Ethnic Identity and the Daily Psychological Well-Being of Adolescents From Mexican and Chinese Backgrounds

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Abstract

Protective effects of ethnic identity on individuals' daily psychological well-being were examined in a sample of 415 ninth grade adolescents from Mexican and Chinese backgrounds. Utilizing daily diary assessments and multilevel modeling, adolescents with a higher regard for their ethnic group were found to have greater levels of daily happiness and marginally less daily anxiety averaged over the two-week study period. Ethnic regard also moderated the daily association between normative stressful demands and happiness, as well as the association between stressful demands and happiness experienced one day after the original stressors occurred. Moderating effects were found even after controlling for self-esteem. Results point to the positive influence of ethnic identity in adolescents' daily lives.

Ethnic Identity and the Daily Psychological Well-Being of Adolescents

From Mexican and Chinese Backgrounds

A major developmental task during adolescence is to ascertain a sense of identity, theorized to play a vital role in individuals' psychological well-being (Erikson, 1968; Yasui, Dorham, & Dishion, 2004). As one of many benefits, a well-established self or identity can provide a source of strength or resilience to help individuals cope with adversity (see Harter, 1999). Fundamentally relevant to adolescents from ethnic minority backgrounds, *ethnic* identity may have a similarly critical and wide-reaching influence on development (Roberts, Phinney, Masse, Chen, Roberts, & Romero, 1999; Sellers, Rowley, Chavous, Shelton, & Smith, 1997), directly and indirectly affecting well-being by providing a buffer against stressful experiences.

Ethnic Identity and Psychological Well-Being

Theoretical links between ethnic identity and well-being have long been established and have recently emphasized positive and protective consequences of identifying with and feeling connected to one's ethnic group (Cross, 1991; Cross, Parham, & Helms, 1998; Umana-Taylor, Diversi, & Fine, 2002). From the perspective of social identity theorists (e.g., Tajfel, 1981), ethnic identity can positively influence individuals' lives by providing a foundation from which they can draw when dealing with negative or stressful events. For example, since ethnic minority groups are often deemed inferior to the dominant group, stress associated with such stigma can negatively impact individuals who are in the ethnic minority (Cross & Phagen-Smith, 2001; Kim, 2001). In dealing with these stressors, individuals may react by asserting or strengthening their ethnic or group identity that, in turn, can create a sense of affiliation or support that buffers against threats to psychological well-being (Tajfel & Forgas, 2000; Phinney, 2003). A strong ethnic identity can thus be called upon to help individuals cope with stressful experiences thereby indirectly predicting well-being and adjustment (Phinney, 1990; Sellers,

Caldwell, Schmeelk-Cone, & Zimmerman, 2003). Indeed, one of the very functions of ethnic identity may be to serve as a buffer of psychological distress by providing a shield against negative or stressful circumstances (Cross et al., 1998; Mossakowski, 2003).

Empirical work has supported these theoretical views by documenting positive associations between ethnic identity and well-being. Contrary to earlier research in which ethnic group status was considered a liability to self-concept and overall well-being (e.g., Clark & Clark 1950), recent research has consistently shown in both African American and Latino samples that, in fact, ethnic identity and well-being are positively linked (Gray-Little & Hafdahl, 2000; Umana-Taylor, 2004; Umana-Taylor, 2004; Umana-Taylor et al., 2002). Many of these studies have attributed such findings to the buffering effect of ethnic pride (e.g., Gray-Little & Hafdahl, 2000). In a similar area of research, individuals with higher levels of ethnic identity were also shown to exhibit a higher quality of life, a common indicator of well-being (Utsey, Chae, Brown, & Kelly, 2002). Research involving ethnic identity stage models has also documented positive associations such that individuals with achieved or integrated identities, or those who have a more developed sense of ethnic identity, typically exhibit better adjustment than those in earlier stages of development (see Phinney, 1990).

Although emerging literature suggests that a strong sense of ethnic identity positively influences psychological well-being, several areas remain largely unexplored. For instance, ethnic identity has been shown to predict a number of stable and enduring outcomes reflecting overall well-being (e.g., Gray-Little & Hafdahl, 2000; Ryff, Keyes, & Hughes, 2003; Tsai, Ying, & Lee, 2001; Umana-Taylor, 2004; Utsey et al., 2002), but what remains unanswered is how ethnic identity shapes the *daily* lives and well-being of adolescents. To truly understand the full range of benefits associated with ethnic identity it is necessary to examine outcomes more variable in nature and as they occur on a daily basis. That is, does ethnic identity impact

individuals' lives by predicting, for example, how happy or anxious they feel on a day-to-day level? Investigating these influences on daily well-being could meaningfully extend existing research and provide a more specific glimpse into how ethnic identity shapes development.

Ethnic Identity as Moderator of Stressful Demands

Another understudied issue in the literature is whether ethnic identity may have a more intricate association with well-being via a moderating or buffering effect. That is, in addition to their direct association, does ethnic identity buffer well-being in the face of stressful experiences and, from a social identity perspective (see Phinney, 2003), help adolescents deal with such stressors? A recent paper attempting to address this issue did find protective stress buffering effects of ethnic identity across three programs of research (Shelton, Eccles, Yip, Chatman, Fuligni, & Wong, under review). As one example, Sellers and colleagues found that African Americans with high levels of racial centrality, i.e., those who indicated race as central to their self-concept, were buffered from the negative impact of race-related hassles and discrimination. Similarly protective effects were also found in light of other dimensions of identity (e.g., racial regard). In another program of research, adolescents from African American backgrounds who experienced racial discrimination at school subsequently exhibited declines in mental health and academic achievement. However, adolescents with positive connections to their ethnic group were protected from these deleterious effects (Wong, Eccles, & Sameroff, 2003).

Still, research investigating protective functions of ethnic identity is scarce and existing research has been limited in and of itself. To date, studies have almost exclusively linked the buffering effect of ethnic identity to perceived discrimination as a source of stress (e.g., Branscombe, Schmitt, & Harvey, 1999; Mossakowski, 2003; Sellers et al., 2003). Although discrimination is salient in the lives of ethnic minorities and worthy of study, research on the impact of more *normative* stressors, which also play an important role in development, has been

largely overlooked. Another limitation to existing stress buffering research, as well as research on ethnic identity and well-being in general, is the predominate focus on African Americans. Thus, in high demand is the examination of how adolescents, particularly those from more ethnically diverse backgrounds, deal with normative daily stressors in their lives.

Surprisingly little research has addressed the impact of normative stressful demands in adolescents' development despite the idea that stress experienced during adolescence can be a significant and pervasive risk factor for poor psychological adjustment (Gonzales, Tein, Sandler, & Friedman, 2001). Typical stressors in adolescence broadly relate to increased pressure to balance the demands and responsibilities associated with the development of a greater sense of maturity (Lohman & Jarvis, 2000), and can stem from several domains including the school environment and family and peer relationships (Compas, 1987). For instance, academically, increase in workload may be experienced due to more demanding classes or in preparation of a college placement test (Eccles, Midgley, Wigfield, Buchanan, Reuman, Flanagan, & Mac Iver, 1993). Socially, adolescents may need to deal with a stressful shift in peer groups upon entering high school, and stress associated with developing more intimate peer relationships while maintaining and renegotiating family relationships and establishing autonomy (Eccles et al., 1993; Lohman & Jarvis, 2000).

