

Correlates of Suicidal Behaviors Among Asian American Outpatient Youths

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Medical record abstraction was conducted at an ethnic-specific mental health outpatient clinic to identify correlates of suicidal behaviors in a sample of 285 Asian American youths. Some risk factors, such as parent-child conflict and age, which have been associated with suicidality in majority group youths, predicted suicidality in this sample, whereas other risk factors, such as gender, did not generalize to this sample. Acculturation interacted with the risk factor of parent-child conflict to predict suicidality. Less acculturated Asian youths were at proportionally greater risk for suicidality under conditions of high parent-child conflict than were their more acculturated counterparts. This finding underscores the importance of culture as a context for determining the relevance of stressors for potentiating psychopathology.

• suicidal behaviors • acculturation • Asian American youths

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Nonfatal suicidal behaviors (i.e., suicidal ideation, threats, gestures, and attempts) are common symptoms among child psychiatric outpatients, with prevalence estimates ranging between 15% and 33% (Milling, Gyure, Davenport, & Blair, 1991; Pfeffer, Plutchik, & Mizruchi, 1986). The importance of symptoms of suicidality in youths must be underscored because suicidal attempts and ideation are indicators of the severity, course, and outcome of depression (Lewinsohn, Rohde, & Seeley, 1993) as well as risks for completed suicide (Maris, 1991). Across numerous studies, risk factors including psychopathology, female gender, and maladaptive family situations have been associated with suicidal behaviors among clinic-referred and hospitalized youths. However, our understanding of risk factors for suicidal behavior in children has been based on data from predominantly Euro American samples (e.g., Asarnow, 1992; Harter, Marold, & Whitesell, 1992; Kovacs, Goldston, & Gatsonis, 1993; Lewinsohn et al., 1993).

Ethnic-specific studies may help provide culturally relevant information on risk of suicidality and needed interventions in historically underserved and understudied ethnic minority communities. Ethnic variations in rates of completed and attempted suicide have been widely documented. For example, Native Americans have the highest rate of completed suicide of any ethnic group (U.S. Congress, 1986), whereas African Americans are reported to have the lowest completed suicide rate (Bingham, Bennion, Openshaw, & Adams, 1994; U.S. Bureau of the Census, 1986). Comparisons of suicide rates among other ethnic groups yield differing conclusions. Some studies report that Euro Americans have higher rates of completed suicide than Asian and Hispanic Americans (Hope & Martin, 1986; Shiang, 1998), whereas others report similar rates across these groups (Bingham et al., 1994).

However, enumeration of completed suicide is problematic. Published suicide rates may underestimate actual rates for ethnic

minorities because they rely on public records and official coroners' verdicts that may be biased with respect to ethnicity and national origin (Neeleman, Mak, & Wessely, 1997). For example, African American youth suicide may be underenumerated because actual suicidal behavior may be masked by high-risk behaviors, such as street violence and substance abuse (Gibbs, 1990). Nevertheless, there is ample evidence that rates of suicidal behaviors vary by ethnic group (Roberts, Chen, & Roberts, 1997), and it is also likely that the correlates of these behaviors vary by group and perhaps within groups. For example, ethnic minority status is a risk factor for suicide in areas in which the density of ethnic minority groups is low, but it appears to be a protective factor in areas with large coethnic communities (Neeleman & Wessely, 1999). In this article, we hope to elaborate on risk factors for suicidality for Asian American youngsters.

Asian American youths from predominantly immigrant families may encounter unique developmental challenges not shared by majority group youths. They are faced with stressors associated with minority and immigrant status, such as racism, discrimination, and cultural rifts within their own families. In view of these ecological differences, it is unclear if the nature and extent of psychosocial risk factors for psychopathology among majority youths hold for Asian American children and adolescents.

The present study had two important objectives. First, we sought to determine whether risk factors for suicidal behaviors as identified in studies of majority youths appear culture-bound or whether they are generalizable to Asian American outpatient youths. We reviewed selected risk factors for suicidality identified in studies of majority group youths, including gender, internalizing and externalizing disorders, and poor parent-child relationship. We also considered risk factors that may be culturally relevant to Asian American youths, including stress associated with acculturation. One of the major goals of ethnic minority psychology is to test the external validity of the con-

clusions generated from the study of majority culture to culturally diverse groups. The second aim of the study was to identify within-group differences in risk factors for suicidal behavior among Asian American outpatient youths. The vast heterogeneity within the Asian American population is widely recognized (Uba, 1994), yet existing research on Asian Americans often fails to attend to issues of intragroup differences in acculturation and ethnicity. Within the Asian American population, some ethnic groups (e.g., Southeast Asian, Korean) appear to have greater mental health needs than others (e.g., Chinese, Japanese; Kuo, 1984; Uehara, Takeuchi, & Smukler, 1994; Ying & Hu, 1994). These findings have been attributed to differences in immigration history, refugee status, trauma experience, and socioeconomic and acculturative stress. These ethnic differences within the Asian American population are obscured when groups are combined in studies (Uehara et al., 1994).

