RESEARCH REPORT

Stress Within a Bicultural Context for Adolescents of Mexican Descent

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Folkman and Lazarus's theory of stress and coping was used to develop a measure assessing the perceived stress within a bicultural context. Middle school students of Mexican descent (N = 881) reported their perceived stress from intergenerational acculturation gaps, within-group discrimination, out-group discrimination, and monolingual stress. Although immigrant youths reported more total number of stressors, U.S.-born youths reported more stress from needing better Spanish and impact of parents' culture. Immigrant youths reported more stress from needing better English in school. Higher stress was associated with more depressive symptoms for both U.S.-born and immigrant youths. Although this study has identified some elements of stress, it has not identified positive coping mechanisms of the bicultural context for Latino youths.
• *bicultural* • *stress* • *adolescent* • *Latino*

Despite the high prevalence of depression in Latino adolescents, we know relatively little about the relation among stress, coping, and depressive symptoms in this population (Castañeda, 1994; Foster & Martinez, 1995; Roberts & Chen, 1995; Roberts & Sobhan, 1992; Swanson, Linskey, Quintero-Salinas, Pumariega, & Holzer, 1992; Weinberg & Emslie, 1987). Stressors, such as racism, have been identified as correlates of depressive symptoms in other ethnic groups (Anderson, 1991; Laungani, 1995; Lin, 1982; Neville, Heppner, & Wang, 1997). The assessment of stressors that reflect the

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bicultural environment of Latinos in the United States could help capture the unique stressors and coping mechanisms within bicultural or multicultural societies. Folkman and Lazarus's theory of stress and coping was the basis for developing a measure of bicultural stressors for Latino adolescents and to test the association with depressive symptoms.

Acculturation and Mental Health

Extant literature has focused on the concept of acculturation to assess cultural influences on mental health (Cuéllar, 1982; Keefe & Padilla, 1987; Molina & Aguirre-Molina, 1994). Some initial assumptions were that the process of culture change, or acculturation, would be stressful for all individuals and that certain acculturation levels may indicate higher levels of distress (see Smart & Smart, 1995, for a review). Yet, findings from empirical studies seem to provide equivocal results; the direction of the relation between acculturation and depression was not consistently positive or negative in previous empirical studies (Rogler, Cortes, & Malgady, 1991). One interpretation suggests that cultural influences are much more complex than early unidimensional linear models of acculturation suggested (Berry, 1980; Born, 1970; Keefe & Padilla, 1987; Oetting & Beauvais, 1990–1991; Stonequist, 1961; for a review, see Smart & Smart, 1995). For example, there are indications that biculturalism might be the healthiest outcome based on orthogonal models of acculturation that allow for adherence to more than one culture (Oetting & Beauvais, 1990–1991). These bicultural/orthogonal models of acculturation seem to hold promise in the ability to address the complexity of the relation between culture and mental health. Researchers suggest that stressors may need to be assessed in a manner that is meaningful to mental health outcomes within a cultural context (Cervantes & Castro, 1985; Rogler et al., 1991; Slavin, Rainer, McCreary, & Gowda, 1991).

Stress and Coping Theory

Lazarus (1997) argued that to understand mental health implications of the acculturation context, researchers need to take into account individual differences in the perception of stressfulness of the acculturation process. In the present study, the Folkman and Lazarus theory of stress and coping was used as a general framework to develop a new measure to assess the stressfulness within a bicultural context for adolescents. Cognitive appraisal, or the subjective evaluation of one's cultural environment, is one of the key processes in psychological models of stress and has been identified as a better determinant of mental health than merely the presence or absence of an event (Folkman & Lazarus, 1980; Monat & Lazarus, 1977). This method of measurement may provide more information on individual subjective evaluation of stressors that occur within a cultural context.

