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UNDERSTANDING DEPRESSED MOOD IN THE CONTEXT OF A FAMILY-ORIENTED CULTURE

Virginia Gil-Rivas, Ellen Greenberger, Chuansheng Chen,
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ABSTRACT

This study examined the contribution of individual and family variables to depressive symptoms among youths in a family-centered culture. Participants were 262 Mexican adolescents (mean age = 15.9 years). At the individual level, gender (being female) and higher levels of perceived stressfulness of life events and ruminative coping style were correlated with higher frequency of depressive symptoms. At the family level, higher levels of perceived parental warmth and acceptance and parental monitoring were correlated with lower levels of depressed mood, whereas higher levels of parent-adolescent conflict were associated with greater frequency of depressive symptoms. Regression analyses confirmed our prediction that both individual factors (gender, ruminative coping) and family factors (parental warmth and parental monitoring) would make unique contributions to depressive symptoms. The model comprised of individual and family variables accounted for 50% of the variance in depressed mood. Moreover, parental warmth and acceptance attenuated the impact of ruminative coping style on adolescents' depressive symptomatology. Findings are discussed in relation to previous research on adolescents in another family-centered culture (China), and directions for future research are proposed.

Depressed mood has been described as a common experience during adolescence (Steinberg, 1999). For example, studies using community samples in the U.S. found that about 25% to 35% of adolescent boys and 25% to 40% of adolescent girls experienced depressive symptoms in the previous six months (Compas, Ey, & Grant, 1993; Petersen, Compas, Brooks-Gunn, Stemmler, Ey, & Grant, 1993). The presence of frequent, moderate symptoms of depression in children and adolescents has been found to have a negative impact on school performance and peer relationships (Merikangas & Angst, 1995; Nolen-Hoeksema, Girgus, & Seligman, 1992). Longitudinal studies have further shown a tendency toward stability of depressive symptoms across at least

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three years of adolescence (Devine, Kempton, & Forehand, 1994; Reinherz, Frost, & Pakiz, 1991), and depressive symptoms during adolescence are associated with depression and other psychological difficulties during adulthood (Compas, Connor, & Hinden, 1998; Devine, Kempton, & Forehand, 1994).

Ethnic group differences in the prevalence of depressed mood among adolescents in the U.S. have been reported in the literature. For example, Roberts and Sobhan (1992), in a national study on the prevalence of depressive symptoms among European-American, African-American, Mexican-American, and other Hispanic youths, found that Mexican-American adolescents had the highest rates of depressive symptoms. Recent studies have further revealed both differences and similarities in the individual and family factors that contribute to depressed mood among adolescents from different cultural and ethnic groups (Greenberger & Chen, 1996; Roberts & Sobhan, 1992).

A scant number of studies have systematically examined the contribution of individual and family factors to depressed mood among Mexican adolescents. The examination of family factors in a culture traditionally characterized as viewing the family as the primary and critical source of personal support (Diaz-Guerrero, 1975) can further our understanding of depressive symptomatology during adolescence. The family has been found to play an extremely influential role in shaping Mexicans' behavior at all developmental stages (Echeverria, 1990). In fact, it has been shown that Mexicans to a great extent define themselves in reference to their relationships with family members, showing a strong desire to obtain acceptance and approval within the family (Diaz-Loving & Draguns, 1999). Evidence for this view of the family as a central source of support is found in an empirical study conducted by Gonzalez-Forteza, Salgado de Snyder, and Andrade Palos (1993). The study showed that the family was the main and preferred source of support for adolescents irrespective of the type of situation or problem they were experiencing.

Mexicans have been found to adhere to traditional family values that place great importance on loyalty to the family, strictness in child-rearing, respect for adults, strong differentiation of gender roles, male/age superiority, and cooperation rather than competition (Rodriguez, Ramirez, & Korman, 1999). For example, in a study of 21 countries, Inglehart (1991) found that 79% of the Mexican sample believed in "unconditional love and respect for parents." Likewise, recent studies indicated that friendship, honesty, loyalty, the family, and parents were most valued by Mexican adolescents (Valdez Medina, Guadarrama Guadarrama, & Gonzalez Escobar, 2000; Vargas Nunez, 2000).