Although these normative demands derived from multiple contexts can affect all youth regardless of ethnicity, effectively coping with these stressors can be exacerbated or at least present a unique conflict in adolescents from Mexican and Chinese backgrounds, who remain understudied despite comprising two of the largest and fastest growing ethnic minority groups in the U.S. (McGoldrick & Giordano, 1996). Perhaps stemming from cultural or familial values, youth from Asian and Latino immigrant families have been shown to place a greater importance upon family duty and obligation than youth from families with European backgrounds (Fuligni,

Tseng, & Lam, 1999). Adolescents from Mexican and Chinese families, most likely socialized

by collectivistic values systems (Corsaro & Fingerson, 2003), may thus appear more vulnerable

in response to normative stressful demands and obligations. For example, although balancing

homework with family chores can be stressful for anyone, these demands may be even more

salient for an individual with a stronger sense of obligation to meet them.

Adolescents from Mexican and Chinese backgrounds may experience additional

challenges associated with academic stressors. For instance, these adolescents may be

particularly challenged in effectively completing their schoolwork because they may not have the

resources or benefit of having parents who were reared in the dominant society and who may

thus be familiar with the American educational system and school curriculum (Cooper, Cooper,

Azmitia, Chavira, & Gullatt, 2002). The socioeconomic status of many ethnic minority families

and primarily those with Latino or Mexican backgrounds could also exacerbate stressful

demands of school. Since parents of these families often earn a low income and have little

English fluency, adolescents' school demands may face stiff competition with family demands

such as helping to earn additional income after school or helping out around the house while

parents are working long hours (Fuligni & Witkow, 2004).

These unique circumstances emphasize the need to examine the impact of

developmentally normative stressful demands in ethnically diverse adolescents from largely

immigrant backgrounds. Also needed is an investigation of whether, similar to research on

perceived discrimination, ethnic identity might protect against the negative effect of such

stressful demands and thus indirectly predict psychological well-being. Indeed, an interesting

finding in the literature is that, despite obstacles associated with immigrant status, youth from

immigrant families actually fare pretty well in terms of academic achievement and adjustment,

often matching their American-born peers from similar ethnic backgrounds (Fuligni & Witkow, 2004). The protective role of ethnic identity could offer one explanation for this paradox.

Recent research by Yip and Fuligni (see Shelton et al, under review) provided initial evidence in this area by implicating ethnic identity as a buffer against the negative effect of normative stressful demands, as they occurred on a day-to-day basis. Utilizing a daily diary approach, adolescents from Chinese backgrounds were found to experience greater anxiety on days in which they also experienced a greater number of stressful demands, but this daily level association was moderated by ethnic identity. That is, individuals with a strong sense of ethnic identity (measured by the ethnic identity achievement subscale of Phinney's (1992) Multigroup Ethnic Identity Measure) were protected from the damaging effect of daily stress such that, for these individuals, stressful demands did not negatively impact daily levels of anxiety. Preliminary research thus suggests that ethnic identity can help individuals cope with stressful experiences and indirectly influence well-being on an actual day-to-day basis. Consequently, continuing along these lines of research could aid in a better understanding of the many ways in which ethnic identity can serve a protective influence in individuals' lives.

A Daily Diary Approach

The current study addressed several understudied issues in the field by examining ethnic identity, daily psychological well-being, and normative stressful demands in adolescents from Mexican and Chinese backgrounds. Employing a daily diary approach, we sought to gain new insight into the protective role that ethnic identity plays in the rhythm of individuals' daily lives. To this end, we explicitly asked individuals how happy and anxious they felt each day over a 14-day period, allowing us to determine the direct effect of ethnic identity on daily levels of well-being averaged across the days of the study period. We expected ethnic identity to serve a positive function by predicting greater daily happiness and less daily anxiety. Additionally, the

daily diary approach permitted us to examine whether ethnic identity indirectly predicted daily well-being by moderating the daily association between stressful demands and well-being.

One of the most unique strengths of the daily diary method is that the intense, repeated measures design provides more reliable and valid data for multilievel modeling than traditionally used single surveyed accounts. Highly successful in the stress and coping literature, the daily diary method has been used to determine how individual differences in, for instance, personality or demographic traits predict daily variation in stress reactivity (e.g., Bolger & Zuckerman, 1995; Almeida & Kessler, 1998). For example, Mroczek & Almeida (2004) found that increased daily levels of stress predicted greater negative affect, but that this daily level association was significantly stronger in older adults and in those with high levels of neuroticism. In another application of the diary method that examined multilevel processes in ethnic minority youth, Yip and Fuligni (2002) found that ethnic centrality, an individual level factor, influenced the daily association between ethnic salience and psychological well-being. That is, Chinese Americans reported more positive affect on days in which they also felt more "Chinese," but this daily level association was found only in individuals who reported ethnic identity to be central in their lives.

Utilizing the diary method, we determined daily level associations between psychological well-being and normative stressful demands as they occurred each day, and whether ethnic identity moderated this daily association and shaped adolescents' lives on a daily basis. For instance, did adolescents from Mexican and Chinese backgrounds feel less happy and more anxious on days in which they experienced a greater number of stressful demands? Did ethnic identity have a protective effect on well-being by predicting how happy or anxious individuals felt on a daily basis, despite the daily stressors they experiences? We expected ethnic identity to moderate the daily association between stressful demands and well-being such that more

stressful demands on a given day were expected to predict less happiness and more anxiety, but individuals with a strong ethnic identity would be buffered from deleterious effects.

We focused on two dimensions of ethnic identity, namely, ethnic regard, an affective evaluation of one's ethnicity, and ethnic centrality, the extent to which ethnicity plays a central role in one's self-concept. Advantages of considering these multiple dimensions and their interaction have been discussed by Sellers and colleagues who argue that the incorporation of both regard and centrality provides a more accurate assessment of how ethnic identity impacts psychological outcomes (Sellers, Smith, Shelton, Rowley, & Chavous, 1998). For instance, in a sample of African Americans, Rowley, Sellers, Chavous, and Smith (1998) found racial regard to positively predict self-esteem but only for individuals who also considered race as central in their lives. Hence, we examined models with (1) ethnic regard, (2) ethnic centrality, and (3) the interaction between these two dimensions as individual level predictors of daily well-being.

Two additional issues were also addressed. First, daily assessments of well-being across the 14-day period allowed us to determine whether ethnic identity served as not only a same day buffer of stress, but also had a longer-lasting effect on stress reactivity. We thus examined whether ethnic identity predicted current day well-being by buffering the effect of prior day stressful demands. That is, did ethnic identity moderate the effect of daily stressful demands on well-being assessed one day after original stressors occurred? Results from these analyses could provide important information as to the potentially enduring role that ethnic identity plays in adolescents' daily lives and stress reactivity. Another important issue we examined involved the consideration of potential confounds that might obscure the link between ethnic identity and well-being. Given the widespread influence of self-esteem on overall well-being (see Harter, 1999) as well as documented links between self-esteem and ethnic identity (e.g., Gray-Little & Hafdahl, 2000), we controlled for self-esteem as an additional individual level predictor. Hence,

to the extent that ethnic identity served as a moderator of stressful demands, we attempted to isolate the effect by examining whether moderation was found even after controlling for self-esteem. Other important variables considered in analyses were ethnicity and gender.