Stressful events can be described as external or internal demands that tax or exceed the adaptive resources of the individual (Folkman & Lazarus, 1980; Monat & Lazarus, 1977; Selye, 1980). Studies indicate that depression in Latino adolescents has been associated with general measures of stress; however, few studies have explored bicultural stressors (Alderete, Vega, Kolody, & Aguilar-Gaxiola, 1999; Katragadda & Tidwell, 1998). In fact, there are very few existing measures available to assess the perception of culture-specific stressors (Cervantes & Castro, 1985; Slavin et al., 1991). The SAFE (social, attitudinal, familial, and environmental) scale and the Hispanic Stress Inventory (HSI) are existing scales for Latino adults that have identified important culture-specific stressors, such as discrimination, minority status, and language stress (Cervantes, Padilla, & Salgado de Snyder, 1990, 1991; Padilla, Alvarez, & Lindholm, 1986). The development of these scales was groundbreaking in that they began to identify specific stressors in the Latino cultural environment and they assessed the perception of stress. However, one limitation of the

HSI scale is that many socioeconomic stressors are combined with cultural and linguistic stressors; as such it is difficult to determine to what extent stress is related to economic pressure or cultural pressure. Additionally, both the SAFE and HSI scales are adult-specific and include marital, occupational, and parental stressors, which may not be as relevant for many adolescents. It is possible that atypical adolescent stressors (e.g., occupation or parental related) may affect some youths; however for the majority of youths, it is more likely that stressful events will be centered around school, family, and peers, as well as developmental issues of identity (Compas, Davis, Forsythe, & Wagner, 1987). Although the SAFE scale has been used with child participants (Chavez, Moran, Reid, & Lopez, 1997), it does not include items sufficient to reflect the bicultural context of stress of monolingualism (English only & Spanish only), intergenerational stress, or peer pressure to conform to one's ethnic group.

Thus, we argue that a bicultural adolescent-specific scale is necessary to identify and assess daily life stressors that may emerge from bicultural context. Research with college students (late adolescents) has found associations between the perception of culture-specific stress and mental health (Mena, Padilla, & Maldonado, 1987; Saldana, 1994; Sanchez & Fernandez, 1993). Hovey (1998) found an association with depressive symptoms and cultural-specific stress using the SAFE scale with a sample of Latino adolescents. The new measure developed in this study extends the literature in that it addresses a bicultural/bilingual environment through assessment of intergenerational stress, peer group racism, school discrimination, worry about immigration, gang influence on ethnicity, and monolingualism. Although many Latino youths may experience these social realities, they may respond with different levels of stress. The assessment of the subjective construal of potential stressors will be necessary to provide insight into the unique bicultural environment that affects Latino adolescent mental health.

Bicultural Context of Stress

To develop this measure of stress, we focused on cultural aspects of bilingual and bicultural environments of Latino youths. Social sources of stress may be particularly important to pursue because of social pressure to live up to cultural standards that may be stressful for youths (Laungani, 1995). Adolescent social environments may include stress from social interactions in relation to cultural differences with other youths, teachers, or family members (Anheshensel, 1992). Sources of stress may result from conflict between different cultures and cultural conflict within one's own ethnic group. Whereas conflict between ethnic groups has often been investigated, within-group heterogeneity has not often been investigated. We argue that stress may result from cultural conflict for same ethnic group members; thus a bicultural context may create intergenerational culture gaps, monolingual stressors, and within-group discrimination, or peer pressure to conform to one's ethnic group cultural norms.

Previous research suggests that Latino youths live in a dual cultural world that is reflective of a family environment that may include individuals of different generations, different language preferences, and varying acculturation levels. Internal family conflict has been identified as associated with possible acculturation gaps between parents and children that may result in intergenerational conflict (Baptiste, 1993; Davis, 1940; Jensen Arnett, 1999; Mead, 1996; Szapocznik, Scopetta, Kurtines, & Aranaldi, 1978). However, there are no measures that have been developed to specifically measure adolescents' perception of these issues. Additionally, we argue that being monolingual (only speaking one language fluently) may be stressful for youths who live in a bilingual world; thus youths may experience stress not only from being a Spanish-dominant speaker but also from being an English-

dominant speaker. For example, youths who only speak English may feel stress because they need to speak better Spanish to communicate with other family members. Thus, it may be the bilingual youths who are better adapted to living in bilingual environments. Research has found that positive acceptance by peers is of importance during adolescence (Clark, Anderson, Clark, & Williams, 1999; Meña et al., 1987; Niemann, Romero, Arredondo, & Rodriguez, 1999; Saldaña, 1994; Sodowsky, Lai, & Pake, 1991). Therefore, youths who feel that they are not accepted because of their ethnic group may report higher levels of stress. Research with African American children has already documented that children do perceive racism and that it may be harmful for their health and development (Sanders Thompson, 1996). The issues of monolingualism, discrimination, and intergenerational gaps should be relevant to all Latino subgroups (Mexican, Cuban, Puerto Rican, etc.) and other ethnic groups as well.