Risk Factors for Suicidality Among Majority Group Youths

Studies of the correlates of suicidal behaviors among majority group youths indicate that girls appear more likely to demonstrate suicidal ideation and attempts than boys (Kovacs et al., 1993; Woods et al., 1997). This gender difference in suicidal behavior may be related to the tendency for girls to display more internalizing behavior problems (Achenbach, Bird, et al., 1990; Achenbach, Hensley, et al., 1990), which are in turn consistently associated with increased risk of suicidality (Lewinsohn et al., 1993). Regardless of population (inpatient, outpatient, or community), depression is widely recognized as the major risk factor for suicidal behavior. Youths displaying suicidal behaviors have high rates of diagnosable depression (e.g., Brent et al., 1988), and depressed youngsters have elevated levels of suicidal thoughts and attempts (e.g., Myers et al., 1991).

Although depression is most commonly thought of as a precursor to suicidal behavior, externalizing disorders have also been implicated as conferring risk. Conduct disorder, antisocial behaviors, and substance abuse are often associated with suicidal behavior, probably due to the shared impulsive nature of these behavioral patterns (Brent et al., 1988; Hoberman & Garfinkel, 1988; Kovacs et al., 1993). In various samples, between one third and one half of suicide attempters displayed antisocial behaviors or substance abuse or conduct disorders (Spirito, Stark, Hart, & Fristad, 1988; Trautman, Rotheram-Borus, Dopkins, & Lewin, 1991). However, the association between externalizing behavior problems and suicidal behaviors has not been consistently replicated (e.g., Garrison, Jackson, Addy, McKeown, & Waller, 1991; Robbins & Alessi, 1985). Externalizing disorders may serve as an aggravating condition rather than a primary risk factor for suicidal behaviors (Kovacs et al., 1993).

Another major risk factor for adolescent suicidal behavior involves the lack of parental stability, warmth, or support (Summerville, Kaslow, Abbate, & Cronan, 1994). Suicide attempters have more instability with regards to their caretakers and experience more separations from a parent than do depressed and nondepressed adolescents (De Wilde, Kienhorst, Diekstra, & Wolters, 1992). Just as lack of parental support is a risk factor, high levels of parent-child conflict are associated with increased risk of suicidal behaviors in youths (Asarnow, 1992; Hollis, 1996). The quality of relationships with parents may be more directly related to suicidal ideation than the quality of peer relationships (Harter et al., 1992).

Culturally Relevant Risk Factors for Asian American Youths

In addition to the risk factors discussed above, ethnic minority youths may have unique experiences that potentiate distress

and suicidal behaviors. Stressful conditions associated with an ethnic minority child's acculturation to the majority culture include discrimination, feelings of alienation, and identity confusion. These stressors may heighten risk for poor self-esteem, hopelessness, depression, and suicide (Huang, 1994). In the process of acculturation, minority youths who fail to achieve bicultural competence and an adaptive ethnic identity are prone to maladjustment (Berry, Kim, Minde, & Mok, 1987; Phinney, Lochner, & Murphy, 1990). Liu, Yu, Chang, and Fernandez (1990) reported that the rate of completed suicide among foreign-born Asian American youths is higher than for U.S.-born Asian American youths. This study explored whether low levels of acculturation are associated with risk for suicidal behaviors among Asian American youths.

In addition to the stress inherent in acculturation, increased levels of intergenerational conflict are associated with the acculturation gap between Asian American parents and their children (Lee, Choe, Kim, & Ngo, 2000). Typically, the ethnic minority child acculturates more readily to the dominant culture than do their parents and older generations. Conflicts can arise when Asian American parents disapprove of their children's adoption of American values and behaviors, taking these as evidence of lax morality and disregard for their native culture (Yew, 1987). Yet, Asian American parents may in some ways encourage rapid behavioral acculturation so that their children may become interpreters and negotiators in the new culture (Huang, 1994). Asian American youths may experience confusion and conflict when their parents send mixed messages about acculturation.

