bigcirc	\bigcirc	\bigcirc	0	\bigcirc
27. I usually discuss my problems and concerns with this person.	0	0	\bigcirc	\bigcirc	\bigcirc	0	\bigcirc
28. I feel comfortable depending on this person.	0	0	0	0	0	0	\bigcirc

	Strongly Disagree	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Strongly Agree
29. I get frustrated when this person is not around as much as I would like.	0	0	0	0	0	0	0
30. I don't think asking this person for comfort, advice, or help.	0	0	0	\bigcirc	0	\bigcirc	0
31. I get frustrated if this person is not available when I need them.	0	0	0	0	0	0	0
32. It helps to turn to this person in times of need.	0	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\circ
33. When this person disapproves of me, I feel really bad about myself.	0	0	0	0	0	0	0
34. I turned to this person for many things, including comfort and reassurance.	0	0	0	0	0	0	0
35. I resent it when this person spends time away from me.	0	0	0	0	0	0	0

Expectation for Contact

How often are you expected to contact your parents?

- O Never
- Once a couple of months
- Once a month
- Once every two weeks
- Once a week
- Several times a week
- Once a day
- Several times a day
- \bigcirc No specific expectation

Who do you contact more often?

- O Mother
- ⊖ Father
- $\bigcirc\,$ About the same frequency
- $\bigcirc\,$ I usually contact them both at the same time.

Perceived Stress Scale

The questions in this scale ask you about your feelings and thoughts during the last month. In each case, you will be asked to indicate by circling *how often* you felt or thought a certain way.

	Never	Almost Never	Sometimes	Fairly Often	Very Often
1. In the last month, how often have you been upset because of something that happened unexpectedly.	0	0	0	0	0
2. In the last month, how often have you felt that you were unable to control the important things in your life.	0	0	0	0	0
3. In the last month, how often have you felt nervous and "stressed"?	0	0	0	0	0
4. In the last month, how often have you felt confident about your ability to handle your personal problems?	0	0	0	0	0
5. In the last month, how often have you felt that things were going your way?	0	0	0	0	0
6. In the last month, how often have you found that you could not cope with all the things that you had to do?	0	0	0	0	0

	Never	Almost Never	Sometimes	Fairly Often	Very Often
7. In the last month, how often have you been able to control irritations in your life?	0	0	0	0	0
8. In the last month, how often have you felt that you were on top of things?	0	0	0	0	0
9. In the last month, how often have you been angered because of things that were outside of your control.	0	0	0	0	0
10. In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?	0	0	0	0	0

Questions and Resources

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If in need, here are some support services:

- 1. Call the toll-free National Suicide Prevention Lifeline at 1-800-273-TALK (8255).
- 2. Text START to the Crisis Text Line at 741-741, available 24 hours a day, 7 days a week.
- SAMHSA's National Helpline is a free, confidential, 24/7, 365-day-a-year treatment referral and information service (in English and Spanish) for individuals and families facing mental and/or substance use disorders.

These services are available to anyone. All communications are confidential.

Appendix B Morning Diary Survey

Daily Distress Level

What is your Research ID number? (Last 4 digits of your Chinese citizen ID Number)

How stressed are you feeling right now?

Not at all

○ Slightly

Moderately

◯ Very

 $\bigcirc\,$ Almost more than I can handle

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Appendix C Evening Diary Survey

Daily Distress Level

What is your Research ID number? (Last 4 digits of your Chinese citizen ID Number)

How stressed are you feeling right now?

- O Not at all
- O Slightly
- Moderately
- ⊖ Very
- Almost more than I can handle

Daily Stressors

Has today been better or worse than usual?

- \bigcirc Much worse than an average day
- \bigcirc Worse than an average day
- \bigcirc About the same as an average day
- O Better than an average day
- $\bigcirc\,$ Much better than an average day

Contact with Parents Items

Please answer the following questions.

	No	Yes
1. Did you contact your parents today?	0	0
2. If yes, did your parents say or do anything that increased your stress?	0	0

Based on your interaction with your parents today, please answer the following questions using the given scale.

1 = None at all	3 = Moderate	5 = A lot				
		1	2	3	4	5

Daily Distress Level

What is your Research ID number? (Last 4 digits of your Chinese citizen ID Number)

How stressed are you feeling right now?

- Not at all
- Slightly
- Moderately
- ◯ Very
- $\bigcirc\,$ Almost more than I can handle

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How much <i>instrumental support</i> did you receive from your parents? Example: Providing money, Putting you in contact with someone who could help.	0	0	0	0	0
How much <i>emotional support</i> did you receive from your parents? Example: Listening and offering sympathy.	0	0	0	0	0
How much helpful advice Example: Told me to get more sleep. Suggested I ask my professor for help.	0	0	0	0	0
How much did your parents boss you around? Example:Telling your precisely what to do.	0	0	0	0	0
How much <i>emotional stress</i> did your parents add to your day? Example: Acted disappointment in you or told you you should do better.	0	0	0	0	0
How much extra stress did you receive from your interaction with your parents? Example: Told me about trouble at home.	0	0	0	0	0

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