Summary

The aim of this study is to develop a new measure of stressors within a cultural context relevant to the unique bilingual/bicultural social context of Latino adolescents and to assess its relation to depressive symptoms. The measure of bicultural stressors is based on the Folkman and Lazarus theory of stress and coping, such that cognitive appraisal of stress is assessed due to intergenerational conflict, monolingualism, and discrimination. We examine differences between immigrant and U.S.-born adolescents in regard to stress type and stress level. Additionally, we assess the relation between stressors and depressive symptoms beyond the variance accounted for by self-esteem.

Method

Participants

A cross-sectional survey of rural middle school (6th–8th grade) students was conducted. Surveys were completed by 994 students, which included 954 English language surveys and 40 Spanish language surveys. Of the students who did not participate, 104 were absent, 9 had parental refusals, and 7 students denied consent themselves. The overall response rate was 79%. Passive parental consent was used; parents returned a signature on the take-home parental consent letter only if they did not want their child to participate. Active student consent was obtained through means of the student's signature on the front page of the survey booklet. Teachers were trained by research staff to administer and read aloud the questionnaire to students. Students voluntarily completed questionnaires during regular classroom hours in mainstream classes, including two English as a Second Language classes. Only students of Mexican descent ($n = 881$) were included in the present study, because the sample sizes of the other ethnic groups were not large enough for statistical comparison groups. See Table 1 for sample characteristics.

Measures

The questionnaire was first developed in English and then translated into Spanish. It was

TABLE 1 Sample Characteristics

Variable	*n*	*%*
Gender		
Male	470	53.3
Female	403	45.7
Age		
11–12 years old	338	38.4
13 years old	280	31.8
14–15 years old	227	25.8
Ethnic label		
Mexican American	736	83.5
Mexican national	145	16.5
Grade		
6th grade	291	33.0
7th grade	292	33.1
8th grade	288	32.7
Generation		
Immigrant	165	18.7
U.S. born	678	77.0
Language use		
English only	191	21.7
Both languages	571	64.8
Spanish only	100	11.4

then back-translated from Spanish to English. A group of translators conducted the translation; they were all individuals who spoke Spanish as a first language and were from various Latino subgroups (Brislin, 1976; Brislin, Lonner, & Thorndike, 1973). When necessary, items for the stress scale were decentered based on differences in the original English version and the back-translated version. Small adjustments in the phrasing were changed to make the original English language version and the back-translated version as similar as possible (Brislin, 1976; Brislin et al., 1973).

DEMOGRAPHICS. Participants were asked to provide information on their age (continuous), gender, grade level (6th, 7th, or 8th grade), generation level (U.S born or born in another country), and ethnic group label (Mexican or Mexican American).

LANGUAGE USE. Students reported language preference in three areas: (a) at home, (b) with family, and (c) with media. Response items ranged from 1 = *only English*, 2 = *more English than Spanish*, 3 = *English and Spanish the same*, 4 = *less English than Spanish*, to 5 = *no English spoken, only Spanish*. The three items on language preference were averaged. Three categories of language preference were obtained: *English only* (language average ≤2.0), *bilingual preference* (language average <4 and >2), and *Spanish only* (language average ≥4). Higher scores indicate speaking more Spanish and less English.

PERCEIVED SOCIOECONOMIC STATUS. Perceived socioeconomic status (SES) was assessed with two questions (Gore, Aseltine, & Colton, 1992). Students were asked, "What best describes your family's standard of living?" with the following Likert-type response formats: 1 = *poor*, 2 = *nearly poor*, 3 = *just getting by*, 4 = *living comfortably*, and 5 = *very well off*. Students were also asked, "Compared to other students at your school, would you say your family is financially better off or worse off than other families?" with the following response formats: 1 = *much worse off*, 2 = *somewhat worse off*, 3 = *about the same*, 4 = *better off*, and 5 = *much better off*. These two items were averaged to create one SES variable. Higher scores indicate higher perceived SES.

SELF-ESTEEM. Rosenberg's (1965) scale was used to measure self-esteem. It comprises eight items based on a 1–5 Likert-type scale with responses ranging from 1 = *almost always true* to 5 = *never*. Scoring for all items was reversed for the analyses, such that higher scores indicated higher self-esteem. All eight items were averaged for a total score. The internal consistency for the scale in the present study was $\alpha = .73$.