Empirical studies have examined the contribution of individual and family factors to depressive symptomatology among adolescents of various cultural and ethnic backgrounds. For example, a considerable number of cross-ethnic studies within the U.S. have shown a higher prevalence of depressed mood among female adolescents than males in samples of European-Americans, African-Americans, Mexican-Americans, other Hispanics, and Asian-Americans (Compas et al., 1997; Devine, Kempton, & Forehand, 1994; Ge, Lorenz, Conger, Elder, & Simmons, 1994; Greenberger & Chen, 1996; Nolen-Hoeksema & Girgus, 1994; Petersen et al., 1993; Petersen, Sarigiani, & Kennedy, 1991; Roberts & Sobhan, 1992). When gender differences have emerged among adolescents from other countries, they also take the form of females reporting more depressive symptoms than males (e.g., Greenberger, Chen, Tally, & Dong, 2000; Benjet, Hernandez-Guzman, Tercero-Quintanilla, Hernandez-Roque, & Chartt-Leon, 1999). It is important to note, however, that gender differences are typically small to moderate in magnitude.

Other individual factors that contribute to adolescent depressed mood include exposure to negative life events and ruminative coping style. Negative life events are a pervasive part of human existence and play an important role in the course of human development. Investigators have found evidence suggesting that adolescents' exposure to various negative life events (e.g., parental divorce, breaking up with a boyfriend or girlfriend) is linked to higher levels of depressive symptoms during adolescence in both the U.S. and other cultures (Ge et al., 1994; Greenberger, Chen, Tally, & Dong, 2000; Wagner, Cohen, & Brook, 1996; Wagner & Compas, 1990). Similar associations between stressful life events and psychological adjustment have been found for American adolescents of diverse ethnic backgrounds (Dornbusch, Mont-Reynaud, Ritter, Chen, & Steinberg, 1991) and among Chinese youths (Greenberger et al., 2000). In a study that examined the longitudinal trajectory of depressed mood during adolescence, Ge et al. (1994) found that levels of depressed mood were related to levels of exposure to negative life events. Moreover, they concluded that gender differences in depressed mood could be explained in part by greater exposure and reactivity to stressful life events among females.

The way people respond to or cope with episodes of depressed mood may increase the severity and chronicity of depressive episodes (Nolen-Hoeksema, 1987, 1991). Clinicians have reported that a ruminative response style, that is, individuals' tendency to respond to episodes of depressed mood with inactivity and by focusing their attention on their depressed mood and personal deficiencies, resulted in the amplification

and lengthening of the depressive episode (Beck, Rush, Shaw, & Emery, 1979; Nolen-Hoeksema, 1987, 1991). In addition, a number of empirical studies suggest that gender differences in the prevalence of depression that emerge during adolescence can be explained partially by females' greater tendency to engage in a ruminative style of responding during depressive episodes (Nolen-Hoeksema & Girgus, 1994).

Interpersonal experiences also have been linked to variations in depressive mood. In view of the importance of the family in helping adolescents navigate this challenging life period, it is not surprising that numerous aspects of family relationships (e.g., perceived parental warmth and acceptance) have been found to exert significant influence on adolescent well-being. Warm and caring parental attitudes have been found to be associated with lower levels of depressed mood among adolescents from various ethnic and cultural backgrounds in the U.S. (Formoso, Gonzalez, & Aiken, 2000; Ge et al., 1994; Greenberger & Chen, 1996; Greenberger et al., 2000; Steinberg, 1999; Steinberg, Mounts, Lamborn, & Dornbusch, 1991). For example, in a sample of European-American and Asian-American adolescents, higher levels of perceived parental warmth and acceptance were associated with lower levels of depressed mood among both early and late adolescents (Greenberger & Chen, 1996). Likewise, Gonzalez-Forsteza and Andrade Palos (1995), in a study of Mexican adolescents, showed that higher levels of parental warmth and supportive interactions were significantly associated with lower levels of depressed mood among females. No significant associations between variables assessing parent-adolescent interactions were found for males. A recent cross-cultural study of U.S. and Chinese adolescents showed that lower levels of parental warmth were associated with higher levels of depressed mood in both groups, but that the magnitude of this association was stronger for Chinese adolescents (Greenberger et al., 2000). The investigators interpreted the latter finding in terms of the greater importance of family relationships in Chinese culture. Research examining the buffering effects of positive family relationships in the context of negative life events has led to conflicting conclusions. Some researchers have found significant buffering effects for parental warmth (Ge et al., 1994; Wagner, Cohen, & Brook, 1996), whereas others have not (Greenberger et al., 2000).