Both acculturation stress and intergenerational acculturation conflicts have been identified as contributing influences in suicidal behavior among Asian youths in Great Britain, where young South Asian women are overrepresented among patients who have attempted suicide (Bhugra, Desai, & Baldwin, 1999; Handy, Chithiramohan, Ballard, & Silveira, 1991; Merrill & Owens,

1986). Among Asian youths who received emergency medical attention for suicide attempts, 76% reported some form of cultural conflict as a contributing factor to their attempt, with a disciplinary crisis between parent and child as the most common precipitating factor (Handy et al., 1991). These cultural conflicts included disagreements with parents over issues such as style of dress, dating, relationships with Caucasian peers, and rules governing communication.

The relationship between intergenerational conflict and child distress may be even more pronounced for Asian American youths than for Euro American youths. In contrast to Western cultural norms valuing individuation and independence, Asian cultural values are collectivistic in nature and are governed by notions of hierarchy, role obligations, and promotion of harmony. The values of family and filial piety include reverence for elders, obedience, and maintenance of family traditions. These tenets discourage or prohibit open conflict between children and their parents. In the interest of maintaining harmony, individuals are expected to avoid confrontation, conform to rules of propriety, and give "face" or respect to others (Chan, 1992). Although overt parent-child conflict is a normative part of development in Euro American culture, it may be more distressing for Asian Americans. Greenberger, Chen, Tally, and Dong (2000) reported that the quality of family relationships has stronger influences on depression among Chinese youths than among U.S. youths. We hypothesize that parent-child conflict may be more distressing to less acculturated Asian American youths who hold more traditional values than it is to highly acculturated Asian American youths.

In a similar manner, acculturation may moderate the association between diagnosis and risk of suicidal behaviors. It has been observed that there is cultural variability in the expression and manifestation of depression (Marsella, Sartorius, Jablensky, & Fenton, 1985). For example, much has been written about the tendency of Asians to re-

port a predominance of somatic complaints and vegetative symptoms rather than the core cognitive and affective components of depression (Kleinman, 1977). If feelings of existential despair and suicidal thoughts are bound by ethnocultural lines and are associated with a Western manifestation of depression, we might expect that less acculturated depressed Asian American youths may be less likely to exhibit suicidal behaviors than their more highly acculturated counterparts. In this way, individual differences in acculturation may moderate the relationship between a diagnosis of depression and suicidality.

In summary, the present study explored the following research questions: (a) Do the risk factors for suicidality found in the general literature hold for Asian American youths? (b) Are there ethnic differences in risk of suicidality among Asian American youths? (c) How do intragroup differences in acculturation among Asian American youths affect the risk of suicidal behaviors? (d) Does one's level of acculturation moderate the relationship between other risk factors and suicidality?

Method

Sample

The participants were 285 Asian American children and adolescents between the ages of 4 and 17 years ($M = 12.94$) who had received outpatient mental health services at the Asian Pacific Family Center in Rosemead, California, between March 1985 and February 1993. The sample was comprised of a complete enumeration of closed child and adolescent cases at the time of data collection in 1995. This clinic was established specifically to meet the cultural and linguistic needs of the local Asian American community.

The participants were defined either as suicidal (displaying suicidal ideation at intake or having a history of suicide attempts

or gestures) or as nonsuicidal. Thirteen percent of the sample ($n = 37$) were categorized in the suicidal group, and 87% ($n = 248$) were categorized as nonsuicidal. Of the 37 suicidal youths, 15 had a history of suicidal self-injurious behavior, 12 displayed active suicidal ideation at the time of intake, and 10 had both a history of suicide attempt and displayed active ideation at intake. This rate of suicidal involvement is on the low end of the range found in previous studies of youth outpatient samples (Milling et al., 1991; Pfeffer et al., 1986).

Procedure

Undergraduate research assistants were trained in data extraction procedures to code information from closed client charts. Coders were trained in a sequential method of searching through standardized chart forms for information pertinent to the variables of interest. Most forms were completed by the clinician, with one bilingual form (English and client's native language) filled out by the parent. All forms in the client charts were documented in English, although clinical interviews may have occurred in the client's native language. Thus, no translation procedures were required for data extraction.

Because all data were gathered from secondary sources (clinic archives), there was no direct contact with participants, thus requirements for informed consent were waived by the institutional review board governing this project. A National Institute of Mental Health Certificate of Confidentiality was issued to protect against third-party subpoena of data accessed for the study. All of the research assistants were trained regarding research ethics and procedures for protecting the confidentiality of the participants. No primary identifying information (e.g., names, social security numbers) was extracted from the client records. Recording of secondary identifiers was avoided (e.g., addresses, zip codes), with the exception of date of birth, which was used to calculate age. A team of 10 raters gathered and

coded the data, with each client chart being independently coded by 2 raters.

