

# Family Cohesion Moderates the Relationship between Acculturative Stress and Depression in Japanese Adolescent Temporary Residents

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Published online: 20 December 2013  
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**Abstract** Acculturative stress is a risk factor for depression, and may be important in the risk for depression among acculturating Japanese adolescents. However, little to no research has been published on the mental health of acculturating Japanese adolescents. Further, although family cohesion has been shown to be protective against depression across ethnic groups, no prior research has examined family cohesion as a protective factor for Japanese adolescents. To examine these relationships, 26 Japanese temporary resident adolescents and 76 parents in the Midwest were recruited to participate. Moderate to strong correlations between acculturative stress, depression, likelihood for and seriousness of family conflict were found. A regression analysis found that likelihood for family conflict moderated the relationship between acculturative stress and depression. Findings broaden our understanding of the role of acculturative stress and family conflict on depression risk for Japanese adolescent immigrants.

**Keywords** Japanese adolescent temporary residents · Depressive symptoms · Acculturative stress · Family conflict

## Introduction

With the advent of technology, growth of international business, and increase in globalized education, individuals frequently encounter cultures unlike their own and, when supplanted in a foreign society, individuals experience

acculturative stress daily. Acculturative stress has implications for the psychological well-being of the acculturating individual [1–3]. Little is known about the mental health of temporary residents in the United States. Moreover, Japanese individuals represent the third largest ethnic group of temporary residents in the US [4] and while academic research has been able to establish links between acculturative stress and poor mental health outcomes in Latino, Korean and Chinese adolescents, none exists for Japanese adolescents.

## Theoretical Framework

Based on Berry's [5] model of acculturation, the level of individual choice to adhere to traditional culture impacts acculturative stress. Further, individuals who receive support in making decisions about their cultural identity are healthier psychologically [3]. Previous research with Asian immigrants has shown that less fluency in English speaking ability was associated with higher levels of acculturative stress and psychological problems [1, 2]. Graham [1] who compared Asian and Polynesian immigrants also found that as mental health problems increase, the groups that have the widest cultural gaps are also the ones that have the highest average depression scores.

Scientific study has also drawn associations between acculturative stress and family dynamics. Specifically, parental support of autonomy was associated with the internalization of the culture of origin among adolescents and better well-being [3]. Among Korean and Indian adolescent immigrants to the US, the first and third highest stressor involved disagreements between parents and adolescents, while adolescents reported that their parents were the second most important source of social support [6].

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No studies have examined depressive symptoms among Japanese adolescent immigrants, though Asian American adolescents have the highest rate of depression and suicide of all ethnic groups [7]. Despite knowing that Asian adolescent immigrants are at increased risk for developing depression, more research is needed on the experience of Japanese adolescent immigrants, who are the third largest group of immigrants in the US.

Our study aims expand on the limited knowledge of acculturative stress and mental health problems in Japanese adolescent temporary residents residing in the United States. Since previous research has established links between socioeconomic and demographic factors (e.g., age at time of migration, ethnic identity) with acculturative stress, and mental health outcomes [1, 2], one of the primary objectives of this study was to examine the quantitative differences between adolescents and adults in their report of acculturative stress. Another goal was to examine the relationship between family conflict, acculturative stress, and mental health problems. Available research establishes a link between parental characteristics like encouragement of autonomy of the child, reduced acculturative stress, and better mental health [3], but does not explicitly examine conflict between parents and their children. Additionally, there is evidence for parental support as a protective factor, but how family conflict changes the acculturative process and the development of psychological problems has not been empirically tested. Finally, given that not all families experience outward conflict despite underlying tension, we examined the effect of the likelihood of parental conflict on acculturative stress and the development of depressive and anxious symptoms in adolescents.

## Method

Participants were 26 adolescent Japanese temporary residents (65 % female) in grades 6–12 and 76 parents of children in grades 1–12 (73 % = female) attending a Japanese language school in the Midwest. The mean age of parents was 41.65 ( $sd = 5.7$ ); the mean age of adolescents was 14.48 ( $sd = 2.76$ ). The mean years lived in USA was 3.83 ( $sd = 4.34$ ), where more than 60 % of the sample reported living in the United States for <3 years. Measures, described in the next section, were translated by the second author using a standard back-translation method where the original scales were compared to the back-translated scales to ensure the integrity of the scales across translation.

## Measures

*Demographic questionnaire* included questions on age, gender, years lived in the US.

*Acculturative Stress* was assessed with the Social, Attitudinal, Familial, and Environmental Acculturation Stress Scale (SAFE) [8]. The SAFE is a 24-item measure of stress resulting from the acculturation process (e.g., “People think that I am unsociable when in fact I have trouble communicating in English”). Responses are rated on a 5-point scale (0 = *do not experience* to 4 = *extremely stressful*). In the current study, the Cronbach’s  $\alpha$  was .93.