<div align="center">Method</div>

Participants

Ninth graders from the Los Angeles metropolitan area were recruited from three high schools varying in ethnic diversity, socioeconomic status, and overall academic achievement. The first school was predominantly populated by Latino and Asian American students with families from lower-middle to middle-class educational, occupational, and financial backgrounds. The second school consisted of students with mostly Latino and European American families from lower-middle to middle-class backgrounds. The third school included mostly Asian American and European American students with families that tended to be middle to upper-middle class. No single ethnicity dominated any of these schools; rather, the two largest ethnic groups each comprised 30-50% of the total population in each school. All ninth graders in two of the three schools and approximately half of the ninth graders in the third school were invited to participate. Of those invited, 65% participated resulting in a total sample of 783 ninth grade students with a wide range of ethnic, socioeconomic, and immigrant backgrounds.

This study focused on potential strengths that ethnic identity can provide for individuals who are in the ethnic minority; thus, we targeted adolescents from Latino and Asian American backgrounds. Within these broader ethnic categories, 86% of Latino Americans had Mexican ancestry, and 67% of Asian Americans had Chinese ancestry. Since these large subgroups had the potential to provide meaningful group comparisons, our final sample consisted of the 415 participants from Mexican (52%) and Chinese (48%) backgrounds. Adolescents from European backgrounds and from ethnic minority groups that comprised too small a number for meaningful

comparisons (e.g., Middle Eastern, Guatemalan) were not included. Participants in our final

sample were predominately from immigrant families (Mexican: 75%; Chinese: 95%). Most of

these immigrants were of the second generation, that is, adolescents were born in the U.S. but

had at least one parent who was foreign-born (Mexican: 76%; Chinese: 67%). Approximately

24% and 33% of adolescents from Mexican and Chinese backgrounds, respectively, were of the

first generation, that is, foreign-born. Average age was 16 years (SD = .84) with an even split

between males (49%) and females (51%). In terms of demographic differences between youth

from Mexican and Chinese families, parents in Mexican families were more likely to have lower

levels of education than parents in Chinese families (mothers: $t(370) = 3.20$, $p < .01$; fathers: t

$(352) = 2.43$, $p < .05$). Ethnic differences in occupational status followed a similar pattern such

that parents of students from Mexican backgrounds worked in lower status occupations than

Chinese parents (mothers: $t(229) = 3.17$, $p < .01$; fathers: $t(255) = 4.05$, $p < .001$).

Procedure

Students who returned assent and parent consent forms completed a series of self-report

questionnaires in small-group settings during school time. These initial questionnaires included

ethnic identity and self-esteem measures and took approximately 30 minutes to complete. Upon

completion of questionnaires, students were given a 14-day supply of daily dairy checklists and

told to complete them each night before going to bed. Daily assessments of stressful demands

and well-being were collected via these checklists, each of which took about 5-10 minutes to

complete. Participants sealed each day's responses in a manila envelope and stamped the seal

with a hand-held electronic time stamper provided by the researchers. The stamper imprinted the

current date and time and was programmed such that the date and time could not be altered. At

the end of the study period, research assistants entered schools to collect completed checklists

from participants. Consent forms and study materials were available in English, Spanish, and

Chinese. Eight participants chose to complete measures in Spanish ($n = 4$) and Chinese ($n = 4$).

Adolescents received \$30 for their participation and were told that they would receive two movie

passes if inspection of the data indicated that they had completed the diaries correctly and on-

time (e.g., diaries completed on consecutive days with correct date stamped on seal). The time

stamper method of monitoring diary completion, cash, and movie pass incentives resulted in a

very high rate of compliance. Approximately 95% of the diaries were completed and, of these,

86% were completed on time, on either the same night or before noon the following day.

Analyses examining only diaries completed on time revealed similar findings to those using the

full sample, revealing no significant effect of lateness. All final analyses, therefore, were

conducted with all diary days, regardless of lateness.

Measures

  Ethnic Identity. Two subscales adapted from the Multidimensional Inventory of Black

Identity (MIBI; Sellers et al., 1997) were used to measure ethnic identity. Scales were slightly

shortened and items modified so that they could be relevant to and completed by members of any

ethnic group. All items were scored on a 5-point scale ranging from "strongly disagree" to

"strongly agree" with higher scores reflecting higher levels of regard and centrality. The Regard

subscale, consisting of eight items, measured the extent to which students had positive feelings

toward their ethnic group. Sample items read, "I feel good about the people in my ethnic group,"

"I believe that I have many strengths because I am a member of my ethnic group," and, "I often

regret that I am a member of my ethnic group" (reverse scored). The internal consistency of the

Regard subscale was good across both ethnic groups (Mexican: $a = .72$; Chinese: $a = .65$). The

Centrality subscale, consisting of five items, assessed the extent to which individuals felt their

ethnicity to be central to their self-concept. Sample items read, "In general, being a member of

my ethnic group is an important part of my self-image," "Being a part of my ethnic group is an

important reflection of who I am," and, "Being a part of my ethnic group is unimportant to my sense of what kind of person I am" (reverse scored). This subscale was reliable across both ethnic groups (Mexican: $a = .64$, Chinese: $a = .76$). Examination of means indicated that individuals scored above the midpoint for both regard ($M = 4.08$, $SD = .66$), and centrality ($M = 3.25$, $SD = .84$), and no significant ethnic or gender differences were found across means.

Self-Esteem. The 10-item Rosenberg Self-Esteem Scale (Rosenberg, 1965) measured individuals' global perceptions of self-esteem. Sample items read, "I feel that I have a number of good qualities," "I take a positive attitude toward myself," and, "I certainly feel useless at times" (reverse scored). Items were scored on a 5-point Likert-type scale rather than the originally conceived 4-point scale in order to remain consistent with other measures in this study. Responses range from strongly disagree to strongly agree with higher scores reflecting higher levels of self-esteem. Internal consistencies across ethnic groups were good (Mexican: $a = .82$, Chinese: $a = .85$). Self-esteem averaged 3.80 ($SD = .73$) across the entire sample. No significant ethnic or gender group differences were found in adolescents' self-esteem.

Stressful Demands. A checklist of daily stressors was adapted from items used successfully in previous research (e.g., Bolger & Zuckerman, 1995) to assess adolescents' daily stressful demands. For each day of the 14-day study period, participants indicated whether the following four stressful events or situations were experienced that day: (1) had a lot of work at home, (2) had a lot of work at school, (3) had a lot of demands made by family, and (4) had a lot of demands made by friends. These items represent classic stress indices used often in daily diary studies of stress, but were adapted to be more developmentally appropriate and to represent central domains in the lives of adolescents. Although existing research has focused on investigating these stressors in adults, demands from these multiple domains constitute normative stressors that may be particularly salient to adolescents who, with increased autonomy

and maturity, need to learn how to effectively manage these demands. Total numbers of stressful demands experienced each day (range = 0-4) were summed to represent daily indicators of stressful demands. On average, individuals appeared to experience less than one stressful demand each day (M = .62, SD = .86). Not significant differences in average stress were found across ethnicity, but females reported experiencing significantly more stressful demands than males ($t(402)$ = 2.11, p < .05).