Measures

DEMOGRAPHICS. Demographic information was recorded, including age, gender, ethnicity, parental education, family income, Medi-Cal eligibility, and primary language. To obtain an index of socioeconomic status (SES), we computed the sum of the standardized scores on level of parental education and family income. The following variables were used as indicators of acculturation: proficiency in English rated by clinician (yes/no), primary language spoken in the home reported by family (English = 3, combination of English and an Asian language = 2, and Asian language = 1), age of immigration (reverse coded), and proportion of life spent in the United States. Each variable was standardized, and the sum of the variables was calculated to yield a composite acculturation score. This index of acculturation is a proxy measure that assesses the amount of time spent in the United States and proficiency with the English language. As such, we have formulated acculturation as a unidimensional linear variable that might be described as an indicator of the opportunity for exposure to and integration into American society.

CLINICAL CHARACTERISTICS. *Diagnostic and Statistical Manual of Mental Disorders* (3rd ed., Rev. [DSM-III-R]; American Psychiatric Association, 1987) diagnoses were determined by clinical judgment by therapists following their initial intake interviews. Depressive disorders (including major depressive disorders and dysthymic disorders) and disruptive behavior disorders (including conduct disorder and oppositional defiant disorder) were the diagnostic categories examined as predictors of suicidality.

INTERNALIZING AND EXTERNALIZING PROBLEMS. Composite variables measuring the level of internalizing and externalizing symptoms

were created using the symptom totals for behaviors that represented externalizing and internalizing problem spectrums. The categorization of symptom variables was modeled after Achenbach's empirically based approach to taxonomy of child behavior problems (Achenbach & Edelbrock, 1991). Forty-four symptom items were coded, 16 were categorized as internalizing problems (e.g., withdrawing from others, cries a lot, sleeping disturbances, and anxious or worried), 13 items were categorized as externalizing problems (e.g., disobedient, cruel to others, yells a lot, and tantrums), and the remaining 15 symptom items reflected mixed problems and were excluded from subsequent regression analyses (e.g., difficulty concentrating, sulking, and tics). Interrater reliability for identification of individual symptoms was fair to good and ranged from .56 to .90 for internalizing symptoms (mean $\kappa = .74$) and from .57 to .90 for externalizing symptoms (mean $\kappa = .72$). We took a conservative method of symptom identification, such that a symptom was coded as present only when independently noted by both raters. The symptom total composites had low internal consistency (internalizing $\alpha = .63$, externalizing $\alpha = .56$). The low number of items that could be feasibly coded from our medical record abstraction procedure limited the internal consistency we could achieve with these scales.

SUICIDAL BEHAVIORS. Suicidal ideation and self-harm were coded from the initial evaluation form completed at intake by the clinician. Self-harm behaviors were defined as intentional self-injurious behavior considered suicidal attempts, such as attempts to overdose on medication. Self-harm was not coded when only superficial injuries were inflicted (e.g., cutting of the skin). A youngster was said to meet criteria for the suicidal behavior group when either the suicidal ideation item or the self-harm item was endorsed. As previously mentioned, a consensus from two independent raters was necessary to determine the presence of a

symptom. Good interrater reliability was achieved for the items indicating self-harm behavior and suicidal ideation ($\kappa = .70$ and $.73$, respectively).

PARENT-CHILD CONFLICT. The level of parent-child conflict was rated by the coders on a 5-point scale based on therapist notes from the initial evaluation interview. Interrater reliability for this item was good with an intraclass correlation of $.87$. Mean severity ratings of two independent coders were used as the measure of level of parent-child conflict.

Results

Comparisons Between Suicidal and Nonsuicidal Youths

We conducted *t* tests and chi-square analyses to compare selected demographic and clinical variables between suicidal and nonsuicidal youths. Results indicated that youths who exhibited suicidal behaviors were older than those who did not evidence suicidality, $t(284) = 3.16$, $p = .006$. The suicidal group had a lower proportion of U.S.-born compared with nonsuicidal youths, $\chi^2(1, N = 285) = 4.17$, $p = .041$. Those with suicidal behaviors tended to be older when they immigrated to the United States, $t(284) = 2.38$, $p = .018$. There were no significant differences in the ethnicity distribution or primary language between the suicidal group and the comparison group.

The suicidal group had a higher proportion of youths receiving a depressive diagnosis, $\chi^2(1, N = 285) = 47.29$, $p < .001$, but the groups did not differ in the frequency of disruptive behavior disorder diagnosis. In terms of symptom counts, the two groups displayed comparable levels of externalizing symptoms, but the suicidal group displayed significantly more internalizing symptoms than the comparison group, $t(284) = 5.13$, $p < .001$.