*Depression* symptoms were measured using the Center for the Epidemiological Study of Depression (CES-D) [9]. The CES-D consists of 20 items rated on a 4-point response scale (0 = *rarely or none of the time* to 3 = *most or all of the time*). In the present study, internal consistency for the CES-D was  $\alpha = .83$ .

*Likelihood for Family Conflict* ( $\alpha = .89$ ) and *Seriousness of Family Conflict* ( $\alpha = .90$ ) were assessed using the Asian American Family Conflict Scale (FCS) [10]. This measure consists of ten questions about family conflicts derived from traditional Asian cultural values that may occur in Asian American families, including addressing intergenerational cultural clash, interdependency, and emotional connectedness.

## Data Collection

This study was approved by an IRB. Participants were contacted in person at the school and asked to participate in the study. After consenting to participation, each participant completed self-report measures. The FCS was not administered to parent participants. Participants were given the option of completing measures in English or in Japanese.

## Results

Table 1 shows the means and standard deviations of the variables in the study. Compared to normed samples (score of 16 or higher on the CES-D = 20 %) [9], our sample reported higher levels of depression symptoms (score of 16 or higher on the CES-D = 35 %). There were no significant gender differences on any of the variables. However, adolescents reported more depression symptoms than their parents. Both parents and adolescents reported experiencing high levels of acculturative stress, though overall levels of acculturative stress were lower for this sample than in other studies using the SAFE. Adolescents reported moderate levels of likelihood of family conflict ( $M = 17.48$ ,  $SD = 8.49$ ), and seriousness of family conflict ( $M = 19.08$ ,  $SD = 9.46$ ).

Table 2 shows the correlations of the variables. Among the adolescents, acculturative stress was significantly associated with depression, likelihood, and seriousness of family conflict. Similarly, among the parent sample, acculturative stress was significantly correlated with depression symptoms.

**Table 1** Means and standard deviations of variables

	Acculturative stress <i>M (SD)</i>	Depressive symptoms <i>M (SD)</i>	Likelihood for family conflict <i>M (SD)</i>	Seriousness of family conflict <i>M (SD)</i>
Parents	33.57 (18.33)	13.11 (7.14)	n/a	n/a
Adolescents	28.40 (20.88)	16.46 <sup>a</sup> (8.90)	17.48 (8.49)	19.08 (9.46)

<sup>a</sup> Independent samples *t* test revealed a trend toward significance, *p* = .054

**Table 2** Correlations of variables

Adult correlations are reported below the line. Adolescent correlations are reported above the line

n/a—Parents were not given the family conflict scale, so no correlations are available to report

\*\* *p* < 0.01; \* *p* < 0.05

	Acculturative Stress	Anxiety	Depression	Likelihood Fam Conflict	Seriousness Fam Conflict
Acculturative Stress		.399*	.761**	.410*	.538**
Depression	.404**	.519**		.349*	.563**
Likelihood Fam Conflict	n/a	n/a	n/a		.775**

Notes. Adult correlations are reported below the line. Adolescent correlations are reported above the line.  
 \*\**p* < 0.01. \**p* < 0.05.  
 n/a - Parents were not given the family conflict scale, so no correlations are available to report.

A multiple regression analysis was conducted in order to identify important predictors for depressive symptoms among the adolescents in the sample. The results revealed that acculturative stress ( $\beta = .881, p < .001$ ) significantly predicted depressive symptoms. Likelihood for family conflict ( $\beta = -.048, p = .755$ ) did not in and of itself significantly predict depressive symptoms. However, we wanted to examine whether likelihood for family conflict moderated the relationship between acculturative stress and depressive symptoms. As shown in Table 3, likelihood for family conflict did moderate the relationship between acculturative stress and depressive symptoms ( $\beta = -.307, p < .01$ ). This means that adolescents who have greater acculturative stress and who have less parental support are at greatest risk for depression. This interaction is illustrated in Fig. 1.

**Discussion**

Japanese adolescent temporary residents are a unique group of acculturating individuals, in that they may experience less acculturative stress than other acculturating groups because they are only temporarily staying in their host country. Thus, the temporary nature of their migration serves as a protective factor against acculturative stress. Consistent with this, our recently migrated sample reported

lower overall levels of acculturative stress. Despite this, acculturative stress still had a significant negative impact on the sample, thus indicating that regardless of the amount of acculturative stress experienced, its presence can still have a profound effect. This was evident in the strong associations between acculturative stress and family conflict, and depression.