Daily Well-Being. Daily well-being was assessed using (1) a newly created Happiness scale modeled after the Profile of Moods States (POMS; Lorr & McNair, 1971) and (2) the Anxiety subscale of the POMS, used successfully in previous dairy studies. For each day during the study period, participants reported on a 5-point Likert-type scale (range = 0-4) the extent to which they felt each of three items for each subscale (Happiness: happy, joy, calm; Anxiety: on edge, nervous, uneasy). Responses range from "not at all" to "extremely" with higher scores reflecting greater happiness and anxiety. Across Mexican and Chinese adolescents, respectively, internal consistencies averaged across each daily assessment were good (Happiness: a = .80, .83; Anxiety: a = .64, .73). Individuals appeared to be relatively happy (M = 2.28, SD = 1.08) and not very anxious (M = .54, SD = .76), scoring above and below the midpoints of each scale, respectively. Differences in well-being across ethnicity and gender, reflected in the following analyses, suggest that adolescents from Chinese backgrounds were marginally less happy and more anxious than adolescents from Mexican backgrounds, and that females were significantly more anxious than males.

<div align="center">Results</div>

Daily and Individual Level Predictors of Daily Well-Being

Hierarchical Linear Modeling (HLM; Byrk & Raudenbush, 1992), a statistical procedure used to analyze nested models, determined whether ethnic identity directly predicted average

daily well-being and moderated daily level associations between stressful demands and well-being. Identical models predicting happiness and anxiety were separately analyzed and consisted of two levels of analyses: (1) a daily level reflecting daily variation in well-being within individuals over the study period, and (2) an individual level reflecting variation in daily level processes (e.g., the daily association between stressful demands and well-being) attributable to individual differences in ethnic identity and other characteristics.

Same Day Stressful Demands Predicting Well-Being

Statistical model. Daily levels of well-being were predicted from same day stressful demands and important control variables typically used in diary methods (e.g, Bolger & Zuckerman, 1995; Yip & Fuligni, 2002) resulting in the following daily level modeling equation:

$$Well\text{-}Being_{ij} = b_{0j} + b_{1j} \ (Same \ Day \ Stressful \ Demands) + b_{2j} \ (Prior \ Day \ Well\text{-}Being) + b_{3j}$$
$$(Day \ of \ Week) + b_{4j} \ (Week \ of \ Study) + e_{ij}. \tag{1}$$

Well-being on a given day (i) for a particular adolescent (j) was modeled as a function of each person's intercept, namely, their average well-being across days (b_{0j}) and daily experience of stressful demands (b_{1j}). Prior day well-being (b_{2j}) was included to control for any prior day effects and to better isolate the daily level association between same day stressful demands and well-being. In doing so, we could only analyze the association between stressful demands and well-being for days 2-14 of the study since we did not have data for adolescents' well-being prior to day 1. Additional control variables included the day of the week (weekdays coded –1 and weekends coded 1) (b_{3j}) and the week of the study period (days 2-7 coded –1 and days 8-14 coded 1) (b_{4j}) in which the diary was completed. The error term in the equation contributing to variance unexplained by other predictors was represented by $e_{ij.}$

For the individual level component of our multilevel analysis, daily level estimates in question (i.e., b_{0j}, b_{1j}) were modeled as a function of individual level factors:

$$(intercept) \; b_{0j} = c_{00} + c_{01} \; (Ethnic \; Identity) + c_{02} \; (Ethnicity) + c_{03} \; (Gender) + u_{0j} \qquad (2)$$

$$(slope) \; b_{1j} = c_{10} + c_{11} \; (Ethnic \; Identity) + c_{12} \; (Ethnicity) + c_{13} \; (Gender) + u_{1j} \qquad (3)$$

Individuals' average daily well-being (b_{0j}) and the daily association between stressful demands and well-being (b_{1j}) were predicted using averages of these estimates across the sample (c_{00}, c_{10}), as well as the effects of ethnic identity (c_{01}, c_{11}), ethnicity (c_{02}, c_{12}), and gender (c_{03}, c_{13}). Error terms contributing to variance unexplained by other predictors were represented by u_{0j} and u_{1j}. Ethnic identity and self-esteem were centered at the midpoint of each scale and ethnicity and gender were effect coded (Mexican = -1, Chinese = 1; Males = -1, Females = 1). For each outcome of well-being (happiness, anxiety), three models were analyzed that focused on individual level predictors of ethnic identity defined by (1) ethnic regard, (2) ethnic centrality, and (3) main effects of regard and centrality and their interaction.

Results: Daily happiness. As shown in Table 1, individuals with higher levels of ethnic regard were happier on average ($b = .16$, $p < .01$). In terms of other individual level variables, ethnicity and gender did not significantly predict average daily happiness. Although the experience of more daily stressful demands was not significantly related to less daily happiness, the overall association was moderated by ethnic regard ($b = .06$, $p < .05$). As depicted in Figure 1, for those with low and moderate levels of ethnic regard, daily levels of happiness decreased as daily stressful demands increased; however, individuals with high levels of ethnic regard were protected from this negative effect. Gender also appeared to have a moderating effect such that females exhibited greater stress reactivity compared to males (see Figure 2). In terms of daily level control variables, prior day happiness significantly predicted current day happiness and day of the week was also significant such that people tended to be happier on weekends.

In the model with ethnic centrality as an individual level predictor, no significant effects on daily happiness were found, either directly or indirectly as a moderator of daily demands (see

Table 2). However, coefficients were in the expected direction implicating protective effects. Similarly, an additional model with individual level predictors including both ethnic regard and ethnic centrality revealed nonsignificant direct ($b = .02$, *ns*) and indirect effects ($b = .02$, *ns*) of the interaction term. It thus appears that, contrary to Rowley et al.'s (1998) findings concerning the importance of considering both regard and centrality as dual predictors of self-esteem, only ethnic regard played a significant role in individuals' daily happiness.

Results: Daily anxiety. As shown in Table 1, individuals with a higher ethnic regard exhibited less daily anxiety, but this direct effect was only marginally significant ($b = -.06$, *p* < .10). The effect of ethnicity also approached significance such that adolescents with Chinese backgrounds exhibited higher levels of anxiety compared to those with Mexican backgrounds. A significant effect of gender was found such that females exhibited higher levels of anxiety than males. Although individuals experienced greater anxiety on days in which they also experienced more stressful demands ($b = .09$, *p* < .01), no moderating effects of ethnic regard, ethnicity, or gender were found. Prior day anxiety, day of week, and day of study were significant control variables such that people were less anxious on weekends and on later days of measurement.

Results from an additional model including ethnic centrality as an individual level predictor revealed no significant direct or moderating effects of centrality (see Table 2). A third model including the interaction term between regard and centrality as an individual level predictor was similar to previous findings predicting happiness in that no significant direct ($b = .03$, *ns*) or indirect ($b = .03$, *ns*) effects of the interaction term were found.

Prior Day Stressful Demands Predicting Well-Being

Statistical model. Additional HLM models determined whether ethnic identity moderated the effect of prior day stressful demands (*d-1*) on current day well-being (*d*). Daily level equations were estimated as shown:

Well-Being$_{ij}$ (d) = b_{0j} + b_{1j} (Prior Day Stressful Demands, d-1) + b_{2j} (Current Day

Stressful Demands, d) + b_{3j} (Prior Day Well-Being, d-1) + b_{4j} (Day of Week, d) + b_{5j} (Week of

Study, d) + e_{ij}. (4)

Well-being on a particular day (*i*) for a particular adolescent (*j*) was modeled as a

function of his or her average well-being across days (b_{0j}), prior day stressful demands (b_{1j}),

current day stressful demands (b_{2j}), prior day well-being (b_{3j}), day of the week (b_{4j}), and week of

the study (b_{5j}) in which the current day diary was completed. The error term in the equation

contributing to variance unexplained by other predictors was represented by e_{ij}.