Ethnic Differences in Risk Factors

The largest ethnic group was Chinese ($n = 110$, 39%), with a mix of families from Tai-

wan, Hong Kong, and mainland China speaking primarily Mandarin and Cantonese. The majority of the Southeast Asian group ($n = 91$, 32%) was comprised of Vietnamese ($n = 83$), with a small number of Laotian ($n = 3$), Cambodian ($n = 3$), and Thai ($n = 2$) clients. Koreans comprised the third largest group ($n = 41$, 14%), followed by Japanese ($n = 36$, 13%), and Filipino ($n = 6$, 2%). A set of one-way analysis of variance, chi-square, and post hoc Tukey tests were run to examine differences in acculturation, SES, symptom counts, and level of parent-child conflict between Chinese, Southeast Asian, Japanese, and Korean youths (Filipinos were excluded because of small sample).

In terms of SES, Southeast Asians reported lower levels of parental education, $F(4, 256) = 19.73$, $p < .001$, and had a much higher proportion of indigent clients (as measured by Medicaid eligibility) than Koreans, Chinese, and Japanese, $\chi^2(4, N = 285) = 112.1$, $p < .001$. No ethnic differences emerged with respect to internalizing and externalizing symptom counts. Japanese families were rated as having greater conflict than Chinese families, with Koreans and Southeast Asians at intermediate levels not significantly different from the other groups, $F(4, 281) = 3.61$, $p = .01$. Chinese clients tended to be younger than Japanese and Southeast Asian clients, $F(4, 281) = 7.47$, $p < .001$. Southeast Asians and Chinese tended to be older when they immigrated to the United States than were Koreans, who in turn were older at immigration than the Japanese youths (who were predominantly U.S. born), $F(4, 281) = 23.63$, $p < .001$. The Southeast Asian and Chinese youths were less likely to report English as their primary language compared with Korean and Japanese youths, $\chi^2(4, N = 285) = 44.92$, $p < .001$.

In summary, ethnic differences pointed toward Japanese and Korean youths appearing more acculturated than Chinese and Southeast Asian youths. Southeast Asians appeared to be an at-risk group by virtue of lower SES than the other Asian groups, whereas Japanese youths were at risk by vir-

tue of greater parent–child conflict compared with Chinese youths.

Risk Factors for Suicidal Presentation

The relative contributions of age, gender, SES, diagnosis of depressive disorder, diagnosis of disruptive behavior disorder, internalizing and externalizing symptom counts, acculturation, parent–child conflict, and the interaction terms between acculturation and conflict and acculturation and diagnosis of a depressive disorder were examined as predictor variables in a simultaneous multiple logistic regression predicting suicidality. Table 1 displays variables that significantly predicted the presentation of suicidal behaviors.

Older youths ($B = .28, p = .002$) and youths with a depressive disorder ($B = 1.41, p = .004$) were at elevated risk for suicidal presentation. Youths with major depression or dysthymia were over four times more likely to display suicidal behaviors than youths with other diagnoses (odds ratio [OR] = 4.1). Similarly, individuals with a greater number of internalizing symptoms were more likely to be suicidal ($B = 1.03, p < .0001$). In contrast, the level of externalizing symptoms was negatively related to suicidal behaviors ($B = -.56, p < .05$). After controlling for all of the other predictors, gender, SES, disruptive behavior disorder diagnosis, and the interaction between acculturation and depression were not significantly related to suicidality.

Youths in the high parent–child conflict group were 30 times more likely to evince

suicidal behavior (OR = 29.6, $p = .0001$). Youths who were less acculturated were at greater risk of suicidality ($B = -.54, p = .006$). However, these main effects must be interpreted in light of their interaction, which significantly predicted suicidality ($B = .42, p < .05$). Figure 1 depicts the nature of this interaction in which the low acculturation group appeared more adversely affected by intergenerational conflict than the high acculturation group. There appeared to be a stronger association between parent–child conflict and suicidal behaviors for less acculturated youths than for highly acculturated youths.

Post hoc chi-square tests of association were conducted to determine the simple main effects involved in this interaction. Parent–child conflict was associated with suicidal behaviors for both high and low acculturated groups, $\chi^2(1, N = 285) = 10.20, p = .001$ and $\chi^2(1, N = 285) = 5.34, p = .021$, respectively. However, acculturation level was significantly associated with suicidal behaviors for the high parent–child conflict group, $\chi(1, N = 285) = 4.28, p = .04$, but was not associated with suicidality for the low conflict group, $\chi(1, N = 285) = 1.56, p = .21$. Under conditions of high conflict, the less acculturated youths were at higher risk of suicidality than the more acculturated group. When conflict was low, there was no significant difference in risk for the two acculturation groups.

