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Cultural Orientations, Daily Activities, and Adjustment in Mexican American Youth

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Abstract

The links between youth's daily activities and adjustment and the role of cultural practices and values in these links were studied in 469 youth from 237 Mexican American families. In home interviews, data on mothers', fathers', and two adolescent-age siblings' cultural practices (language use, social contacts) and values (for familism, for education achievement) were collected, along with data on youth risky behavior and depressive symptoms. In 7 nightly phone calls, youth reported on their day's free time activities (i.e., sports, academics, religious activities, television viewing, and hanging out). Analyses revealed that youth who spent more time in unsupervised hanging out reported more depressive symptoms and risky behavior, and those who spent more time in academic activities reported less risky behavior. Results also indicated that more Anglo-oriented youth spent more time in sports, that more Mexican-oriented youth spent more time watching television, that fathers' familism values were related to youth's time in religious activities, and that parents' educational values were linked to youth's time in academic activities. Some evidence indicated that parents' cultural practices and values, particularly fathers', moderated the links between daily activities and youth adjustment.

Keywords

Adolescence; Time use; Culture; Mexican American; Family processes; Adjustment

Introduction

Daily activities are significant developmental phenomena (Bronfenbrenner 1979). How youth spend their time reflects the affordances and constraints in their environments. In turn, youth's daily activities provide opportunities for developing skills, forging social bonds, and forming a personal identity (e.g., Bronfenbrenner 1979; Coatsworth et al. 2005; Larson and Verma

1999; Weisner 2002). A burgeoning body of empirical studies documents the adaptive implications of youth's involvement in structured and organized free time activities (e.g., Eccles and Barber 1999). In contrast, unstructured activities, such as hanging out, provide opportunities for youth to engage in risky behaviors, and time spent in unsupervised activities has been linked to higher levels of depressive symptoms (Mahoney et al. 2002; Osgood et al. 1996). An important new direction for research in this area is to examine the conditions under which and the processes through which daily activities have implications for youth adjustment.

Most research on youth's daily activities has targeted European American adolescents, and when minority youth have been studied, the focus has generally been on ethnic group comparisons. Such studies show, for example, that Hispanic youth are less likely to spend time in development-enhancing activities than either African American or European American youth (Brown and Evans 2002). As a number of writers have suggested, however, such *ethnic comparative designs* provide limited information about minority youth's development and adjustment (Garcia Coll et al. 1996; McLoyd 1998). First, because European American youth are treated as the standard for comparison, divergence from their norm is assumed to be pathological. In addition, because ethnicity is only a status or "social address" variable (Bronfenbrenner 1979), when ethnic group differences are detected, researchers can only speculate on the mechanisms that are responsible for those differences. Accordingly, these scholars advocate the use of *ethnic homogenous designs* that allow culture to be unpacked so that researchers can begin to identify the processes through which culture has implications for youth (Garcia Coll et al. 1996; McLoyd 1998).

In the present study, we built on prior research on the role of activities in youth adjustment, using an ethnic homogeneous design, to study the daily free time activities of Mexican American youth and their links with risky behavior and depressive symptoms. We also expanded on prior research to examine the role of Mexican and Anglo cultural values and practices in activity–adjustment linkages. Hispanics are the largest ethnic minority group in the U.S., and Mexican origin individuals comprise 67% of the Hispanic population (U.S. Bureau of the Census 2003). Further, almost 40% of children born to immigrants in the U.S. are born to parents from Mexico (Hernandez 2004). Higher rates of risky behavior (delinquency, substance use, risky sexual behavior) among more acculturated Mexican American youth (e.g., Vega and Sribney 2003; Crosnoe and Lopez-Gonzalez 2005), and higher rates of depressive symptoms in Mexican American relative to majority culture youth (e.g., Gonzales et al. 2002), mean that the processes underlying adjustment in these adolescents are an important focus for research.

Grounded in cultural and ecological perspectives that highlight links between cultural orientations, daily activities, and youth development and adjustment (e.g., Bronfenbrenner 1979; Weisner 2002), the goals of this study were: (a) to measure the links between involvement in daily activities and Mexican American youth's risky behavior and depressive symptoms; (b) to measure the links between parents' and youth's cultural values and practices and youth's activity involvement; and (c) to explore how cultural values and practices, in combination with activity involvement, were linked to youth's risky behavior and depressive symptoms. As we explain below, in addressing our third goal we tested hypotheses drawn from cultural anthropology (e.g., Weisner 2002), that daily activities mediate the links between culture and youth adjustment and that cultural practices and values moderate activity–adjustment linkages.

Daily Activities and Youth Adjustment

As noted, a body of work documents links between youth's daily activities and youth adjustment, highlighting linkages between youth activities and both their internalizing symptoms and externalizing problems (e.g., Eccles and Barber 1999; Mahoney et al. 2002; McHale et al. 2001; Osgood et al. 1996). Given the limited information on Mexican American

youth, in the present study we measured a range of activities that have been the targets of prior research on youth's free time use: sports, religious activities, academic activities, television viewing, and unsupervised hanging out with peers. In addressing our first study goal we examined the associations between time spent in each of these activity domains and youth adjustment. We operationalized youth adjustment in terms of youth depressive symptoms and risky behavior given that these kinds of problems have been the focus of prior research on Mexican American youth and, as we elaborate below, because they have been the focus of research on the adjustment implications of youth's activity involvement (e.g., Gonzales et al. 2002; Mahoney et al. 2002; Moyerman and Forman 1992; Osgood et al. 1996).

Beginning with involvement in *sports activities*, prior research provides mixed results. Some work suggests that more involved youth score higher on some measures of adjustment (e.g., Feldman and Matjasko 2005). Among Hispanic youth, involvement in sports is linked to peer popularity (Melnick et al. 1992) and psychological wellbeing (Erkut and Tracy 2002), and involvement in school-based sports teams has been linked to academic adjustment (e.g., Melnick et al. 1992) and lower levels of risky behavior (Yin et al. 1999). In contrast, other research indicates that more involved youth engage in more rule-breaking, aggressive, and risky behavior (Crosnoe 2002; Eccles and Barber 1999) including Hispanic youth (Pumariega et al. 1992). In short, sports involvement does not appear to have universally positive implications. As such, an important direction for research is to identify factors that may moderate the links between sports involvement and youth adjustment.