DEPRESSIVE SYMPTOMS. The depressive symptoms scale has 31 items derived from items on the Diagnostic Interview Schedule for Children, Version 2.1 and covers diagnostic criteria in the fourth edition of the *Diagnostic and Statistical Manual of Mental Disorders* (*DSM–IV*; American Psychiatric Association, 1994). This version of the scale was originally developed and validated with young adolescents and Latino adolescent populations (Roberts, Roberts, & Chen, 1997). All questions are in reference to how the respondent felt in the past 2 weeks. Likert-type responses included 1 = *hardly ever* to 4 = *almost every day*. The measure was used as a continuous average score of all 31 items. Higher scores indicate more depressive symptoms. The internal consistency for the scale in the present study was $\alpha = .93$.

BICULTURAL STRESSORS. Bicultural stressors include proximate everyday life stressors that may occur within a bilingual and bicultural environment. The basic focus of the scale was derived from the Cuéllar and Roberts (1997) adult stress scale, and 14 items were revised with an adolescent focus on school, family, and peers. Research with the adult scale found high internal consistency ($\alpha = .87$). A few items were developed based on previous scales (SAFE, HSI, and Minority Stressors Scale) and modified for relevance to adolescents by basing them on school, peer, or family contexts (see the Appendix). New items were based on literature reviews

that suggested intergenerational conflict, monolingual stressors, and peer pressure to conform to one's ethnic group (Baptiste, 1993; Clark et al., 1999; Davis, 1940; Jensen Arnett, 1999; Mead, 1996; Meña et al., 1987; Niemann et al., 1999; Saldaña, 1994; Sodowsky et al., 1991; Szapocznik et al., 1978).

Items were kept to a minimum so that the scale could be completed in a reasonable amount of time along with other mental health measures in a classroom setting. Instructions stated: "Please indicate how stressful the following experiences have been for you. If you have never had the experience please fill in 'does not apply"' (see the Appendix). The scale is based on a Likert-type scale ranging from 1 (*not stressful at all*) to 4 (*very stressful*). Higher scores indicate more stress. The scale can provide information on the number of stressors that youths experience, and it can also provide information on the degree of stress perceived from the experience of each stressor identified by each respondent. A composite score can be created by multiplying the number of reported stressors and the perceived stress ratings; this composite score was used in the analyses for the present study unless otherwise specified.

A focus group comprising seven individuals in late adolescence (18–21 years) was conducted to assess the face validity of the items and to discuss their meaning to young people of color. Focus group participants were recruited from an undergraduate general psychology class. Participants signed a consent form before beginning the survey and focus group. Participants first individually completed the 20-item scale and then discussed the meaning of each item and their personal interpretations of them. The focus group results suggested that the items had good face validity and were representative of the types of stressors that young people from minority ethnic groups experience. Suggestions were made for 2 new items, including an item about gangs and about children translating for parents.

A pilot study was then conducted with a diverse group ($N = 43$) of male and female middle school students to assess readability, length of time for survey, and internal consistency of items. Students were recruited from social studies classes at a middle school. All participants prior to the survey provided passive parental and active youth consent. On the basis of these results, 2 items in the original scale were dropped because of ambiguity and lack of internal consistency, and 9 items were adjusted to reduce the reading level to a fifth-grade reading level (verified with Microsoft Word Processing readability statistics). The 2 items dropped were in reference to stereotypes and having the same chance in life as other students. After the 2 items were dropped, pilot study results indicated that the Cronbach's internal consistency alpha was $\alpha = .93$. The 20-item scale was used in all further work.

Results

Sample characteristics are presented in Table 1. All age outliers (older than 15 years) were dropped because they could disproportionately influence the findings due to differences that may exist in developmental stages by age (Tabachnick & Fidell, 1996). Using a method similar to that used by Dohrenwend, Krasnoff, Askenasy, and Dohrenwend (1978) and Cervantes et al. (1991), we first evaluated stress items with respect to the percentage of participants reporting the experience represented in a particular item. Using Exclusion Rule 1, if an item was experienced by less than 5% of the sample, it was deleted and not included in further analyses. It was not necessary to delete any items (see Table 2). Using Exclusion Rule 2, items were evaluated on the basis of the appraised stress ratings; if mean stress scores were below 1.0, they would be deleted. No items met these criteria for deletion (see Table 2). These procedures were conducted separately for immigrants and nonimmigrants, and no deletions were required in either sample.