In subsequent exploratory analyses, a series of logistic regressions were run adding dummy variables representing membership in each of the four ethnic groups (Chinese,

TABLE 1 Summary of Results of Logistic Regression Analyses Predicting Suicidal Behaviors

<i>Variable</i>	<i>B</i>	<i>SE</i>	<i>Wald</i>	<i>Significance</i>	<i>Odds ratio</i>
Diagnosis of depression	1.41	.49	8.18	.0042	4.10
Internalizing symptoms	1.03	.23	20.31	<.0001	2.80
Externalizing symptoms	−0.56	.28	4.00	.0456	0.57
Age	0.28	.09	9.26	.0023	1.31
Parent–child conflict	3.39	.88	14.82	.0001	29.62
Acculturation	−0.54	.20	7.54	.0060	0.58
Parent–Child Conflict × Acculturation	0.42	.21	4.03	.0447	1.53

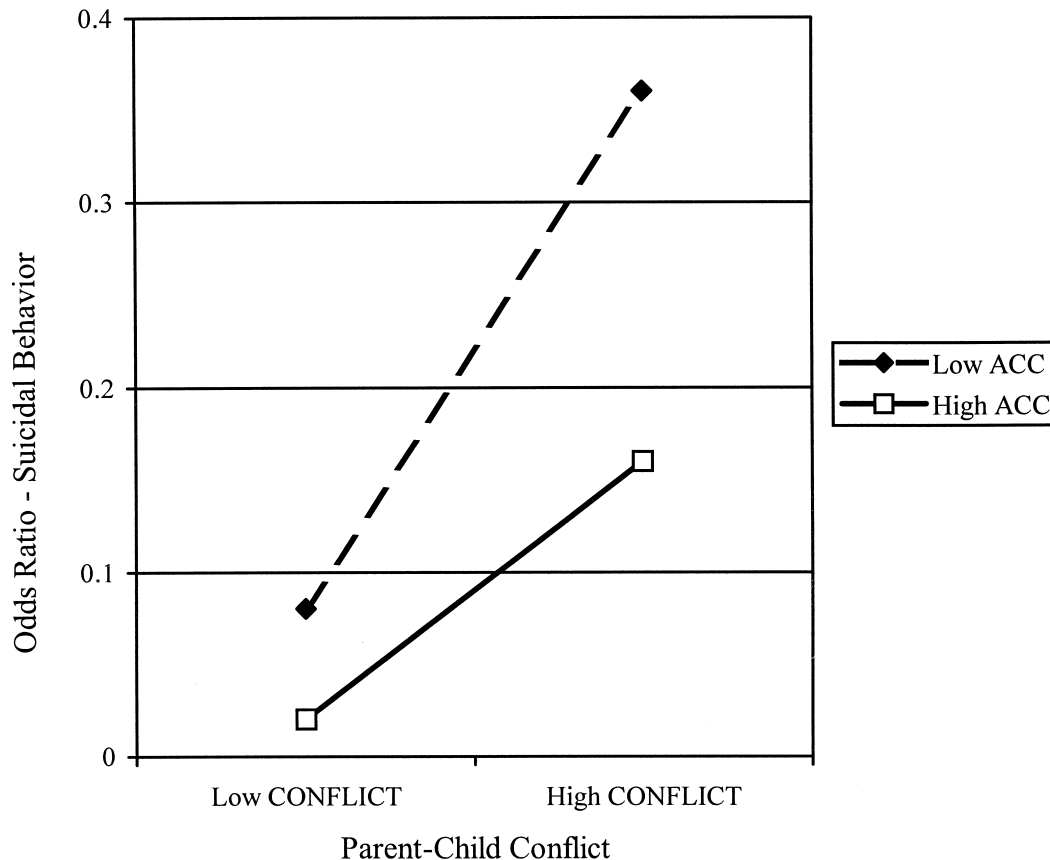


Figure 1. Interaction between parent-child conflict and acculturation (ACC) on suicidal behaviors.

Southeast Asian, Korean, and Japanese) to the set of significant predictors of suicidal behaviors. Consistent with univariate chi-square analyses, there were no significant effects of ethnic group membership in predicting suicidal behaviors.