Religious activity is a domain of increasing research interest. Prior work has linked religiosity, indexed as subjective evaluations of the importance of religion, spirituality, and global ratings of service attendance, to both internalizing (depression) and externalizing (risky behavior) symptoms of youth in the general population (e.g., Donahue and Benson 1995) as well as among Hispanic youth (e.g., De La Rosa and White 2001; Marsiglia et al. 2005; Pumariega et al. 1992). This work suggests that religiosity may be a protective factor for youth adjustment. We expanded on this work to measure the implications of youth's daily *time spent* in religious activities, including both structured (attend religious services) and unstructured (e.g., daily prayer) activities, and its links with adjustment. We expected that temporal involvement in religious activities would have the same protective effects as religiosity.

The implications of *television viewing* have been the focus of much research (Anderson et al. 2001). Early work focused on television violence and established its links to aggressive behavior (Anderson et al. 2001) and recent studies document links between adolescents' television viewing and their involvement in risky behaviors (Gutschoven and Van den Bulck 2004). Many studies find that youth spend more time watching television than engaging in other activities (e.g., McHale et al. 2001) and a concern raised by a number of researchers is that television time keeps youth from engaging in the organized and constructive activities that build skills and enhance social ties (Anderson et al. 2001). Along these lines, Larson argued that youth watch television because they have nothing better to do (Larson and Verma 1999). The limited data available suggest that television viewing is central in Hispanic youth's daily routines (Lopez 2002), making this activity an important focus of our study. Taken together, extant data led us to expect that television watching would be negatively related to youth adjustment.

Involvement in *academic activities* such as reading and homework also has been a focus of empirical study (Bianchi and Robinson 1997; Larson and Verma 1999). Such activities do not consume large amounts of free time among U.S. youth, but they are a part of most adolescents' daily routines. Time spent in academic activities has mostly been studied in terms of its positive implications for school achievement (e.g., Fuligni and Stevenson 1995) including in Hispanic youth (Eamon 2005). We know less about the links between academic activities and youth

adjustment. Positive links between school engagement and youth adjustment, however, may mean that academic activities play a protective role for example, by fostering a positive sense of self and a sense of identity, by connecting youth to peers who are achievement-oriented, and by minimizing their time spent in unstructured/unsupervised activities. Thus, we expected that time in academic activities would be positively related to youth adjustment.

Time spent in unstructured activities, like *hanging out with peers*, has been linked to involvement in risky behavior as well as to depressive symptoms (Mahoney et al. 2002; Osgood et al. 1996). Prior work suggests that these links emerge, in part, because hanging out involves a lack of adult supervision that affords opportunities for youth to engage in delinquent and deviant behavior (e.g., Osgood et al. 1996). Analyses also suggest that youth spend more time hanging out when their parents do not orchestrate or support their involvement in development-enhancing, constructive, and organized activities (Lareau 2003). Given these findings, in this study we tested the prediction that time spent in unsupervised hanging out with peers would be negatively related to youth adjustment.

Cultural Orientations and Youth's Daily Activities

Some prior work has assessed family background characteristics that are associated with youth's involvement in different kinds of free time activities. Socioeconomic status (SES) has been the primary focus, with most research documenting that youth from more economically advantaged families are more involved in organized activities (e.g., sports teams) and spend more time in academic activities like homework and reading. In contrast, less advantaged youth spend more time in unstructured and unsupervised activities including television viewing and hanging out (Bianchi and Robinson 1997; Hofferth and Sandberg 2001; Lareau 2003). Some research also has measured ethnic group differences in youth's activities and shown that Hispanic youth spend less time than African or European American youth in organized and constructive activities (e.g., Brown and Evans 2002). Research on SES and ethnic group differences in youth's activities documents the importance of the social ecology in youth's time use patterns, but an important step is to go beyond such *status variables* to examine the *processes* through which contextual conditions play a role in the links between youth activities and adjustment (Bronfenbrenner 1979).

Accordingly, in the present study, we extended prior research on the links between family background characteristics and youth activities to measure the role of *cultural processes* in youth's time use. Responding to the call of scholars interested in the acculturation processes of Hispanic families (e.g., Gonzales et al. 2002), we conceptualized these in a multi-dimensional way, as including both cultural practices and cultural values. We also measured the cultural practices and values, or what we refer to here as *cultural orientations*, of mothers, fathers, and youth in an effort to move beyond examining youth's correlated self reports of culture and adjustment (Gonzales et al. 2002). Although some prior research has linked mothers' cultural orientations to youth functioning, fathers' orientations have been virtually ignored (Gonzales et al. 2002). Evidence that Mexican American families are more traditional in their gender role orientations (Azmitia and Brown 2000; Coltrane and Valdez 1993), however, means that fathers' cultural values and practices may have especially important implications for youth functioning. As a measure of Mexican- and Anglo-oriented cultural *practices* we used an index of acculturation that targets parents' and youth's language use and social contacts. In addition, we examined *values* in two domains; specifically, parents' and youth's *familism values*, a Mexican cultural ideal that reflects a communal orientation (Marín and Marín 1991), and mothers' and fathers' *values for education* as a reflection of parents' orientations toward their offspring's individual achievement (Okagaki and Frensch 1998). Our second research goal, to assess the links between these dimensions of parents' and youth's

cultural orientations and youth's daily activities, was directed at unpacking culture in an effort to understand *how* culture may have implications for youth's activities.

Cultural Orientations, Daily Activities, and Youth Adjustment

To illuminate *how* cultural orientations and daily activities operate jointly in explaining youth adjustment we drew on ideas from cultural anthropology. From this perspective, everyday activities “crystallize culture directly” (Weisner 2002, p. 275). This is because daily activities reflect opportunities and constraints in the social and physical environments and associated attitudes and values. Furthermore, daily activities are the forum within which culturally valued behaviors and skills are learned and practiced and in which attitudes and beliefs are assimilated (e.g., Rogoff and Chavajay 1995). Research in this tradition ties parents' beliefs about culturally valued qualities and competencies to their offspring's daily activities. For example, parents who value achievement may promote children's involvement in academics or other kinds of skill-developing activities, and those who value family relationships may make efforts to involve their children in family activities. In this way, a cultural anthropological perspective ties parents' beliefs about culturally valued qualities and competencies to youth's daily activities and highlights how parents (and other adults) promote these in the context of everyday life.