Parent-adolescent conflict or bickering frequently increases during adolescence, and this aspect of family relationships has been found to be associated with higher levels of depressed mood among U.S. adolescents of different ethnic backgrounds and among Chinese and Australian adolescents (Chiu, Feldman, & Rosenthal, 1992; Greenberger &

Chen, 1996; Greenberger et al., 2000; Shek, 1999). Cultural differences in the strength of the association between high levels of parent-adolescent conflict and depressed mood have been found between Chinese and U.S. adolescents, with parent-adolescent conflict showing a stronger association with depressed mood among Chinese youths (Greenberger et al., 2000). As Greenberger et al. noted, this finding could reflect the greater value placed on family harmony within the Chinese culture.

Finally, parental monitoring, or the extent to which parents are generally aware of, or try to "keep on top of," their adolescents' activities, has been shown to be positively associated with various aspects of positive psychosocial development among adolescents of diverse ethnic backgrounds in the U.S. (Formoso, Gonzales, & Aiken, 2000; Greenberger, 1984). However, other studies have found that after controlling for other aspects of parent-child relationships, parental monitoring did not contribute uniquely to the variance in depressed mood (Gray & Steinberg, 1999).

The present study explored the contributions of both individual-level variables (specifically gender, perceived stressfulness of negative life events, and ruminative coping style) and family-level variables (namely parental warmth and acceptance, parent-adolescent conflict, and parental monitoring) to depressive symptomatology among Mexican adolescents. We were particularly interested in determining whether findings from a study of Chinese and U.S. adolescents (Greenberger et al., 2000), suggesting that family relationships have a stronger association with depressive symptomatology in the more "familistic" culture (China), would have a parallel in this study of Mexican adolescents, who are part of a *Western* cultural group that is also characterized by a strong emphasis on family harmony and connectedness.

Based on empirical evidence from previous research, we hypothesized that both individual-level variables (i.e., gender, perceived stressfulness of life events, and ruminative coping) and family-level variables reflecting the nature of family relationships (i.e., perceived parental warmth, level of parent-adolescent conflict, and parental monitoring or knowledge of the adolescents' activities) would contribute to the prediction of depressed mood. Because of the central role of the family in Mexican culture, and in light of findings from the Greenberger et al. (2000) study noted above, we also predicted that parental warmth would *moderate* the effects of overall perceived stress from negative life events and ruminative coping style. That is, we predicted that Mexican adolescents who reported higher levels of being upset by the negative events they had experienced during the past year, and those who tended to ruminate upon potentially depressogenic

events, would report fewer depressive symptoms if they perceived their parents as warm and accepting and experienced less conflict with them. In other words, we anticipated that positive family relationships would attenuate the effect of individual differences that have been shown to be related to depressed mood.

METHOD

Participants

Participants in the study were 272 adolescents from a high school in Mexico City serving an approximately middle-class population. The mean age of participants was 15.9 years; 60% of participants were female. Seven respondents were dropped from the study because their age was substantially above that of typical high school students. In addition, 3 individuals did not complete the questionnaire and were eliminated from the study, thus leaving a final sample of 262 adolescents. Modal education for mothers and fathers was less than a high school diploma, with 20.6% of mothers and 23.3% of fathers having a college degree or higher. The majority of the sample (77.9%) lived in a two-parent household, 17.4% were living with a single parent, and 4.3% lived in blended families. Regarding parental employment, 35.8% of adolescents reported that both of their parents worked, 36.6% reported that only their father worked, 8.6% reported that only their mother worked, and 19% reported that other members of the family were employed.