Discussion

To our knowledge, this is the first clinical study of the risk factors for suicidality among Asian American youths. One major finding is that majority youths and Asian American youths appear to share some risk factors for suicidality. Age, indexes of psychopathology, and family conflict were each related to suicidality in the expected manner. Consistent with the results of studies of majority group

youths, our results demonstrated that older adolescents had an increased risk of suicidal behaviors (Bingham et al., 1994). Approximately three quarters of the suicidal youths were adolescents 15 to 17 years of age.

Not surprisingly, a depressive diagnosis was a major predictor of suicidality. Previous studies have determined that major depression and dysthymia are associated with significantly higher rates of suicidal behaviors than are adjustment disorders with depressed mood and nondepressive disorders (Kovacs et al., 1993). Almost half of the suicidal youths were diagnosed with depression or dysthymia compared with 10% in the nonsuicidal group.

The suicidal youths displayed a higher number of internalizing symptoms and fewer externalizing symptoms. This pattern of findings is consistent with research that

describes suicide as part of an internalizing profile of psychopathology in which depressed and anxious features predominate (Asarnow & Guthrie, 1989; Pfeffer et al., 1986). Our results regarding the role of externalizing behaviors and disruptive behavior disorders suggest that for Asian American youths, impulsive, antisocial, and undercontrolled behaviors may not be related to risk of suicidality. In fact, our findings appear consistent with reports that externalizing behavior problems may represent a protective factor against suicidal ideation and attempts (Garrison et al., 1991).

Contrary to expectations, after controlling for other demographic, clinical, and psychosocial variables, gender was not associated with risk of suicidal behaviors in this sample of Asian American youths. This is inconsistent with reports that girls are more likely than boys to evidence suicidal thoughts, attempts, and gestures (Kovacs et al., 1993; Roberts et al., 1997; Woods et al., 1997). Our data are more in line with recent reports that suggest that the gender gap in suicidal behaviors may be culture-bound, with a less pronounced female-to-male ratio in some Asian American groups (Shiang et al., 1997). The gender gap may be more prominent in communities in which different suicidal behaviors are expected of females and males (Canetto & Sakinofsky, 1998). Further research is necessary to determine whether gender differences in suicidal behaviors can be generalized across cultural groups.

Although there is a growing body of literature citing ethnic differences between Asian American groups on adjustment and psychopathology, the present study found no ethnic differences in risk of youth suicidal behavior. However, it is possible that the limited sample size and power with few positive cases in each ethnic group provided a weak test of ethnic differences. Community-based studies and larger scale clinical studies are necessary to further explore the possibility of interethnic differences in risk among Asian American youths.

The results of the study failed to support the contention that there are acculturative differences in the manifestation of suicidality among depressed Asian American youths. Contrary to our prediction, the likelihood of exhibiting suicidal behaviors in the presence of a depressive disorder was not higher for the more acculturated youths. Further research should be conducted to explore the issues of cultural variation in symptom profiles among depressed children and adolescents.

Consistent with previous literature on majority group samples, children and adolescents who experienced more conflict with their parents were at higher risk for suicidality. Our data suggest that Asian American youths have a 30-fold increase in risk for suicidal behaviors when they experience high levels of intergenerational conflict. Our finding underscores the salience of parent-child conflict for Asian American youths.

Furthermore, our results indicate that the stress of parent-child conflict is proportionately more powerful in the prediction of suicidality among less acculturated Asian American youths. Although the data suggest that more highly acculturated youths experience greater conflict than less acculturated youths, this conflict is more damaging to the well-being of less acculturated youths. It is possible that less acculturated Asian youths may hold more collectivistic values involving the importance of filial piety, relationship harmony, and avoiding confrontation and conflict. These values may make the risk factor of parent-child conflict especially culturally relevant for traditional Asian American families. With this orientation, less acculturated youths may experience more severe distress when their relationship with their parents becomes conflictual, as this very conflict represents a violation of their internalized cultural value system. Stated in terms of self-construal, less acculturated Asian American youths may hold conceptions of themselves that are intrinsically defined by their relationships (Markus & Kitayama, 1991). By contrast, more acculturated youths may adopt a more independent self-construal

placing less emphasis on their connectedness with others. For less acculturated youths, family conflict may have more adverse impact because it threatens the very basis of their interdependent self-construal.

Another possible explanation of this finding involves the primacy of familial support for less acculturated Asian American youths. It is possible that highly acculturated Asian American youths benefit from a wider social support network emphasizing support from peers. Parent-child conflict may have more harmful effects for the less acculturated group because the family is their main source of social support and they may rely less on peer support to buffer stress. Recent cross-national evidence suggests that peer influences on adjustment may be more potent among Chinese American youths than among Chinese youths residing in Taiwan and China (Chen, Greenberger, Lester, & Dong, 1998). We pose these alternative interpretations to generate hypotheses for future research to examine the role of social support, self-construal, and acculturative stress in accounting for the differential effects of intergenerational conflict on low and high acculturated Asian American youths.