A conceptualization of daily activities as a forum for cultural socialization suggests that cultural orientations have implications for the kinds of activities youth engage in, and in turn, that daily activities *mediate* the links between cultural orientations and youth development and adjustment. In other words, cultural orientations are the cause of youth's activity involvement, and the nature of youth's activities, in turn, leads to youth well-being or adjustment problems. For example, parents with strong educational values may encourage their children's involvement in academic activities, and more time spent in academic activities, in turn, may be linked to positive youth adjustment. In the present study we tested this idea, exploring whether youth's daily activities mediated the links between cultural orientations and youth adjustment.

Cultural orientations also may have implications for how activities are carried out, including the social scripts that characterize activities, the socialization goals that motivate activities, and the meanings attributed to activities (Weisner 2002). In other words, involvement in an activity may have different implications for youth in different cultural contexts, because cultural orientations *moderate* the links between activities and youth outcomes. For example, youth with parents who report high values for education *and* who also spend more time on academic activities may exhibit more positive adjustment because their academic endeavors are congruent with parental values. In contrast, when parents do not emphasize the importance of education, time spent in academic activities may not have similarly strong positive implications. We tested this idea in the present study as a means of exploring how cultural orientations and daily activities operate together in promoting Mexican American youth's adjustment. Specifically, we explored whether the associations between youth's daily activities and their adjustment varied as a function of parents' and youth's cultural orientations.

Overview of Study Goals

Grounded in the tenets of ecological and cultural perspectives, we built on prior research on the links between youth's activities and adjustment to study these linkages in Mexican American youth and to examine the role of cultural values and practices in these processes. Our first goal was to examine the associations between time spent in five categories of free time activities—*sports, religion, television, academics, and hang out*—and both depressive symptoms and risky behavior in Mexican American youth. Based on existing literature, we predicted that religious and academic activities would be associated with more positive

adjustment (less depression and risky behavior) and that hanging out and watching television would be linked to poorer adjustment. Given prior mixed results for sports activities, we did not have a specific hypothesis for the adjustment implications of youth's involvement in this activity domain.

To illuminate the role of culture in youth's daily activities, our second goal was to assess the links between parents' and youth's cultural orientations and youth's daily activities. To our knowledge, ours is the first study to examine associations between cultural values and practices and youth's activities, and thus our analyses were largely exploratory. Findings that Hispanic youth tend to be less involved in organized and structured activities (Brown and Evans 2002) and that television watching is central in Mexican American youth's daily routines (Lopez 2002), however, led us to predict that youth from more Mexican-oriented and less Anglo-oriented families would spend less time in sports and more time watching television. We also expected that Mexican orientations and familism values would be linked to lower levels of unsupervised hanging out given a cultural emphasis on family relationships and activities. Finally, we expected that parents' educational values would predict youth's time in academic activities.

Our third goal was to study how youth's daily activities, in combination with cultural orientations, were linked to youth adjustment. Here, we tested two exploratory hypotheses derived from cultural anthropological theory: (a) that youth's daily activities would *mediate* the links between cultural orientations and adjustment, and (b) that cultural orientations would *moderate* activity–adjustment linkages. We tested these hypotheses in an effort to unpack culture and illuminate the processes through which culture may have implications for youth adjustment.

Method

Participants

The data came from a study of family socialization and adolescent development in Mexican American families (McHale et al. 2005; Updegraff et al. 2005). Families were recruited through schools in and around a southwestern metropolitan area. Given the focus of the larger study on normative family, cultural, and gender role processes in Mexican American families with adolescents, criteria for participation were: (1) mothers were of Mexican origin; (2) families included a 7th grader and at least one older adolescent-age sibling living in the home; (3) biological mothers and biological or long-term adoptive fathers lived at home (all non-biological fathers had been in the home for a minimum of 10 years); and (4) fathers worked at least 20 h per week. Most fathers (93%) also were of Mexican origin. Importantly, our sampling criteria and our focus on a local population mean that our sample was not designed to be representative of Mexican American families in general. Instead, our larger study goals directed attention to two-parent families with employed fathers and at least two adolescent-age siblings. By using a multi-level modeling (MLM) analytic strategy that took into account the clustered nature of our data (i.e., siblings within families), we were able to capitalize on the fact that we had data from two siblings in each family to study the processes of interest in $N = 469$ youth from 237 families.

To recruit families, letters and brochures describing the study were sent to families and follow-up telephone calls were made by bilingual staff to determine eligibility and interest in participation. Letters were sent to 1,851 families with a Latino 7th grader. For 438 families (24%), contact information was incorrect and repeated attempts to find updated information were unsuccessful. An additional 42 (2.4%) families moved between screening and recruitment, 148 (8%) refused to be screened for eligibility, and 202 (11%) did not meet study criteria. Eligible families included 421 families (23% of the initial rosters and 32% of those

screened for eligibility). Of those eligible ($n = 421$), 284 families (67%) agreed to participate, 95 (23%) refused, and we were unable to recontact the remaining 42 families (10%) who were eligible to determine if they would participate. Enrollment of families ended when we completed home interviews with 246 families because we had surpassed our target sample size of 240 families (which was based on budget constraints). As noted, the present analyses were based on data from 469 youth; 23 youth from the sample were excluded from our analyses due to missing telephone interview data or parents' refusal to provide family income data (a control variable).

Families represented a range of education and income levels, from poverty to upper class. Consistent with the rate in the county from which the sample was drawn (18.6%; U.S. Census Bureau 2000), 18.3% of families met federal poverty guidelines. Most parents had been born outside the U.S. (71% of mothers and 69% of fathers); this subset of parents had lived in the U.S. an average of 12.4 ($SD = 8.9$) and 15.2 ($SD = 8.9$) years, for mothers and fathers, respectively. About 70% of the parent interviews were conducted in Spanish and the rest were conducted in English. Fifty percent of older siblings were female and 15.70 ($SD = 1.6$) years old on average. Forty-seven percent had been born outside the U.S. and 18% were interviewed in Spanish. Of the younger siblings, 51% were female and they averaged 12.8 ($SD = .58$) years of age, 38% had been born outside the U.S., and 17% were interviewed in Spanish.

Procedures

Data were collected using two procedures. First, during home interviews lasting an average of 3 h for parents and 2 h for adolescents, family members reported on their family relationships, cultural values and practices, and psychosocial adjustment. Interviews were conducted individually using laptop computers by bilingual interviewers in separate locations in the home. Most questions were read aloud (due to variability in reading levels) and interviewers entered family members' answers into the computer. For sensitive questions (e.g., risky behaviors), adolescents entered their answers directly into the laptop computers. Informed consent was obtained prior to the interview.