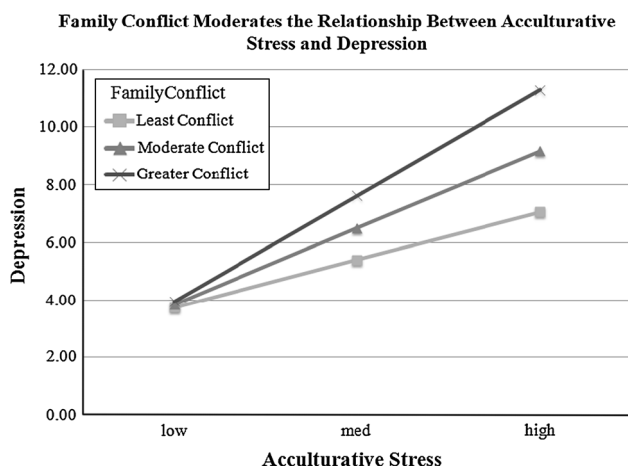
Our findings also support Berry’s [5] model of acculturation in that our sample showed high levels of acculturative stress with increased levels of family conflict and depression. It would make sense, then, that adolescents who resist acculturation or have less choice and less social support while acculturating would fare worse psychologically. One possible explanation for this could be that adolescents may not be as sophisticated in using adaptive coping strategies. Further, family cohesion could also serve as a protective factor against depression, whereas family conflict does seem to exacerbate the effects of acculturative stress. This is perhaps because the conflict brings to the surface intergenerational cultural differences, drawing distinction to the disrupted role of interdependency and dampening the familial emotional connectedness. The new contribution to the field is that for Japanese adolescent temporary residents, acculturative stress exacerbates the risk for depression that family conflict creates, even with overall lower levels of acculturative stress reported. Depression can have a pervasive impact on adolescents’

**Table 3** Regression analysis of acculturative stress and likelihood for family conflict on depression

Model	Unstandardized coefficients		Standardized coefficients $\beta$	t	Sig.
	B	SE			
Acculturative stress	.382	.065	.881	5.900	.000**
Likelihood family conflict	-.057	.179	-.048	-.316	.755
AccltStressX LikeFamConflict	-.018	.007	-.307	-2.538	.008*

$R^2$  for overall model was .655

\*\* Regression was significant at  $p < .001$ . \* Interaction was significant at  $p < .01$



**Fig. 1** Likelihood for family conflict moderates relationship between acculturative stress and depression

lives. Thus, our findings point to the concern for culturally sensitive assessments and early intervention with acculturating Japanese temporary residents and their families in order to prevent depression. Specifically, preventative interventions focused on building family cohesion, reducing acculturative stress, and improving the acculturative process would be most beneficial.

Our study was not without limitations. Though our sample size was small, given the disconnect from mainstream culture that many Japanese temporary resident families face, our findings still generalize to other Japanese adolescent temporary residents living in the Midwest. Future research should examine acculturation in the theoretical model. Another limitation is that the Japanese versions of the measures were not previously validated. However, the alpha levels are excellent. Finally, the cross-sectional nature of our data do not permit us to make

conclusions about the entire acculturation process for temporary residents. A future direction of this work would be to examine these factors over time.

## References

- Graham MA. Acculturative stress among Polynesian, Asian and American students on the Brigham Young University—Hawaii campus. *Int J Intercult Relat.* 1983;7(1):79–103.
- Greenland K, Brown R. Acculturation and contact in Japanese students studying in the United Kingdom. *J Soc Psychol.* 2005;145(4):373–89.
- Downie M, Chua S, Koestner R, Barrios M, Rip B, M'Birkou S. The relations of parental autonomy support to cultural internalization and well-being of immigrants and sojourners. *Cult Divers Ethn Minor.* 2007;13(3):241–9.
- Trinh N, Rho Y, Lu FG, Sanders K. *Handbook of mental health and acculturation in Asian American families.* Totowa, NJ: Humana Press; 2009.
- Berry J. Acculturation as varieties of adaptation. In: Padilla AM, editor. *Acculturation: theory, models and some new findings.* Boulder: Westview; 1980. p. 9–25.
- Thomas M, Choi JB. Acculturative stress and social support among Korean and Indian immigrant adolescents in the United States. *J Sociol Soc Welf.* 2006;33(2):123–43.
- Africa J, Carrasco M. *Asian-American and Pacific Islander mental health: report from a NAMI listening session.* Arlington, VA: NAMI; 2011.
- Mena F, Padilla A, Maldonado M. Acculturative stress and specific coping strategies among immigrant and later generation college students. *Hisp J Behav Sci.* 1987;9(2):207–25.
- Radloff LS. The CES-D scale: a self-report depression scale for research in the general population. *Appl Psychol Meas.* 1977; 1(3):385–401.
- Lee RM, Choe J, Kim G, Ngo V. Construction of the Asian American family conflicts scale. *J Couns Psychol.* 2000;47(2): 211–22.