TABLE 2 Descriptives for Immigrants (N = 165) and U.S.-Born Adolescents (N = 678)

	% reporting stressor		*Mean perceived stress*	
Variable	*Immigrant*	*U.S. born*	*Immigrant*	*U.S. born*
Family stressors				
Family obligations	75	77	2.23	2.29
Translate for parents	78	55	2.02	1.86
Parents say I don't respect elders	64	67	2.00	2.21
Help parents in U.S.	60	35	1.73	1.56
Argue with family about traditions	57	55	1.93	1.88
Can't be like American kids	56	40	1.42	1.67*
Lonely because family not united	54	51	1.94	2.10
Discrimination stressors				
Uncomfortable with other cultures	79	64	1.60	1.58
Uncomfortable ethnic jokes	76	76	2.62	2.50
Worried about immigration	72	50	2.27	2.11
Don't understand different cultures	64	60	2.01	1.92
Harder to succeed because of ethnicity	61	52	1.71	1.68
Monolingual stressors				
Treated bad because of accent	68	45	1.58	1.76
Problems at school because of poor English	67	39	1.83	1.53**
Need better Spanish	53	63	1.63	1.92*
Pressure to learn Spanish	53	56	1.57	1.73
Peer stressors				
Not accepted because of ethnicity	52	41	1.57	1.58
Argue with boy/girlfriend	49	38	1.50	1.71
My friends think I act White	44	34	1.49	1.60
Belong to gang for ethnicity	44	38	1.69	1.94

Note. t tests were performed for differences in mean perceived stress.
*$p < .05$. **$p < .01$.

Internal Consistency

With the 20-item version of the scale, internal consistency estimate for perceived ratings of bicultural stressors was $\alpha = .93$. Results for immigrant adolescents were $\alpha = .92$ and for U.S.-born adolescents were $\alpha = .93$.

Gender and Generational Differences

The t-test results indicate no significant gender differences in bicultural stressors but did indicate that the total number of stressors experienced by immigrants and U.S.-born youths were significantly different, $t(873) = 3.496$, $p < .0001$. U.S.-born students (M = 9.984) reported experiencing fewer total number of stressors than immigrant students (M = 11.835). See Table 2 for frequencies by each item for immigrant and U.S.-born youths. Perceptions of stressfulness were significantly different for only three items based on t-test results comparing the perception of stress means of U.S.-born to immigrant youths (see Table 2). U.S.-born youths reported significantly more perceived stress than immigrants as a result of needing better Spanish, $t(519) = -2.614$, $p < .009$, and feeling that their parents' culture kept them from being like other American kids, $t(351) = -2.006$, $p < .05$ (see Table 2). Immigrant youths reported more perceived stress than U.S.-born adolescents from problems at school because of poor English, $t(376) = 2.974$, $p < .003$ (see Table 2).

Pearson Product–Moment Correlations

Correlations between variables of interest are included in Table 3. More stress was sig-

TABLE 3 Pearson Product–Moment Correlations for Variables of Interest

Variable	*1*	*2*	*3*	*4*	*5*	*6*
1. Language	—					
2. Perceived SES	–.093*	—				
3. Age	.036	–.094*	—			
4. Depressive symptoms	.090*	–.079	.001	—		
5. Self-esteem	–.197***	.129**	–.092*	–.530***	—	
6. Bicultural stressors	.117**	–.094*	.066	.363***	–.228***	—

Note. SES = socioeconomic status.
*$p < .05$. **$p < .01$. ***$p < .001$.

nificantly associated with speaking less English, lower SES, older students, more depressive symptoms, and lower self-esteem.

Regression Analyses

The hierarchical multiple linear regression analyses were run using the same model separately for immigrant and U.S.-born youths. The criterion used was depressive symptoms, and the first step of the regression model included age, SES, gender, and language. The second step added an interaction term for SES and language; to minimize multicollinearity the interaction term was the product of the centered variables (Aiken & West, 1991). The third step of the regression models added self-esteem, and the fourth step added cultural stressors. Stress was significantly associated with depressive symptoms beyond the variance accounted for by self-esteem for both immigrant and U.S.-born youths in the full regression models (see Table 4 and Table 5).