To collect data on youth's free time activities we used a modified daily diary procedure originally developed by Huston (Huston and Robins 1982). Specifically, during the 3–4 weeks following the home interviews, families were telephoned on 7 evenings (5 weekday evenings and 2 weekend evenings) and reported on their activities during the day of the call; adolescents participated in all 7 calls and parents completed 4 calls each. Families without phones were given cell phones. Families were provided with an activity list, and using a cued-recall strategy, adolescents reported on their involvement in 86 daily activities. Specifically, for each activity on the list they were asked whether had engaged in that activity between 5 PM on the previous day until 5 PM on the day of the call. If they responded in the affirmative they were then asked how many times they had engaged in the activity, and for each instance, how long they had engaged in the activity and who else participated. Families were paid \$100 for home interview and \$100 for phone interview participation.

Measures

All measures were forward and back translated into Spanish (for Mexican dialect in the local area) by two independent translators following the procedures outlined by Foster and Martinez (1995). All final translations were reviewed and discrepancies were resolved. Preliminary analyses revealed that some scales were not normally distributed. In each case, we used the most conservative transformation possible to approximate a normal distribution of scores.

Cultural practices were operationalized via two subscales of the Acculturation Rating Scale for Mexican Americans II (ARSMA II; Cuéllar et al. 1995), a subscale measuring Mexican-

oriented practices and a subscale measuring Anglo-oriented practices. This measure has been used widely in the literature with both parents and youth, and prior research shows that the scales are linked in expected ways to family background characteristics (e.g., generational status; Cuéllar et al. 1995). On this 30-item scale mothers, fathers, and youth used a 5-point rating scale to show how often (1 = *not at all*, 5 = *extremely often or always*) each statement applied to their behavior during the past year (e.g., “I speak English; I enjoy Spanish language television; My friends are of Mexican origin”). Scores were averaged such that high scores reflect stronger orientations toward Mexican or toward Anglo culture. Cronbach’s alphas were .87 for mothers’, .91 for fathers’, .90 for older siblings’, and .90 for younger siblings’ Mexican practices, and .90 for mothers’, .91 for fathers’, .88 for older siblings’, and .82 for younger siblings’ Anglo practices.

Familism values of parents and adolescents were measured with the 16-item familism scale from the Mexican American Cultural Values Scale (Knight et al. under review). Evidence of the validity of this new measure is that it is linked to established indices of cultural practices in expected ways (i.e., positively associated with Mexican cultural orientation and negatively associated with Anglo cultural orientation), but our data also show discriminant validity in low correlations between familism values and cultural practices (*rs* fell between .09 and .31; see Table 1). Family members used a 5-point scale (1 = *strongly disagree*, 5 = *strongly agree*) to rate their agreement on items such as “It is always important to be united as a family.” Scores were averaged such that high scores reflect stronger familism values. Cronbach’s alphas were .80 for mothers’, .85 for fathers’, .90 for older siblings’, and .87 for younger siblings’ values. Due to negative skewness and high kurtosis, squared transformations of family members’ scores were used in the analyses.

Educational values of parents were rated by youth using an 8-item scale adapted from Murcock (1999). Prior research has established the predictive validity of this measure in terms of linkages with youth academic performance (Murcock 1999). In this study, youth reported on their mothers’ and fathers’ values (e.g., “My mom/dad tells me that getting a good education should be my top priority”) using a 5-point scale (1 = *strongly disagree* to 5 = *strongly agree*) at different times during the interview. In prior research we have counterbalanced order of presentation of mother versus father scales and have found no order effects (McHale et al. 1992). Scores were averaged such that high scores reflect values for higher levels of educational achievement. Cronbach’s alphas were .86 for older siblings’ reports of both mothers’ and fathers’ values, and .77 and .82 for younger siblings’ reports of mothers’ and fathers’ values. Due to negative skewness and kurtosis, educational values were square root transformed.

Adolescents’ depressive symptoms were assessed using the 20-item Center for Epidemiological Studies Depression Scale, a widely used scale with well-established validity and reliability (CES-D; Radloff 1977). Adolescents used a 4-point rating scale (1 = *rarely or none of the time*, 4 = *all of the time*) to describe the frequency of their experiences (e.g., “I had crying spells”). Scores were averaged such that higher scores reflect more depressive symptoms. Cronbach’s alphas were .86 for older and .85 for younger siblings.

Risky/delinquent behavior was assessed using a measure developed by Eccles and Barber (1990) for ethnically diverse youth. Prior research shows high cross-time reliability for this measure and it is linked in predictable ways to both family background characteristics and to other indices of youth adjustment (e.g., Eccles and Barber 1999). On this measure, adolescents rated the frequency with which they engaged in each of 24 problem behaviors during the past year (e.g., skip a day of school, got drunk or high) on a 4-point scale (1 = *never*, 4 = *more than 10 times*). Scores were averaged such that higher scores signify more risky behavior. Alphas were .90 for older and .91 for younger siblings. Due to positive skewness and high kurtosis, we used square root transformations.

Daily activities, specifically time spent in *sports* (team sports, work out), *religious activities* (attend religious services and classes, prayer), *academic activities* (homework, reading), *television viewing*, and *hanging out with peers* (no adults present) were measured using data from the telephone interviews. We aggregated youth's reports across the 7 calls to create indices of the total number of minutes across 7 days that youth spent in each type of activity. The correlation between siblings' reports of their shared activities was high, $r = .90, p < .001$, suggesting that the time use reports were reliable. Square root transformations were applied to correct for positive skewness and high kurtosis of each of the activity measures.

Results

The results are organized around our three study goals. We first examined the associations between youth's daily activities and their risky behavior and depressive symptoms. Then we examined the links between parents' and youth's cultural orientations and youth's daily activities. Finally, we tested whether and how cultural orientations and daily activities operated together to explain individual differences in youth risky behavior and depressive symptoms, including whether daily activities mediated the links between cultural orientations and youth adjustment and whether cultural orientations moderated activity–adjustment associations.