As presented earlier in Equations 2 and 3, daily level estimates (i.e., b_{0j}, b_{1j}) were

modeled as a function of individual level factors:

(intercept) b_{0j} = c_{00} + c_{01} (Ethnic Identity) + c_{02} (Ethnicity) + c_{03} (Gender) + u_{0j} (5)

(slope) b_{1j} = c_{10} + c_{11} (Ethnic Identity) + c_{12} (Ethnicity) + c_{13} (Gender) + u_{1j} (6)

Individuals' average daily well-being (b_{0j}) and the association between prior day stressful

demands and current day well-being (b_{1j}) were estimated using averages of these estimates

across the sample (c_{00}, c_{10}), as well as the effect of ethnic identity (c_{01}, c_{11}), ethnicity (c_{02}, c_{12}),

and gender (c_{03}, c_{13}). Error terms contributing to variance unexplained by other predictors were

represented by u_{0j} and u_{1j}. Again, for each outcome (happiness, anxiety), three models were

analyzed that focused on individual level predictors including (1) ethnic regard, (2) ethnic

centrality, and (3) the interaction between regard and centrality.

Results: Prior day stressful demands and daily happiness. Similar to previous results,

ethnic regard significantly and positively predicted average daily levels of happiness (see Table

3). Ethnicity also emerged as significant such that individuals from Chinese backgrounds were

significantly less happy than individuals from Mexican backgrounds. In terms of indirect

effects, ethnic regard significantly moderated the association between prior day stressful

demands and current day happiness, even after controlling for prior day happiness and current day stress ($b = .05$, $p < .05$). Individuals with a high ethnic regard were again protected from negative effects of stress when considering daily levels of happiness assessed a day after original stressors occurred, implicating the strength of ethnic regard as an ongoing buffer of stress reactivity (see Figure 3). Unlike previous results, gender did not significantly moderate the daily level association between prior day stressful demands and current day happiness. Prior day happiness and day of the week also emerged as significant control variables.

Models including ethnic centrality and the interaction between ethnic regard and centrality again revealed largely nonsignificant findings. The direct effect of centrality was marginally significant ($b = .07$, $p < .10$), but the moderating effect was not ($b = .02$, *ns*). Both direct ($b = .03$, *ns*) and indirect ($b = -.02$, *ns*) effects of the interaction term were nonsignificant.

Results: Prior day stressful demands and daily anxiety. Models predicting current day anxiety from prior day stress revealed similar results to those presented in Table 1. Ethnic regard, ethnicity, and gender predicted average daily anxiety, but did not moderate the daily level association between prior day stress and current day anxiety. All daily level controls were also significant. Again, ethnic centrality and the interaction between regard and centrality did not exert significant direct (centrality: $b = .01$, *ns*; interaction: $b = .03$, *ns*) or indirect (centrality: $b = -.01$, *ns*; interaction: $b = .04$, *ns*) effects.

Models Controlling for Self-Esteem

To control for the potentially confounding role of self-esteem, additional models were reexamined that included self-esteem as an additional individual level predictor. As self-esteem has been consistently shown to affect both psychological well-being and reactivity to stress (see Harter, 1999), we sought to determine whether the protective effects of ethnic identity emerged above and beyond the effect of self-esteem. Since moderating effects of ethnic identity were

found only with ethnic regard and happiness (predicted by both current day and prior day stress), we reanalyzed these two models after the inclusion of self-esteem.

Statistical model. Daily level equations were identical to those presented above (see Equations 1 and 4), but self-esteem was included as an additional individual level predictor. Hence, daily level estimates (i.e., b_{0j}, b_{1j}) were modeled as follows:

(intercept) $b_{0j} = c_{00} + c_{01}$ *(Ethnic Identity)* $+ c_{02}$ *(Self-Esteem)* $+ c_{03}$ *(Ethnicity)* $+ c_{13}$ *(Gender)* $+ u_{0j}$ (7)

(slope) $b_{1j} = c_{10} + c_{11}$ *(Ethnic Identity)* $+ c_{12}$ *(Self-Esteem)* $+ c_{13}$ *(Ethnicity)* $+ c_{13}$ *(Gender)* $+ u_{1j}$ (8)

Individuals' average daily well-being (b_{0j}) and the associations between current day and prior day stressful demands and current day well-being (b_{1j}) were estimated using averages of these estimates across the sample (c_{00}, c_{10}), as well as the effect of ethnic identity (c_{01}, c_{11}), self-esteem (c_{02}, c_{12}), ethnicity (c_{03}, c_{13}), and gender (c_{04}, c_{14}). Error terms contributing to variance unexplained by other predictors were represented by u_{0j} and u_{1j}.

Results: Daily happiness controlling for self-esteem. As shown in Table 4, the direct effect of ethnic regard predicting average daily happiness no longer emerged as significant after controlling for self-esteem. However, for both same day and prior day stressful demands predicting happiness, the buffering effect of ethnic regard was still significant, suggesting that ethnic regard had a protective role above and beyond the effect of self-esteem.

Discussion

Although consistent evidence has shown ethnic identity to have a positive function in individuals' lives, existing research has been surprisingly limited in its focus on fairly stable outcomes such as self-esteem or overall well-being. Research has also been limited in centering on African Americans and neglecting the study of adolescents from more diverse ethnic

backgrounds. We employed a daily diary approach to extend the empirical literature and address unexplored issues in the field by examining protective effects of ethnic identity on the daily well-being of adolescents from Mexican and Chinese backgrounds. The uniqueness of utilizing an intensive daily diary approach was that it provided a window into important developmental processes that occur on a daily level and that are often overlooked by traditional, single surveyed accounts. Ethnic identity was thus implicated as having a more precise influence on well-being by predicting how individuals feel on a day-to-day basis. Adolescents who had a higher regard for their ethnic group were indeed happier and less anxious when daily assessments of well-being were averaged over the two-week study period, suggesting that individuals derived direct psychological benefit from feeling positively about their ethnic group.

Theoretically, from a social identity perspective, having positive feelings about and a strong identification with one's ethnic group can provide a foundation from which individuals can draw in the face of stress which, in turn, can have a protective influence on development and well-being (Tajfel, 1981). We provided empirical support for this idea by demonstrating that ethnic identity did appear to indirectly influence daily well-being by providing a source of strength that allowed individuals to withstand stressful experiences. That is, ethnic identity had an additionally positive influence on daily well-being by serving as a buffer against normative stressful demands. Although the greater experience of daily stressors predicted less daily happiness in individuals with a low to moderate ethnic regard, individuals with a high ethnic regard were protected from these negative effects. What was particularly striking was that the moderating effect of ethnic identity was based on fairly conservative estimates after controlling for influential variables such as prior day well-being.

Another noteworthy finding was that the enhancement in happiness or positivity that ethnic identity provided not only influenced the same day association between stressful demands

and well-being, but also had a longer-lasting influence in the association between daily stressors on a given day and happiness reported one day later. Again, these lingering effects were remarkable considering our statistical control of both prior day well-being and current day stressors. An additional variable that we considered and controlled for was self-esteem, a construct shown to impact a host of psychological outcomes including overall positivity and well-being (see Harter, 1999 for a review) and that may also act as a buffer of well-being in the face of stress (see Mossakowski, 2003). We found ethnic identity to play an independent role as a moderator between stressful demands and daily levels of happiness above and beyond the influence of self-esteem, thereby further emphasizing and isolating its protective effects.