For the immigrant group (see Table 4), total variance accounted for in the full model was 17% (13% adjusted), and gender, age, SES, and language use were not significant in the full model. Self-esteem accounted for 9% of the variance in depressive symptoms; stressors predicted 6% more variance in the full regression model beyond the variance accounted for by self-esteem.

For the U.S.-born adolescents (see Table

TABLE 4 Hierarchical Regression Analyses Predicting Depressive Symptoms for Immigrant Adolescents

Step/variable	*B*	*SE B*	β	R^2 *change*	*F change*
1				.013	.403
Age	.028	.036	.067		
SES	.086	.098	.088		
Gender	.034	.057	.051		
Language	.009	.101	.009		
2				.002	–.017
SES and language Interaction	–.089	.142	–.063		
3				.093	2.126*
Self-esteem	–.205	.070	–.261**		
4				.064	1.146**
Bicultural Stressors	.013	.004	.263**		

Note. Values for the full regression model $R^2 = .172$ (adjusted $R^2 = .125$), $F(7, 123) = 3.658$, $p < .001$. SES = socioeconomic status.
*$p < .05$. **$p < .01$.

TABLE 5 Hierarchical Regression Analyses Predicting Depressive Symptoms for U.S.-Born Adolescents

Step/variable	*B*	*SE B*	β	R^2 *change*	*F change*
1				.025	3.377*
Age	–.019	.020	–.035		
SES	.026	.041	.023		
Gender	.012	.028	.016		
Language	–.026	.041	–.011		
2				.003	–.407*
SES and language Interaction	.076	.065	.043		
3				.255	31.198***
Self-esteem	–.359	.029	–.471***		
4				.059	4.31***
Bicultural Stressors	.013	.002	.252***		

Note. Values for the full regression model R^2 = .342 (adjusted R^2 = .333), $F(7, 518) = 38.478$, $p < .001$. SES = socioeconomic status.

*$p < .05$. ***$p < .001$.

5), total variance accounted for by the full model was 34% (33% adjusted). Self-esteem accounted for 26% of the variance in depressive symptoms, and stressors accounted for 6% more variance beyond self-esteem in the full regression model. In all regression models, more depressive symptoms were associated with lower self-esteem and higher stressors.

Discussion

This study described bicultural stressors including discrimination (between and within groups), intergenerational gaps, and monolingual stressors among Mexican-descent adolescents and the relation of these stressors to depressive symptoms. All items of the stress scale were experienced by at least 30% or more of the sample. Youths reported whether they experienced the event as well as their perception of stressfulness of the event. This distinction is an important element of understanding stressors that may occur within bicultural environments. Results suggest that the perception of stressors were associated with depressive symptoms beyond variance accounted for by demographic variables and self-esteem. Additionally, generational differences were found in the type and perception of stressors that youths reported.

Generational Differences in Bicultural Stressors

In general, both immigrants and U.S.-born adolescents reported that they experienced the stressors identified within a bicultural context. Generational differences in types of stressors were found. U.S.-born children reported significantly less stress at school because of poor English; it is likely that U.S.-born children may have been speaking or exposed to Enlish for a longer period of time than immigrant children. On the other hand, U.S.-born students reported more stress because of the need to speak better Spanish and because they felt as though they could not be like American kids. Future studies may investigate to what extent being bilingual is a positive coping skill for Latino youths.

In general, there were few significant differences between generation levels in the perception of stress. The majority of youths (for both generation levels) most often reported stress from family obligations or derogatory ethnic jokes. Previous research has also suggested that family obligations and

family cultural differences may be stressful for some youths. Jensen Arnett (1999) has theorized that the primary stressor for all adolescents is conflict with parents; he suggested that U.S.-born adolescents strive to be more independent and autonomous during this point in their life, which may result in additional parental–child conflict in collectivistic culturally based families. Additionally, previous research with other ethnic groups has documented that children and youths do experience prejudice and discrimination and that it can be stressful; however the impact on child health requires more research (Sanders Thompson, 1996). Future research contributions may consider clarifying the specifics of family obligations and discrimination that might be particularly stressful for Latino adolescents.