Procedure

Bilingual members of the research team translated and back-translated all measures, paying special attention to the cultural relevance of the concepts and to language nuances. Data were collected from adolescents by means of an anonymous self-report survey that was administered during a 50-minute class period at school. Prior to survey administration, a Mexican researcher from the same region made a class presentation to students about the purposes of the project (briefly, "to better understand the lives of adolescents today"). Active consent of adolescents for participation in the study was obtained. The participation rate was virtually 100%, with the 3 individuals whose questionnaires were incomplete considered as having declined to participate.

Measures

Adolescents responded to a variety of demographic questions. The demographic information obtained included parents' marital status,

educational attainment, household composition, and employment status of household members.

Depressive symptoms were assessed by the 20-item Center for Epidemiological Studies Depression Scale (CES-D; Radloff, 1977, 1991). The scale includes 4 subscales that indicate depressed mood, happy/positive affect, somatic and psychomotor retardation, and interpersonal distress. Participants reported the frequency of symptoms over the past month (e.g., "I could not get going") on a 4-point scale ranging from 1 (*never*) to 4 (*always*). The CES-D has demonstrated adequate reliability and validity for adolescents of diverse backgrounds in the U.S. (Radloff, 1991) and among Mexican children and adolescents (Benjet et al., 1999). In the current Mexican sample, coefficient alpha for this scale was .86.

Perceived stressfulness of negative events in adolescents' lives was assessed with a newly developed scale. The scale included 7 items describing specific events that adolescents may have experienced within the last year, such as "a friend and I had a serious argument or conflict" and "my grades in school went down a lot." Respondents first indicated whether the event had occurred, and then for each of the events they reported, rated the perceived stressfulness using a 4-point scale ranging from 1 (*not at all upsetting*) to 4 (*extremely upsetting*). A summary score was computed to reflect the total perceived stressfulness of events. Nine respondents who did not report any of the listed events received a score of zero.

Ruminative coping style was assessed using the 22-item Ruminative Style subscale of the Response Style Questionnaire developed by Nolen-Hoeksema (1991). Respondents indicated the frequency with which they engage in "ruminative" thoughts and behaviors when they feel down, sad, or depressed, using a scale ranging from 1 (*almost never*) to 4 (*almost always*). The scale included items such as "think about how passive and unmotivated you feel" and "go away by yourself and think about why you feel this way." Coefficient alpha for this scale was .86.

Parent-adolescent conflict was assessed using a scale that contained 11 items about arguments in domains such as schoolwork, household chores, family relationships, friends, money, and personal habits. Respondents indicated the frequency of disagreements during the past month on a 4-point scale ranging from 1 (*never*) to 4 (*almost every day*). The validity of this measure is supported by positive correlations with the Conflict subscale of Moos and Moos's (1986) Family Environment Scale (see Greenberger & Chen, 1996), and it has been previously used in research involving various cultures (e.g., Chen, Greenberger, Lester,

Dong, & Guo, 1998; Greenberger et al., 2000). Coefficient alpha for this scale was .75.

Parental warmth and acceptance was assessed by means of an 11-item scale. Items included the following: "My parents really understand me" and "I find it hard to please my parents" (reverse coded). Adolescents responded on a 6-point scale ranging from 1 (*strongly disagree*) to 6 (*strongly agree*). This scale has been used cross-culturally (Greenberger, Chen, & Beam, 1998; Greenberger et al., 2000). An earlier version of the scale was positively correlated with the Cohesion subscale of Moos and Moos's (1986) Family Environment Scale (see Greenberger & Chen, 1996) and has been shown to be significantly associated with depressive symptoms among adolescents of different ethnicities within the U.S., as well as adolescents in China and Korea (Tally et al., 2000) and in several western European nations (Gil-Rivas et al., 2000). In the current study, the alpha coefficient for this scale was .81.