In addition to documenting direct and indirect associations between ethnic identity and daily well-being, our results provide new insight into stress and coping among ethnic minority adolescents. Although some have examined the stress buffering role of ethnic identity, research has been limited in its focus on perceived discrimination and other race-related hassles as sources of stress. Virtually no work has examined the impact of normative stressful demands that may be particularly salient during adolescence due to increased autonomy and a greater responsibility to manage stress from multiple domains (e.g., school, peers, and family). Our focus on normative stressful demands built upon existing research and acknowledged an important developmental influence that has been largely understudied. Another way in which we extended existing literature was in our consideration of normative stressful demands as they occurred on a daily basis. Our successful use of the daily diary method suggests that it may be worthwhile to utilize this multilevel method in future research on stress related processes in adolescence. For instance, it may be particularly interesting to apply the daily diary method and revisit associations between ethnic identity, ethnic discrimination, and well-being, but on a daily level.

Although we found ethnic identity to predict daily levels of happiness in the face of daily stressors, unlike previous research (e.g., Yip & Fuligni, cited in Shelton et al., under review), ethnic identity did not buffer against anxious reactivity to stress. One explanation for this finding involves potential developmental differences related to the meaning that one places on one's ethnic identity. Indeed, much of the research demonstrating stress buffering effects of ethnic identity has focused on older adolescents and adults (e.g., Mossakowski, 2003; Sellers et al., 2003). During adolescence, identities may still be in the process of being established; thus, obtaining a high score on a measure of ethnic regard may have a fundamentally different meaning for an individual who may not yet have a full grasp of what their identity means to them compared to an older individual for whom identity may be more fully established. Thus, the full potential for ethnic identity to serve a protective function in individuals' lives may not yet be fully realized for many individuals until later in adult years.

Similarly, developmental differences could account for why ethnic centrality and the interaction between regard and centrality were not significant predictors of daily well-being. Previous research documenting significant interaction effects predicting self-esteem have been found with adults and with older adolescents ranging from 16 to 18 years of age (Rowley et al., 1998). Perhaps our lack of an interaction effect was due to our use of ninth graders in early adolescence who, again, may have yet to fully establish what their ethnic identity is and what it means to them. In light of such developmental differences, it would be important to replicate these results in older samples; consequently, stronger buffering effects could be found in older individuals who may have a more developed sense of ethnic identity. It would also be worthwhile to examine stress reactivity in younger individuals to determine how early in development a protective effect of ethnic identity exists.

Although ethnic identity did not appear to serve as a buffer of daily levels of anxiety, the finding that daily stressful demands had a powerful impact on anxiety despite having a strong ethnic identity provided interesting information in and of itself. As one might expect, individuals are vulnerable to negative events in their lives and are not completely immune to the negative impact of normative stressful demands. What was highly notable, however, was that adolescents with a high ethnic regard maintained a generally positive and happy attitude in the face of these stressors and despite their anxious feelings. Thus, having a positive regard for one's ethnic group appeared to provide an extra boost of positivity in individuals' daily lives, which could subsequently translate into a protective foundation from which individuals can draw in coping with their daily stressful demands and the feelings of anxiety that stem from such daily stressors.

To further explicate protective functions of ethnic identity, future work might examine, more specifically, mechanisms by which ethnic identity translates into positive developmental outcomes. For instance, it is possible that a strong ethnic regard relates to a strong network of social support or predicts more proactive coping strategies. Availability of these resources could then help individuals to better deal with their daily stressors. It is also possible that ethnic identity contributes to a broader sense of purpose in life or eudaimonic well-being (Ryff et al., 2003) that pervades other areas of development and mediates the link between ethnic identity and daily well-being. Thus, in continuing along these lines of research to more thoroughly understand why, exactly, ethnic identity should have such a striking influence in individuals' development, it would be worthwhile to incorporate variables that have not typically been the focus of research (e.g., as we have done with normative stressful demands and daily indicators of well-being). Of additional importance is the use of more sophisticated methodologies, such as the daily diary approach, that allow for the hierarchical examination of how ethnic identity can affect not only individuals' general well-being but, more precisely, their daily lives.

Several limitations to this study should be noted. First, although results point to ethnic identity as an important predictor of daily well-being and although we controlled for important variables, it is possible that additional factors might be involved in the association. For instance, as suggested above, perhaps ethnic identity relates to other influential variables such as having a sense of social support which could also provide protective effects on development. Second, although one of the strengths of this study was its focus on traditionally understudied groups, additional research is needed to generalize results to other groups. For example, moderating effects of ethnic identity may vary across ethnic groups with different immigration histories, for instance, Vietnamese refugees seeking asylum in the U.S., or even within broader ethnic group contexts, for instance, Latino adolescents with Mexican versus Central American backgrounds. Similarly, it would be interesting to replicate our research and determine whether these processes differ in adolescents from African American backgrounds, whose experiences may differ significantly from those of other ethnic minority groups (Sellers et al., 1998).

Despite these limitations, the current study provided evidence for the protective role that ethnic identity plays in the daily psychological well-being of adolescents from Mexican and Chinese backgrounds. In line with the current movement in positive psychology (Seligman & Csikszentmihalyi, 2000) and much of the recent research emphasizing positive developmental outcomes and the resources ethnic identity can provide, we adopted a strengths-based approach in examining the influence of ethnic identity in individuals' daily lives. Although this approach is critical in advancing our understanding, it is also important not to neglect individuals who exhibit low levels of ethnic identity and to determine how their outcomes could be potentially improved. Indeed, in achieving a better understanding of the role that ethnic identity plays in development, the next logical step is to effectively use this information to benefit individuals' daily lives and functioning.

References

Almeida, D. M., & Kessler, R. C. (1998). Everyday stressors and gender differences in daily

distress. *Journal of Personality and Social Psychology, 75,* 670-680.

Bolger, N., & Zuckerman, A. (1995). A framework for studying personality in the stress

process. *Journal of Personality & Social Psychology, 69,* 890-902.

Branscombe, N.R., Schmitt, M.T., & Harvey, R.D. (1999). Perceiving pervasive discrimination

among African Americans: Implications for group identification and well-being. *Journal

of Personality and Social Psychology, 77,* 135-149.

Byrk, A.S., & Raudenbush, S.W. (1992). *Hierarchical linear models: Applications and data

analysis methods.* Newbury Park, CA: Sage.

Clark, K.B., & Clark, M.P. (1950). Emotional factors in racial identification and preferences in

Negro children. *Journal of Negro Education, 19,* 341-350.

Compas, B. (1987). Coping with stress during childhood and adolescence. *Psychological

Bulletin, 101,* 393-403.

Cooper, C.R., Cooper, R.G., Azmitia, M., Chavira, G, & Gullatt, Y. (2002). Bridging multiple

worlds: How African American and Latino youth in academic outreach programs

navigate math pathways to college. *Applied Developmental Science, 6,* 73-87.

Corsaro, W.A., & Fingerson, L. (2003). Development and socialization in childhood. In J.