Links Between Daily Activities and Youth Adjustment

Table 2 shows descriptive data for youth's time in sports, religion, academics, television viewing, and unsupervised hanging out with peers. Consistent with prior research (e.g., Larson and Verma 1999), youth spent more time watching television than in any other activity; they spent the least amount of time in religious activities (boys) and in unsupervised hanging out (girls). Time spent in sports and academic activities fell between these extremes. Table 2 also shows that there was substantial variability in youth's time use and our multi-level model (MLM) analyses, described below, revealed that girls spent more time in academic activities than boys and that boys spent more time in sports and unsupervised hanging out than girls.

The (non-transformed) means for the adjustment measures, shown in Table 2, also reveal that there was variability in this relatively homogeneous sample of youth from two-parent families. On average, youth scored somewhat below the midpoint of the 4-point depressive symptoms scale ($M = 1.84$), indicating that they had experienced most of the symptoms on this 20-item scale “some of the time” during the past week. With respect to risky behavior, the group average ($M = 1.43$) suggested that youth had engaged in almost half of the risky behaviors on this 24-item scale at least once during the past year. As we describe below, the MLM analyses revealed gender differences in these indices, such that girls reported more depressive symptoms and boys tended to report more risky behavior.

Given our nested design (siblings within families), we used MLM analyses to test the links between youth's daily activities and their adjustment. This approach extends multiple regression to account for non-independence of repeated-measures or within-family data (e.g., Bryk and Raudenbush 1992). MLM also can incorporate data that are missing at random, which improves statistical estimation and the robustness of estimates (Schafer 1997). In this and all further analyses we used SAS 9.1.

The 2-level model we tested partitioned variance into: (1) within family (i.e., between sibling), and (2) between-family variance. At level 1, the within family model, explanatory variables that were specific to each sibling (i.e., that varied within the family) were included. These were youth gender, birth order, and youth's reports of their time spent in sports, religious activities, academic activities, television viewing, and unsupervised hanging out with peers. We did not have hypotheses about gender differences in the processes of interest, but gender was included as a control variable given prior research showing gender differences in both activity patterns

and youth adjustment (e.g., Larson and Verma 1999). Similarly, the birth order factor was not included for substantive reasons because we did not expect that the processes of interest would vary by birth order. Given the nested design, however, it was essential to ensure that this factor did not bias the pattern of results. Both gender and birth order were effect coded such that girls and younger siblings = -1 and boys and older siblings = 1. At level 2, the between-family model, a variable that was specific to the family and shared by the siblings was included, family income (a control factor). Analyses were conducted separately for youth depressive symptoms and risky behavior.

Beginning with *depressive symptoms*, the analyses revealed that girls and youth from lower income families reported more symptoms, $\gamma = -.19$, $SE = .05$, $p < .01$, and $\gamma = -.10$, $SE = .03$, $p < .01$, respectively. In addition, youth who spent more time hanging out reported more depressive symptoms, $\gamma = .01$, $SE = .004$, $p < .01$. Two trends also emerged, suggesting that youth who spent more time in religious activities and those who spent more time on academic activities tended to report fewer depressive symptoms, $\gamma = -.005$, $SE = .003$, $p < .10$ and $\gamma = -.006$, $SE = .004$, $p < .10$, respectively.

Turning to *risky behavior*, boys tended to report more such behaviors, and older siblings reported significantly more risky behaviors, $\gamma = .03$, $SE = .014$, $p < .10$; $\gamma = .04$, $SE = .011$, $p < .01$. Controlling for these factors, the analyses showed that youth who spent more time hanging out reported more risky behavior, $\gamma = .006$, $SE = .001$, $p < .01$. A trend level effect also suggested that youth who spent more time in sports also tended to report more risky behavior, $\gamma = .001$, $SE = .001$, $p < .10$. In contrast, youth who spent more time in academic activities engaged in less risky behavior, $\gamma = -.003$, $SE = .001$, $p < .01$.

Links Between Cultural Orientations and Daily Activities

In a preliminary step, we examined the links between the multiple dimensions of family members' cultural orientations. As noted earlier, with the exception of parents' scores on the two subscales of the ARSMA II, dimensions of family members' cultural orientations were not highly correlated (see Table 1). These findings underscore the importance of conceptualizing cultural orientations in a multi-dimensional way. Given the high correlations for parents on the ARSMA II subscales and in an effort to reduce multi-collinearity, we created single scores from this measure for mothers and for fathers by subtracting the Mexican from the Anglo scores. As Table 1 also shows, family income was linked more strongly to some measures of cultural orientations (i.e., Anglo and Mexican *practices*) than others (i.e., education and familism *values*).

To assess links between cultural orientations and youth's daily activities, we again used MLM, testing a series of two-level models. In separate analyses we assessed the links between fathers', mothers' and youth's orientations and youth activities (3 family members' orientations $\times$ 5 activities). As in the previous MLM analysis, level 1 was the within family (between sibling) level and level 2 was the between family level. In the models focusing on youth's cultural orientations, level 1 included those variables that were specific to each sibling, (i.e., gender, birth order), and youth's reports of their own cultural orientations, and level 2 included family income. In the models focused on parents' cultural orientations, youth gender, birth order, and youth's reports of parents' educational values were included at level 1. Because parents' reports of their own cultural orientations were not specific to each sibling, these were included at level 2, along with family income, as family-wide predictors. Again, we tested interactions between cultural orientations and both gender and birth order in a preliminary step, retaining only significant interactions in the final models. Given the redundancy across models, we report coefficients for income, birth order and gender from the father models only; tables for all coefficients, however, are available from the first author.

Beginning with *sports*, the analyses showed that boys spent more time in sports activities than girls, $\gamma = 5.55$, $SE = .77$, $p < .01$. In addition, youth who reported more Anglo-oriented cultural practices spent more time playing sports, $c = 1.20$, $SE = .69$, $p < .01$.

Turning to *religious activities*, we found significant positive effects of income indicating that youth from higher income families spent more time in religious activities, $\gamma = 1.80$, $SE = .82$, $p < .05$. Youth gender reached trend level in the father and youth models, suggesting that girls may be more involved in religious activities than boys, $\gamma = -.77$, $SE = .47$, $p < .10$. Fathers' familism was positively related to religious activities and was the only significant cultural predictor, $\gamma = .31$, $SE = .13$, $p < .05$. Of potential importance, however, fathers', mothers', and youth's Anglo-oriented practices were each positive trend level predictors of youth religious activities, $\gamma = .66$, $SE = .38$, $p < .10$, $\gamma = .66$, $SE = .38$, $p < .10$, $\gamma = .86$, $SE = .47$, $p < .10$, respectively. In contrast to prior work focused on *ratings* of religiosity, our data suggested that youth may *spend more time* in religious activities when they come from more Anglo-oriented families.