Parental monitoring was measured with a 10-item scale that assessed the extent of parents' knowledge of, and involvement in, a variety of aspects of the adolescents' lives. For example: "How frequently do your parents know where you go, when you go out at night?" This scale has been used with ethnically diverse samples of U.S. youths as well as cross-culturally (Chen et al., 1998). Adolescents responded on a 4-point scale ranging from 1 (*never*) to 4 (*always*). The alpha coefficient for this scale was .89.

RESULTS

Table 1 shows the mean levels of depressed mood, individual variables, and family variables by gender. As predicted, the analyses indicated significant gender differences in depressed mood, with females reporting a significantly greater frequency of depressive symptoms, $F(1, 258) = 5.17, p < .05$. On average, male and female Mexican adolescents reported experiencing depressive symptoms once or twice per month. There were no gender differences in the perceived stressfulness of negative life events. Consistent with expectations, females reported more frequently engaging in ruminative thoughts and behaviors compared to males, $F(1, 253) = 11.95, p < .01$. In the family domain, males and females did not differ significantly in their perceptions of parental warmth and acceptance; overall, participants perceived their parents positively (mean item scores for both groups were close to 5 on a 6-point scale). Participants reported relatively low levels of parent-adolescent conflict (mean scores below 2 on a 4-point scale). However, adolescent

Table 1

Mean Scores and Standard Deviations by Gender

Variable	Male		Female		<i>F</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
Depressive symptoms	1.80	0.44	1.94	0.47	5.17*
Perceived stress of events	9.21	5.71	9.58	5.57	0.26
Ruminative coping style	1.97	0.47	2.17	0.42	11.95**
Parental warmth and acceptance	4.80	0.82	4.96	0.81	2.52
Parent-adolescent conflict	1.72	0.51	1.58	0.42	6.08*
Parental monitoring	2.87	0.65	3.22	0.63	17.03***

* $p < .05$, ** $p < .01$, *** $p < .001$.

males reported engaging in arguments with their parents significantly more frequently than did females, $F(1, 247) = 6.08, p < .05$. In contrast, adolescent females reported significantly higher levels of parental monitoring than did males, $F(1, 245) = 17.03, p < .001$.

Initial correlational analyses revealed that demographic variables such as respondents' age, parental education, and employment status of household members were not significantly associated with depressed mood. Therefore, these variables were eliminated from subsequent multivariate analyses. Each of the other individual- and family-related variables showed significant zero-order correlations with adolescent depressive symptomatology and were therefore included in the subsequent regression models.

Table 2 presents the zero-order correlations among the variables. All of the individual and family variables were associated with depressed mood in the expected direction. At the individual level, ruminative style showed the strongest association with depressive symptomatology. Within the family context, higher levels of parental warmth and acceptance and parental monitoring were significantly associated with lower levels of depressed mood, while higher levels of parent-adolescent conflict were associated with higher levels of depressed mood.

Table 2

Correlations Among the Variables

Variable	1	2	3	4	5	6	7
1. Depressive symptoms	—						
2. Gender (female = 0, male = 1)	-.14**	—					
3. Perceived stress of events	.32***	-.03	—				
4. Ruminative coping style	.56***	-.21**	.33***	—			
5. Parental warmth and acceptance	-.54***	-.10	-.20**	-.26***	—		
6. Parent-adolescent conflict	.29***	.16*	.46***	.20**	-.37***	—	
7. Parental monitoring	-.43***	-.26***	-.16*	-.16***	.64***	-.31***	—

* $p < .05$, ** $p < .01$, *** $p < .001$

In subsequent regression analyses, we evaluated the total and unique contributions of individual and family factors to the explanation of depressive symptoms. We also tested the hypothesis that parental warmth would buffer adolescents from the deleterious effects of a high level of perceived stressfulness of negative life events and from the depression-exacerbating effects of a ruminative style of coping with negative life events. Variables were entered in the regression equation as follows: individual-level variables (i.e., gender, perceived stressfulness of events, and ruminative style) were entered together at Step 1; family-level variables (i.e., parental warmth, parent-adolescent conflict, and parental monitoring) were entered together at Step 2. In subsequent analyses, each of two two-way interaction terms was added *individually* to Step 3. These interaction terms were Parental Warmth \times Perceived Stressfulness of Events, and Parental Warmth \times Ruminative Coping Style.