Depressive Symptoms and Stress for Youths of Mexican Descent

Acculturation theory has suggested that there is a link between changes in culture, acculturation, and mental health; however previous empirical research appeared to provide equivocal results as to the direction of the link between acculturation and mental health. The findings of this study indicate that youths of Mexican descent experienced stress resulting from stressors unique to their dual cultural and linguistic contexts. Moreover, bicultural stress appears to be associated with more depressive symptoms even after individual differences in demographics and self-esteem are accounted for in both U.S.-born and foreign-born youths. Self-esteem has previously been identified as a resource against stress, and yet even after accounting for self-esteem, bicultural stressors were associated with more depressive symptoms. This finding may lead to future research to further explain why there are higher rates of depressive symptoms among Mexican-descent youths and to identify culture-specific coping methods with bicultural stressors.

There are several limitations to the present study. First, the sample is limited to only rural adolescents of Mexican descent; there are no other Latino subgroups represented. Significant differences in mental health between Latino groups have been previously found; thus it is recommended that the relevance, internal consistency of the scale, and its relation to depressive symptoms be tested with other Latino subgroups. Second, the association between general stressors and bicultural stressors was not investigated in the present study. A longitudinal study could also provide empirical information about the causal relations between general life stressors and stress within a bicultural context. Moreover, a longitudinal study could investigate the causal relation between depressive symptoms and the identified stressors. Another limitation of this study is the lack of a measure of specific coping responses and a lack of a measure of how long immigrant children have lived in the United States. To develop a more comprehensive picture of stress and coping for Latino adolescents, future studies would do well to include additional measures of general stress and coping measures, in particular culture-specific coping. Future studies would also do well to further investigate the bilingual and bicultural positive culture-specific coping skills that Latino youths may possess to cope with these specific stressors. Finally, a limitation of this study and the measure is that only 20 items were included; it is possible that there are other stressors that were not assessed in the present measure that have relevance for Latino youths' mental health.

The present study does, however, provide impetus to further investigate bicultural stressors that may affect the mental health, resiliency, and risk behaviors of Latino adolescents. The purpose of this study was to assess stress that may result from intergenerational acculturation gaps, monolingual stressors, and discrimination. Findings suggest that these stressors were associated with more depressive symptoms for youths of Mexican descent. In the present study, stressors often reported were discrimination and family obligations. Future research will

need to advance this work by including measures on the bicultural context of coping to improve our understanding of the positive factors that result from a bicultural context. By better understanding the bicultural/bilingual environment of Latino youths, researchers and practitioners can further explore the complexities of predictors of mental health in Latino populations. Cultural context is especially important to further understand how stress and mental health may be be impacted by bicultural and multicultural environments within the United States.

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Appendix
Bicultural Stressors Scale

Please indicate how stressful the following experiences have been for you.
If you have never had the experiences listed please mark #5 (does not apply).

Please fill in only one for each item.

	Not at all stressful 1	A little bit stressful 2	Quite a bit stressful 3	Very stressful 4	Does not apply 5
a.	I have been treated badly because of my accent.	1	2	3	4	5
b.	Because of family obligations I can't always do what I want.	1	2	3	4	5
c.	I have worried about family members or friends having problems with immigration.	1	2	3	4	5
d.	I have had problems at school because of my poor English.	1	2	3	4	5
e.	I do not feel comfortable with people whose culture is different from mine.	1	2	3	4	5
f.	I have felt pressure to learn Spanish.	1	2	3	4	5
g.	I have felt that I need to speak Spanish better.	1	2	3	4	5
h.	I have argued with my boyfriend/girlfriend over being too traditional.	1	2	3	4	5
i.	My friends think I'm acting "White."	1	2	3	4	5
j	My parents feel I do not respect older people the way I should.	1	2	3	4	5
k.	I feel uncomfortable when others make jokes about or put down people of my ethnic background	1	2	3	4	5
l.	I have argued with family members because I do not want to do some traditions.	1	2	3	4	5
m.	I have had to translate/interpret for my parents.	1	2	3	4	5
n.	I have felt lonely and isolated because my family does not stick together.	1	2	3	4	5
o.	I have felt that others do not accept me because of my ethnic group.	1	2	3	4	5

(*Appendix continues*)

p.	I have had to help my parents by explaining how to do things in the U.S.	1	2	3	4	5
q.	I feel like I can't do what most American kids do because of my parents' culture.	1	2	3	4	5
r.	I feel that belonging to a gang is part of representing my ethnic group.	1	2	3	4	5
s.	Sometimes I do not understand why people from a different ethnic background act a certain way.	1	2	3	4	5
t.	Sometimes I feel that it will be harder to succeed because of my ethnic background.	1	2	3	4	5