Although the results of this study are compelling, it is important to note the limitations of the research. First, this sample included primarily Chinese and Southeast Asian youths. Characteristics of these groups, such as immigration history and SES, may not generalize to other Asian ethnic groups. Furthermore, the sample was derived from one Asian-specific mental health clinic. It would be difficult to generalize these clinical findings to Asian youths in the community and to other geographical areas. Second, in view of the correlational design of the study, we cannot determine the direction of the association between risk factors and suicidal behaviors. For example, rather than parent-child conflict resulting in more suicidal risk, it is possible that youths with suicidal behaviors have a tendency to report more conflict with their parents. Third, our methodology was one of archival record re-

view and data extraction. Although these methods allowed us to study a large number of treated Asian American youths, our data are a number of steps removed from the actual experience of our participants. Information was filtered through child and parent reports at intake, the clinician's recording of the interview, and the coders' ratings of these records. This methodology resulted in psychometric limitations, including low internal consistency of behavior problem scales. However, we used conservative strategies including consensus coding and have based our findings on data with solid interrater reliability. Fourth, research indicates that youth suicidal behaviors often go undetected, even by their primary caregivers (Velez & Cohen, 1988). It is possible that suicidal behaviors were underreported in this study, which restricted the variance on our major dependent variable, making this a conservative test of our hypotheses. Finally, our measurement of acculturation was limited to indicators that could be extracted from client files. We used proxy variables that together construed acculturation as a unidimensional construct. There is a wealth of literature that indicates that there are qualitative modes of acculturation that are not captured by a unidimensional model. More research needs to be done with refined measures of acculturation, values, ethnic identity, and other direct measures of cultural orientation.

Notwithstanding these limitations, the findings of this study have implications for broader conceptual and clinical issues in ethnic minority mental health. First, the findings represent a step in determining the external validity of some of the literature on risk factors for suicidality among youths. In particular, we note that age and parent-child conflict appear to confer risk in the same way for Asian American youths as is seen in majority group youths. However, we did not find an association between gender and suicidality when controlling for other demographic and clinical variables. Although these results need further study for replication, it is generally expected that

some risk factors will be upheld as culturally invariant, whereas others may be determined to be more culture bound. Ascertaining these two types of predictors is an essential goal of ethnic minority psychology and culturally competent practice. One such topic for further investigation is the cultural relevance of hopelessness for predicting suicidality.

Second, this study presented one approach to the study of culture and models of risk and resilience. By demonstrating that acculturation level modifies the relationship between risk factors and outcomes, we underscore the importance of culture as a context for determining the relevance of particular stressors for potentiating psychopathology. We found differences in the way high and low acculturation groups responded to the stress of intergenerational conflict as indicated by suicidal behavior. Although it is always crucial to screen for suicidality, our findings suggest that we pay special attention to the needs of less acculturated youths who face intergenerational conflict, who may demonstrate a cultural tendency to manifest distress in this alarming manner. Future research should help better articulate the actual nature of the association among acculturation, family conflict, and suicidality by examining the roles of constructs such as acculturative stress, social support, and self-construals.

These findings have implications for clinicians. Many authors have already stressed the importance of family involvement for Asian American clients in psychotherapy (e.g., Sue & Morishima, 1982). Indeed, our findings suggest that intergenerational conflict is a high priority for intervention with Asian youths, especially among the less acculturated. Thus, family interventions are important. However, traditional schools of family therapy should be applied with caution, as they sometimes involve techniques that bring to the fore differing perspectives and disagreements to expose the system of rules and roles within the family that lead to dysfunction. For example, one strategic family therapy technique involves "prescribing

the symptom," in which a family member is urged to continue to engage in or even exaggerate the identified problem behavior. Such practices can be highly incongruous with cultural expectations, and there is potential for an initial escalation of conflict. Hence, although it is of great importance to use family therapy to address parent-child conflict, it is imperative to adopt culturally competent methods for doing so. For example, Kim (1985) offered a framework for adapting structural/strategic family therapy techniques that are more compatible with the needs and values of Asian American families. It is our hope that a growing base of research on risk and resilience in ethnic minority families will generate hypotheses for yet another understudied direction for ethnic minority clinical research—studies of the effectiveness of culturally adapted interventions for ethnic minority communities.

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