These multivariate analyses, shown in Table 3, indicated that all three individual-level variables were associated with depressed mood in the expected direction. However, only two of these variables contributed *uniquely* to the prediction of depressed mood when the effects of other individual-level variables were controlled. Specifically, individuals who reported more frequently engaging in ruminative thoughts and behaviors, and individuals who reported higher levels of perceived stressfulness of events, had higher levels of depressed mood. Contrary to expectation, gender did not uniquely contribute to the variance in depressed mood in the model that included these three individual-level variables (i.e., the Step 1 results; see Table 3). In view of the fact that there were no gender differences in perceived stressfulness of life events, it appears that ruminative coping accounts for the gender differences in depressed mood (see Table 1). The model including the three individual-level variables explained 33% of the variance in depressed mood, $F(3, 233) = 39.65, p < .001$.

When family variables were added to Step 2 of the regression equation, ruminative coping style continued to make a unique contribution to adolescents' depressed mood. The effect of perceived stressfulness of negative life events was reduced to nonsignificance when family

Table 3

Regression of Depressive Symptoms on Individual and Family Variables

Variable	Step 1			Step 2		
	<i>B</i>	β	<i>t</i>	<i>B</i>	β	<i>t</i>
<i>Individual domain</i>						
Gender	-.02	-.02	-0.33	-.14	-.14	-2.85**
Perceived stress of events	.01	.16	2.83**	.01	.10	1.69
Ruminative coping style	.53	.51	8.78***	.41	.40	7.70***
<i>Family domain</i>						
Parental warmth and acceptance	-	-	-	-.15	-.27	-4.18***
Parent-adolescent conflict	-	-	-	.05	.05	0.89
Parental monitoring	-	-	-	-.15	-.21	-3.36**

* $p < .05$, ** $p < .01$, *** $p < .001$

variables were included in the model. Interestingly, gender made an independent contribution to depressed mood, once the family measures were controlled. In order to determine which of the family variables accounted for the reemergence of gender as a predictor of depressed mood, we conducted further analyses. Results of these analyses indicated that only parental monitoring (i.e., not parental warmth and acceptance or parent-adolescent conflict) was responsible for the reemergence of a gender effect on depressed mood.

Among the family-level variables, higher levels of perceived parental warmth and parental monitoring were each significantly associated with fewer symptoms of depression after controlling for individual-level variables. Contrary to expectations and findings from other studies, however, parent-adolescent conflict did *not* contribute uniquely to the variance in depressed mood in this sample. Further analyses, in which we removed each of the individual-level variables one at a time and evaluated the resulting model, clarified the picture. Parent-adolescent conflict did not survive controls for individual-level variables because of shared variance between the measures of parent-adolescent conflict and perceived stressfulness of negative life events. (Recall that perceived stressfulness of events was reduced to nonsignificance in the complete model, after individual factors had been controlled; see also the considerable zero-order correlation between perceived stressfulness of events and parent-adolescent conflict as shown in Table 2.) The inclusion of the family-level variables resulted in a change in R^2 of .17, $F(6, 227) = 39.87, p < .001$. The adjusted R^2 for the complete model, comprising individual and family variables, was .50, $F(4, 228) = 39.63, p < .001$.