With respect to *academic activities*, consistent with prior work, income was a positive trend level predictor in the father and mother models, $\gamma = .94$, $SE = .56$, $p < .10$, and youth gender was significant, indicating that girls spent more time on activities like reading and homework than boys, $\gamma = -2.96$, $SE = .58$, $p < .01$. Only trend level effects emerged for the cultural orientation predictors. Fathers' and mothers' educational values and youth's Anglo-oriented practices were positively linked to time spent in academic activities, $\gamma = .10$, $SE = .06$, $p < .10$, $\gamma = .10$, $SE = .06$, $p < .10$, $\gamma = .86$, $SE = .52$, $p < .10$, respectively.

Turning to *television viewing*, neither family income nor gender effects were significant. One significant effect emerged, showing that youth who reported more Mexican-oriented practices spent more time watching television, $\gamma = .90$, $SE = .45$, $p < .05$.

Finally, the results for *hang out with peers* revealed two significant predictors: older siblings and boys spent more time hanging out, $\gamma = 1.05$, $SE = .51$, $p < .05$, and $\gamma = 1.23$, $SE = .58$, $p < .05$, for the birth order and gender effect, respectively.

Cultural Orientations, Daily Activities and Youth Adjustment

Do Activities Mediate the Links Between Culture and Adjustment?—Having established that (a) cultural orientations were linked to daily activities and that (b) daily activities were linked to adjustment in Mexican American youth, our next step was to test a mediational hypothesis that daily activities explain the link between cultural orientations and youth adjustment. In addition to steps (a) and (b), evidence of a mediational process also requires (c) establishing significant links between cultural orientations and adjustment that become less pronounced or disappear when activity measures are included in the analyses (Baron and Kenny 1986; Holmbeck 1997). To address step (c), we first tested two-level models examining (in separate analyses) the links between fathers', mothers', and youth's cultural orientations and youth depressive symptoms and risky behavior. At level 1 we included the within-family factors that were specific to each sibling, namely youth gender and birth order and youth's reports of their own and their parents' cultural orientations. At level 2 were family-wide predictors, namely parents' reports of their cultural orientations and family income. Again, given the redundant findings across models of the effects of family income and youth gender and birth order, we do not report these but tables of all coefficients can be requested from the first author.

The analyses revealed that both education and familism values, but not Anglo and Mexican practices, were consistent predictors of youth adjustment. Beginning with *depressive symptoms*, beyond the effects of family income and youth gender reported above, fathers' educational values, fathers' familism values, mothers' educational values, and youth familism

values were all negatively correlated with depressive symptoms, $\gamma = -.01$, $SE = .004$, $p < .05$, $\gamma = -.01$, $SE = .007$, $p < .05$, $\gamma = -.02$, $SE = .004$, $p < .01$, $\gamma = -.02$, $SE = .005$, $p < .01$, respectively. That is, when fathers and youth held stronger familism values and when parents were seen as valuing education, youth reported fewer depressive symptoms. Turning to *risky behavior*, beyond effects of youth gender, birth order reported above, income emerged as a significant negative correlate, $\gamma = -.03$, $SE = .001$, $p < .05$. Further, fathers' (at trend level) and mothers' educational values and youth's familism values were negatively related to youth risky behavior, $\gamma = -.003$, $SE = .001$, $p < .06$, $\gamma = -.005$, $SE = .001$, $p < .01$, and $\gamma = -.004$, $SE = .002$, $p < .01$, respectively. When parents reported stronger educational values and youth reported stronger familism values, youth reported engaging in less risky behavior.

These findings on the links between cultural orientations and adjustment are important, but taken together with findings regarding steps (a) and (b), did not reveal consistent evidence of mediation processes. We focused on the nine indices of cultural orientations (three dimensions each for fathers, mothers, and youth), five specific activities, and two measures of youth adjustment, yielding 90 possible mediation pathways. Significant effects involving the three successive steps of specific mediational pathways were fewer than chance.

Do Cultural Orientations Moderate Activity–Adjustment Linkages?—In a final set of analyses, we tested whether the implications of youth's daily activities differed depending on their own or their parents' cultural orientations. To test the moderational role of cultural orientations, we again used MLM, studying the implications of fathers', mothers', and youth's cultural orientations for youth depressive symptoms and risky behaviors in separate models. At level 1 we entered the individual factors, youth gender, birth order, time in activity, and in the youth models, youth's reports of cultural orientations as well as the cultural orientations by daily activity interaction terms. At level 2 we entered family level variables, including family income, and in the parent models, parents' cultural orientations. In the parent models we also included cross-level cultural orientation by activity interaction terms. To follow up significant interactions we used strategies described by Aiken and West (1991).

The strongest effects of moderation were found for the father models (4 of the 10 models) and for youth risky behavior outcomes; the two models that were significant for mothers replicated the father findings and the model that was significant for youth replicated the father and mother findings. Because all of the main effect for cultural orientations and activities were described earlier, we only report significant cultural orientation by activity interactions here.

Beginning with findings for *hanging out*, for fathers, mothers, and youth we found significant Anglo-oriented practices by youth unsupervised hang out interactions for youth risky behavior, $\gamma = -.002$, $SE = .001$, $p < .01$, $\gamma = -.003$, $SE = .001$, $p < .01$, $\gamma = -.004$, $SE = .002$, $p < .05$, for the father, mother, and youth models. Figure 1 shows the interaction between fathers' Anglo practices and youth hanging out and is a prototype for these effects. These interactions suggest that lower levels of Anglo practices and less time hanging out are both protective factors and work additively in predicting youth risky behavior. Youth who spent less time hanging out *and* who came from families with weaker orientations to Anglo culture were less involved in risky behavior.

Turning to time spent in *sports*, there were significant interactions between both mothers' and fathers' educational values and sports time in predicting risky behaviors, $\gamma = .0003$, $SE = .0001$, $p < .05$, $\gamma = .0003$, $SE = .0002$, $p < .05$. These findings were similar to those for hanging out and suggest additive protective/risk effects. Youth who spent less time in sports *and* who reported stronger parental values for education also reported lower levels of risky behavior. The findings for mothers are shown in Fig. 2 and are a prototype for the findings on fathers' educational values.