Delamater (Ed.) *Handbook of social psychology: Handbooks of sociology and social

research* (pp. 125-155). New York: Kluwer/Plenum.

Cross, W.E. (1991). *Shades of black: Diversity in African-American identity.* Philadelphia, PA:

Temple University Press.

Cross, W.E., & Phagen-Smith, P. (2001). Patterns of African American identity development: A

life span perspective. In C.L. Wijeyesinghe, & Jackson III, B.W. (Eds.), *New perspectives on racial identity development: A theoretical and practical anthology* (pp. 243-270). New York: New York University Press.

Cross, W.E., Parham, T.A., & Helms, J.E. (1998). Nigrescence revisited: Theory and research. In R.L. Jones (Ed.), *African American Identity Development: Theory, Research, and Intervention.* Hampton, VA: Cobb and Henry.

Eccles, J.S., Midgley, C., Wigfield, A., Buchanan, C.M., Reuman, D., Flanagan, C., & Mac Iver, D. (1993). Development during adolescence: The impact of stage-environment fit on young adolescents' experiences in schools and in families. *American Psychologist, 48,* 90-101.

Erikson, E.H. (1968). *Identity: Youth and crisis.* New York: Norton.

Fuligni, A. J., Tseng, V., & Lam, M. (1999). Attitudes toward family obligations among American adolescents from Asian, Latin American, and European backgrounds. *Child Development, 70,* 1030-1044.

Fuligni, A.J., & Witkow, M. (2004). The postsecondary educational progress of youth from immigrant families. *Journal of Research on Adolescence, 14,* 159-183.

Gonzales, N.A., Tein, J., Sandler, I.N., & Friedman, R.J. (2001). On the limits of coping: Interaction between stress and coping for inner-city adolescents. *Journal of Adolescent Research, 16,* 372-395.

Gray-Little, B., & Hafdahl, A.R. (2000). Factors influencing racial comparisons of self-esteem: A quantitative review. *Psychological Bulletin, 126,* 26-54.

Harter, S. (1999). *The construction of the self: A developmental perspective.* New York: Guilford.

Kim, J. (2001). Asian American identity development theory. In C.L. Wijeyesinghe, & Jackson

III, B.W. (Eds.), *New perspectives on racial identity development: A theoretical and practical anthology* (pp. 67-90). New York: New York University Press.

Lohman, B.J., & Jarvis, P.A. (2000). Adolescent stressors, coping strategies, and psychological health studied in the family context. *Journal of Youth and Adolescence, 29,* 15-43.

Lorr, M. & McNair, D. M. (1971). <u>*The profile of mood states manual*</u>. San Francisco, CA: Educational and Industrial Testing Service.

McGoldrick, M., & Giordano, J. (1996). Overview: Ethnicity and family therapy. In M. McGoldrick, J., Giordano, J., & J.K. Pearce (Eds.), *Ethnicity and family therapy (2nd ed.)* (pp. 1-30). New York: Guildford.

Mossakowski, K.N. (2003). Coping with perceived discrimination: Does ethnic identity protect mental health? *Journal of Health and Social Behavior, 44,* 318-331.

Mroczek, D.K., & Almeida, D.M. (2004). The effect of daily stress, personality, and age on daily negative affect. *Journal of Personality, 72,* 355-378.

Phinney, J.S. (1990). Ethnic identity in adolescence and adults: A review of research. *Psychological Bulletin, 108,* 499-514.

Phinney, J.S. (1992). The Multigroup Ethnic Identity Measure: A new scale for use with diverse groups. *Journal of Adolescent Research, 7,* 156-176.

Phinney, J.S. (1996). When we talk about American ethnic groups, what do we mean? *American Psychology, 9,* 918-927.

Phinney, J. S. (2003). Ethnic identity and acculturation. In K. M. Chun, P. B. Organista, & G. Marin (Eds.), *Acculturation: Advances in theory, measurement, and applied research* (pp. 63-81). Washington, DC: American Psychological Association.

Roberts, R.E., Phinney, J.S., Masse, L.C., Chen, Y.R., Roberts, C.R., & Romero, A. (1999). The

structure of ethnic identity of young adolescents from diverse ethnocultural groups. *Journal of Early Adolescence, 19,* 301-322.

Rosenberg, M. (1965). *Society and the adolescent self-image.* Princeton, NJ: Princeton University Press.

Rowley, S.J., Sellers, R.M., Chavous, T.M., & Smith, M.A. (1998). The relationship between racial identity and self-esteem in African American college and high school students. *Journal of Personality and Social Psychology, 74,* 715-724.

Ryff, C.D., Keyes, C.L.M., & Hughes, D.L. (2003). Status inequalities, perceived discrimination, and eudaimonic well-being: Do the challenges of minority life hone purpose and growth? *Journal of Health and Social Behavior, 44,* 275-290.

Sellers, R.M., Caldwell, C.H., Schmeelk-Cone, K.H., & Zimmerman, M.A. (2003). Racial identity, racial discrimination, perceived stress, and psychological distress among African American young adults. *Journal of Health and Social Behavior, 44,* 302-317.

Sellers, R.M., Rowley, S.J., Chavous, T.M., Shelton, J. N., & Smith, M.A. (1997). Multidimensional inventory of black identity: A preliminary investigation of reliability and construct validity. *Journal of Personality and Social Psychology, 73,* 805-815.

Sellers, R.M., Smith, M.A., Shelton, J.N., Rowley, S.A.J., & Chavous, T.M. (1998). Multidimensional Model of Racial Identity: A reconceptualization of African American racial identity. *Personality and Social Psychology Review, 2,* 18-39.

Shelton, N., Eccles, J. S., Yip, T. Chatman, C., Fuligni, A. J., & Wong, C. (under review). *Ethnic identity as a buffer in psychological adjustment.*

Tajfel, H. (1981). *Human groups and social categories.* New York: Cambridge University Press.

Tajfel, H., & Forgas, J.P. (2000). Social categorization: Cognitions, values, and groups. In C.

Stangor (Ed.), *Stereotypes and prejudice: Essential readings* (pp. 49-63). New York: Psychology Press.

Tsai, J.L., Ying, Y., & Lee, P.A. (2001). Cultural predictors of self-esteem: A study of Chinese American female and male young adults. *Cultural Diversity & Ethnic Minority Psychology, 7,* 284-297.

Umana-Taylor, A.J. (2004). Ethnic identity and self-esteem: Examining the role of social context. Journal of Adolescence, 27, 139-146.

Umana-Taylor, A.J., Diversi, M., & Fine, M.A. (2002). Ethnic identity and self-esteem among Latino adolescents: Making distinctions among the Latino populations. *Journal of Adolescent Research, 17,* 303-327.

Utsey, S.O., Chae, M.H., Brown, C.F., & Kelly, D. (2002). Effect of ethnic group membership on ethnic identity, race-related stress and quality of life. *Cultural Diversity & Ethnic Minority Psychology, 8,* 367-378.

Wong, C.A., Eccles, J.S., & Sameroff, A. (2003). The influence of ethnic discrimination and ethnic identification on African American adolescents' school and socioemotional adjustment. *Journal of Personality, 71,* 1197-1232.

Yasui, M., Dorham, C.L., & Dishion, T.J. (2004). Ethnic identity and psychological adjustment: A validity analysis for European American and African American adolescents. *Journal of Adolescent Research, 19,* 807-825.