The hypothesis that in the family-oriented Mexican culture, perceived parental warmth would moderate the effects of two individual factors associated with depression (perceived stressfulness of recent life events and tendency to ruminate when depressed) was *partially* supported. Although the beta weight for the interaction term reflecting Parental Warmth \times Perceived Stressfulness of Negative Events was *not* significant, $t(7, 226) = -.96, p > .05$, it *was* significant for the interaction term reflecting Parental Warmth \times Ruminative Coping Style, $t(7, 226) = -2.68, p < .01$. In other words, parental warmth and acceptance attenuated the effect of ruminative coping style on adolescents' mood.

DISCUSSION

This study examined individual and family correlates of depressive symptoms in a culture in which the family is frequently portrayed as

playing an especially important role in adolescent development. The individual and family variables included in this study were associated with depressed mood in the expected direction. Correlational analysis at the individual level showed that gender (being female) and higher levels of ruminative coping and perceived stressfulness of negative life events were associated with higher levels of depressed mood. These findings are consistent with those for adolescents from diverse ethnic backgrounds within the U.S. and for youths from other cultures (see Greenberger & Chen, 1996; Nolen-Hoeksema & Girgus, 1994; Roberts & Sobhan, 1992).

In the family domain, correlational analyses indicated that parental warmth and acceptance, parent-adolescent conflict, and parental monitoring were significantly associated with depressed mood. As expected, higher levels of perceived parental warmth and acceptance and parental monitoring were associated with lower frequency of depressed mood among adolescents, whereas higher levels of parent-adolescent conflict were associated with higher levels of depression.

Regression analyses in which both individual and family variables were included continued to show significant unique effects of gender (female), ruminative coping style, perceived parental warmth and acceptance, and parental monitoring on depressed mood. Our findings for parental monitoring are consistent with a recent study of Mexican-American adolescents (Formoso, Gonzales, & Aiken, 2000), but inconsistent with results reported by Gray and Steinberg (1999) in a study of U.S. adolescents. Contrary to the findings of studies with U.S. adolescents from diverse ethnic backgrounds, as well as cross-cultural studies (Chiu et al., 1992; Greenberger & Chen, 1996; Greenberger et al., 2000), parent-adolescent conflict was not significantly associated with depressed mood among Mexican adolescents when other family and individual variables were controlled. This was due mainly to shared variance between parent-adolescent conflict and perceived stressfulness of life events. Future research is needed to clarify the processes that underlie the link between these variables.

Finally, as expected, perceived parental warmth and acceptance not only contributed to lower levels of depressed mood among Mexican youths, but, in this family-oriented culture, moderated the effects of individuals' tendency to ruminate when depressed. That is, parental warmth and acceptance attenuated the negative effect of ruminative coping style on adolescents' mood.

This study makes several contributions to our understanding of depressed mood in a community sample of Mexican adolescents. It is one of the first studies to systematically examine individual and family correlates of depressive symptoms in this population. For middle-class,

urban Mexican adolescents, who are growing up in a family-oriented culture, individual as well as family factors play an important role in depressive symptomatology. The findings of this study extend previous research on adolescents in China—another culture in which the family is highly valued (Greenberger et al., 2000). In both studies, family variables were predictive of adolescents' depressive symptoms. However, parental warmth and acceptance did not buffer Chinese adolescents from the depressogenic effects of low grades or a high number of negative life events. In contrast, the current study of Mexican youths suggests that there may be particular types of risk, such as ruminative coping style, that are offset by parental warmth. Whether this is the case only for adolescents in cultures where the family occupies a central role over the life course, as in Mexico, is not known. Comparable research on adolescents in less family-centered cultures is needed to address this issue.

Several limitations of this cross-sectional study should be noted. First, the results may not generalize to Mexican adolescents from lower socioeconomic status families and rural settings. Second, data for our predictor and outcome measures were obtained from only one source, adolescents. Finally, because of the cross-sectional nature of our data, we cannot conclude that individual and family factors actually are the causes of differences in adolescents' depressed mood, although longitudinal studies of other populations point in this direction. Future research should include data from multiple sources regarding the quality of the family environment and examine how these factors contribute to changes in depressed mood over time.

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