Two significant moderation patterns emerged for *viewing television*, and both were consistent with the notion that activities may have different implications in different cultural settings. First, a significant interaction between fathers' familism values and TV time revealed that television time was positively related to risky behavior when fathers reported lower familism values, but not when fathers' familism values were strong, $\gamma = -.001$, $SE = .0003$, $p < .05$. Similarly, television time was positively related to depressive symptoms when fathers had lower educational values, but there was no association between television time and depressive symptoms when fathers placed a high value on education, $\gamma = -.002$, $SE = .001$, $p < .05$ (see Fig. 3 for prototype).

Discussion

This study was grounded in cultural and ecological perspectives on the role of daily activities in youth well-being and development. We built on a small body of research on the free time activities of Hispanic youth, using an ethnic homogeneous design (a) to examine activity–adjustment linkages in Mexican American youth, (b) to study the role of cultural values and practices in youth's daily activities, and (c) to explore the ways in which activities and cultural orientations work together to explain youth adjustment. Our research contributes to the burgeoning literature on youth time use in its focus on an understudied group, Mexican American youth. We also expanded on this literature, moving beyond status variable explanations (SES, ethnicity) to examine the role of cultural practices and values in youth's activities and adjustment and by measuring the cultural orientations of mothers, fathers, and youth in a multi-dimensional way. Finally, we tested two processes proposed by cultural anthropologists to explain how activities and cultural orientations operate together to affect youth adjustment.

Daily Activities and Youth Adjustment

Significant connections between youth activities and adjustment were consistent with prior research that has focused primarily on European American youth in documenting links between hanging out in unsupervised settings with peers and youth risky behavior (e.g., Osgood et al. 1996). Fewer studies have examined the associations between youth activities and internalizing problems, but our findings were consistent with those of Mahoney et al. (2002) in showing that time spent in unstructured, unsupervised activities also was linked to depressive symptoms. Although youth averaged only about 1.5 h across seven days in unsupervised hanging out, there was substantial variability across the sample and hanging out was the strongest and most consistent correlate of internalizing and externalizing problems in these Mexican American adolescents. In keeping with prior work on religiosity, we also found that time spent in religious activities was associated, at trend level, with lower levels of depressive symptoms (e.g., Marsiglia et al. 2005; Pumariega et al. 1992), and, consistent with expectations of the positive correlates of constructive activities (Larson 1994), that time in academic activities was related to lower levels of risky behavior and marginally related to lower levels of depressive symptoms. Such results are consistent with ecological ideas about the importance of constructive activities in developing skills, social ties, and a sense of identity. Finally, our results fit with some prior research in showing that time in sports was positively linked to risky behavior (Crosnoe 2002; Pumariega et al. 1992).

Given that all of the youth in this sample came from two-parent families with employed fathers, we would expect less variability and lower levels of adjustment problems than in samples of youth from a broader range of family circumstances. The fact that time spent hanging out explained adjustment in our relatively homogeneous sample attests to the developmental significance of this dimension of youth's time use. With the exception of hanging out, however, the direct links between activities and youth adjustment were not strong. A natural confound

between youth activities and family income may have masked some of the “effects” of activity involvement in our analyses. That is, income was a positive correlate of youth involvement in sports, religious activities and academic activities and was negatively related to both depressive symptoms and risky behavior, thereby operating as a third variable in the association between these activities and youth adjustment. We controlled for family income so that we could discern the unique effects of activities on youth adjustment, and the pattern of results suggests that one means through which more affluent parents promote their children’s well-being is by providing them with opportunities to engage in constructive activities (Lareau 2003). As we elaborate below, another reason why associations between activities and adjustment were not strong is that these linkages were not always direct, but instead, moderated by cultural orientations.

Implications of Cultural Values and Practices

Our findings on the links between cultural orientations and youth’s daily activities revealed that associations were evident for all activities except hanging out. The most consistent results revealed that Anglo-oriented practices (i.e., English language use and social contacts with Anglos) were associated with more time spent in sports, religious, and academic activities, but that Mexican-oriented practices were linked to more time spent in television viewing. More generally, our results highlight three conclusions about the links between cultural orientations and youth activities. First, indices of Anglo- and Mexican-oriented practices add to SES in explaining within-group differences in youth activities. Although SES indices and ethnicity are confounded in the U.S. in general and within our sample, our ethnic homogeneous design allowed us to illuminate the ways in which cultural orientations may have unique implications, beyond SES, for the daily lives of youth. Second, youth’s cultural orientations were more consistently linked to their daily activities than were parents’ orientations. Parents’ cultural orientations may have stronger implications for the daily activities of younger children; adolescents, in contrast, may practice more autonomy in their selection of activity niches. A third conclusion is that cultural *practices*—indexed by our measure that reflects language use and social contacts—were more closely linked to daily activities than were *values*. To the extent that practices largely reflect everyday *behavior*, this pattern may not be surprising.

Cultural orientations also were directly linked with youth risky behavior and depressive symptoms, only here, *values*, not *practices*, were consistent correlates. Fathers’ and youth’s familism values and youth reports of mothers’ and fathers’ educational values were negative correlates of youth depressive symptoms, and youth’s familism values and their reports of fathers’ educational values were negative correlates of risky behavior. These findings extend prior work on the links between culture and youth adjustment by moving beyond a focus on ethnicity or generation status and by including measures of both youth’s and parents’ cultural orientations. The association between familism values and adjustment is consistent with research linking acculturation and youth adjustment problems and highlights the significance of weakened family ties in this process (Gonzales et al. 2002). The findings on educational values are congruent with literature on the protective effects of such values (e.g., Okagaki and Frensch 1998). Again, the natural confound between family income and the cultural indices, particularly between income and parents’ Mexican and Anglo practices, may have masked direct links between cultural practices and youth adjustment, but it also may be the case that cultural values have a more pervasive effect on youth well-being than the specific behaviors (e.g., language use) marked by the indices of cultural practices. Our findings on the moderational role of cultural orientations also suggest that links between cultural orientations and youth adjustment are sometimes more complex than bivariate associations imply.

Culture, Activities, and Youth Adjustment

To study how cultural orientations worked together with youth daily activities in predicting youth adjustment, we tested two hypotheses. The first was that youth activities would

mediate the links between cultural orientations and youth adjustment, that is, that cultural values and practices would give rise to daily activity patterns, which in turn, would explain youth adjustment. Our findings did not support this idea. Although there were some direct links between the cultural orientation and youth activity indices and other links between cultural orientations and youth adjustment, youth activities did not explain cultural orientation–adjustment linkages. We used a variable oriented approach here, however, testing individual cultural orientations, individual activities, and specific measures of adjustment. This approach provided a first look at a potential cultural orientation → activity → adjustment process, but a person oriented approach, examining *patterns* of (multiple) cultural orientations and *combinations* of daily activities will be an important direction for future work.

We found some evidence in support of our second hypothesis, that cultural orientations moderated the link between youth's daily activities and adjustment. Most of the findings were suggestive of an *additive protective effect*. Lower orientations to Anglo culture in combination with less time spent hanging out and playing sports were linked to less risky behavior in youth. These patterns are consistent with prior work showing higher levels of risky behavior in more acculturated youth (Gonzales et al. 2002). Importantly, however, our findings suggest that ties to the culture of origin alone did not protect Mexican American youth who spent time in activities that have been shown to foster risky behavior (e.g., Osgood et al. 1996; Pumariega et al. 1992).

Of the 10 moderational models we ran for fathers, two were consistent with a second kind of process that cultural orientations *alter the implications of daily activities*, and both models pertained to television viewing. When fathers reported stronger familism values, television time was negatively linked to youth depressive symptoms, but it was positively linked to depressive symptoms when fathers' familism values were low. Similarly, for fathers with higher educational values, there was a negative link between television time and risky behavior, but television time was positively linked to risky behavior when fathers' educational values were perceived as low. In the face of concern that the sheer volume of television viewing will have negative implications for youth adjustment by virtue of its passive nature and displacement of other activities, little evidence for such a process has emerged (Anderson et al. 2001). In this sample, youth spent more time watching television than on any other activity and those more enculturated within Mexican culture spent the most time of all. Our findings, however, were consistent with the notion that television time does not have monolithic adjustment implications. Anderson et al. (2001) concluded that the messages, not the medium, are what give television its impact on adjustment. In the case of youth in this sample, fathers' familism and educational values may have implications for the kinds of programs youth view on television, and in turn, television's impact on adjustment. Links between watching televised aggression and externalizing and risky behaviors are well established (Anderson et al. 2001). Although depressive symptoms are rarely studied as outcomes of television viewing, research on the role of television in self-image highlights that negative stereotypes (e.g., of women; of minority groups) are common in television programming. Spending time immersed in such stereotypic portrayals has been linked to self-image problems (e.g. Anderson et al. 2001), and may also be an explanation for the higher levels of internalizing symptoms we observed.

Conclusions

Our research is not without limitations. An intensive data collection and interest in both mothers and fathers led us to focus on a local sample of two-parent Mexican American families. Extending our ethnic homogeneous design to study the cultural correlates of variability in a broader sample of Mexican American families is an important direction for future work. In addition, this study's findings are limited to one point in time. Cultural values and practices, patterns of daily activities, and adjustment change from childhood through adolescence.

Longitudinal designs are essential for establishing temporal precedence in the processes of interest, and experimental designs that alter youth's daily activity patterns and test their effects on adjustment would allow for inferences about causal mechanisms in youth adjustment.

In the face of its limitations, this study contributes to the literature on adolescent development by integrating ideas from ecological developmental and cultural anthropological perspectives about the roles of culture and daily activities in youth adjustment. Our work also illustrates the value of unpacking culture to identify the processes through which it has implications for youth, and documents that the cultural values and practices of mothers, fathers, and youth are linked in somewhat different ways to adolescents' daily activities and adjustment. The associations we found between daily activities and adjustment in this sample of Mexican American youth were consistent with some prior work on majority culture youth. At the most general level, however, by illuminating the role of cultural orientations in youth activities and their links with adjustment, this research highlights the importance of studying adolescent development in its cultural context.

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Fig. 1. Interaction between fathers' acculturation and youth time spent hanging out in predicting youth risky behavior. Scores are transformed such that the Risky Behavior Scale ranges from 1 to 2

Fig. 2. Interaction between mothers' education values and youth time in sports in predicting youth risky behavior. Scores are transformed such that the Risky Behavior Scale ranges from 1 to 2

Fig. 3. Interaction between fathers' familism values and youth time spent viewing television in predicting youth depressive symptoms. Depressive symptoms scale ranges from 1 to 4

Table 1
Correlations between family members' cultural orientations and between cultural orientations and family income

	1	2	3	4	5
<i>Parents^a</i>					
1. Family income	—	.45**	-.22**	-.08	-.08
2. Anglo-oriented practices	.46**	.68**	-.50**	-.17**	.04
3. Mexican-oriented practices	-.34**	-.56**	.62**	.26**	.10
4. Familism values	-.19**	-.21**	.31**	.22**	-.03
5. Educational values	-.12	.03	.05	.05	.56**
<i>Siblings^b</i>					
1. Family income	—	.35**	-.30**	.02	—
2. Anglo-oriented practices	.27**	.57**	-.41**	.05	—
3. Mexican-oriented practices	-.31**	-.33**	.69**	.17**	—
4. Familism values	.09	.09	.09	.14*	—

*
p<.05

**
p<.01

^a Mothers above diagonal, fathers below diagonal, correlations between parents on diagonal

^b Older siblings above diagonal, younger siblings below diagonal, correlations between siblings on diagonal

Table 2
Means (standard deviations) and ranges for girls' and boys' time in daily activities (min/7 days) and for measures of adjustment

	Girls			Boys			Total	
	Mean (SD)	Range		Mean (SD)	Range		Mean (SD)	
<i>Activities</i>								
Sports	122.83 (197.67)	0–1252.00		259.46 (277.79)	0–1303.00		190.56 (250.02)	
Religion	103.02 (186.64)	0–1340.00		81.85 (166.38)	0–1035.00		92.53 (177.02)	
Academics	232.17 (194.13)	0–1275.00		156.06 (160.01)	0–1455.00		194.45 (181.88)	
Television	591.66 (291.91)	0–1545.00		585.50 (301.01)	0–1652.00		588.61 (296.15)	
Hang out (unsupervised)	88.22 (118.13)	0–594.00		105.48 (124.83)	0–655.00		96.78 (121.67)	
<i>Adjustment</i>								
Depressive symptoms	1.90 (.55)	1–3.65		1.79 (.43)	1–3.60		1.84 (.50)	
Risky behavior	1.35 (.34)	1–3.25		1.50 (.46)	1–3.50		1.43 (.41)	