Yip, T., & Fuligni, A.J. (2002). Daily variation in ethnic identity, ethnic behaviors, and psychological well-being among American adolescents of Chinese descent. *Child Development, 73,* 1557-1572.

Table 1

HLM Estimates of Ethnic Regard Moderating Same Day Stressful Demands

Daily Level	Happiness	Anxiety
Individual Level	*b (SE)*	*b (SE)*
Intercept (average daily well-being)	1.67 (.08)***	.43 (.05)***
Ethnic Regard	.16 (.05)**	-.06 (.04)†
Ethnicity	-.05 (.03)	.04 (.02)†
Gender	-.01 (.03)	.06 (.02)**
Daily Stress	-.06 (.04)	.09 (.03)**
Ethnic Regard	.06 (.03)*	-.01 (.03)
Ethnicity	.00 (.02)	.01 (.01)
Gender	-.06 (.02)**	.01 (.02)
Daily Level Controls		
Prior Day Well-Being	.21 (.02)***	.17 (.03)***
Day of Week	.05 (.01)***	-.03 (.01)***
Week of Study	.01 (.01)	-.04 (.01)***

†*p* < .10*, *p* < .05, **p* < .01, ***p* < .001.

Note: In all tables, ethnicity, gender, day of week, and week of study were effect coded

(Mexican, Male, Weekday, Week 1 of study = -1; Chinese, Female, Weekend, Week 2 of study

= 1).

Table 2

HLM Estimates of Ethnic Centrality Moderating Same Day Stressful Demands

Daily Level	Happiness	Anxiety
Individual Level	*b (SE)*	*b (SE)*
Intercept (average daily well-being)	1.81 (.05)***	.36 (.03)***
Ethnic Centrality	.07 (.04)	.00 (.03)
Ethnicity	-.06 (.03)†	.04 (.02)†
Gender	.00 (.03)	.06 (.02)**
Daily Stress	.00 (.02)	.08 (.02)***
Ethnic Centrality	.03 (.02)	.01 (.02)
Ethnicity	.00 (.02)	.01 (.01)
Gender	-.05 (.02)**	.01 (.01)
Daily Level Controls		
Prior Day Well-Being	.21 (.02)***	.17 (.03)***
Day of Week	.04 (.01)***	-.03 (.01)***
Week of Study	.01 (.01)	-.04 (.01)***

†*p* < .10, ****p* < .01, ***p* < .001.

Table 3

HLM Estimates of Ethnic Regard Moderating Prior Day Stressful Demands

Daily Level	Happiness (*d*)	Anxiety (*d*)
Individual Level	*b (SE)*	*b (SE)*
Intercept (average daily well-being)	1.65 (.08)***	.42 (.05)***
Ethnic Regard	.15 (.05)**	-.06 (.04)†
Ethnicity	-.07 (.03)*	.04 (.02)†
Gender	-.04 (.03)	.06 (.02)*
Prior Day Stress (*d-1*)	-.02 (.04)	.03 (.03)
Ethnic Regard	.05 (.03)*	-.01 (.02)
Ethnicity	.03 (.02)	.01 (.01)
Gender	-.00 (.02)	.02 (.01)
Daily Level Controls		
Same Day Stress (*d*)	.00 (.02)	.08 (.01)***
Prior Day Well-Being (*d*)	.22 (.02)***	.17 (.03)***
Day of Week	.05 (.01)***	-.03 (.01)***
Week of Study	.02 (.01)	-.04 (.01)***

†*p* < .10, *p* < .05, **p* < .01, ***p* < .001.

Table 4

HLM Estimates of Ethnic Regard Predicting Happiness After Controlling for Self-Esteem

Daily Level	Same Day Happiness (*d*)	Next Day Happiness (*d+1*)
Individual Level	*b (SE)*	*b (SE)*
Intercept (average daily well-being)	1.59 (.08)***	1.56 (.07)***
Ethnic Regard	.06 (.06)	.05 (.05)
Self-Esteem	.24 (.05)***	.24 (.05)***
Ethnicity	-.04 (.03)	-.06 (.03)*
Gender	.01 (.03)	-.02 (.03)
Daily Stress (*d*)	-.04 (.04)	-.01 (.04)
Ethnic Regard	.07 (.03)*	.07 (.03)*
Self-Esteem	-.04 (.03)	-.04 (.02)†
Ethnicity	.00 (.02)	.02 (.02)
Gender	-.06 (.02)**	-.01 (.02)
Daily Level Controls		
Prior Day Stress	--	.00 (.02)
Prior Day Well-Being	.21 (.02)***	.22 (.02)***
Day of Week	.05 (.01)***	.05 (.01)***
Week of Study	.01 (.01)	.02 (.01)

†*p* < .10, *p* < .05, **p* < .01, ***p* < .001.
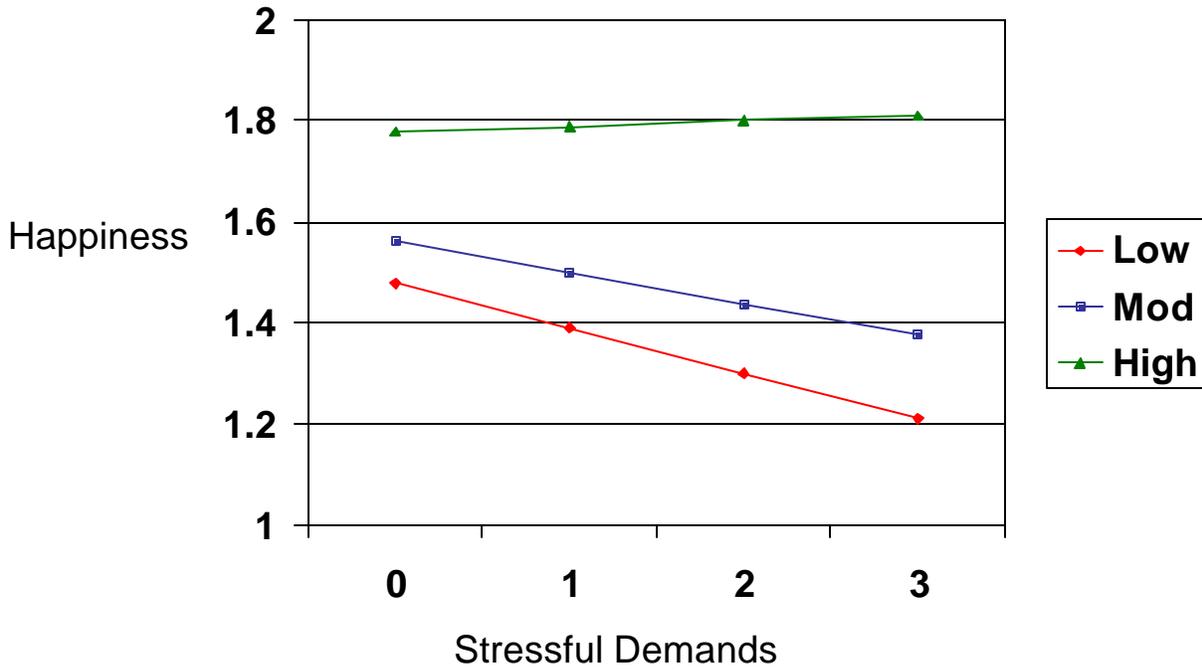
Figure Captions

Figure 1: Same day stress reactivity by ethnic regard

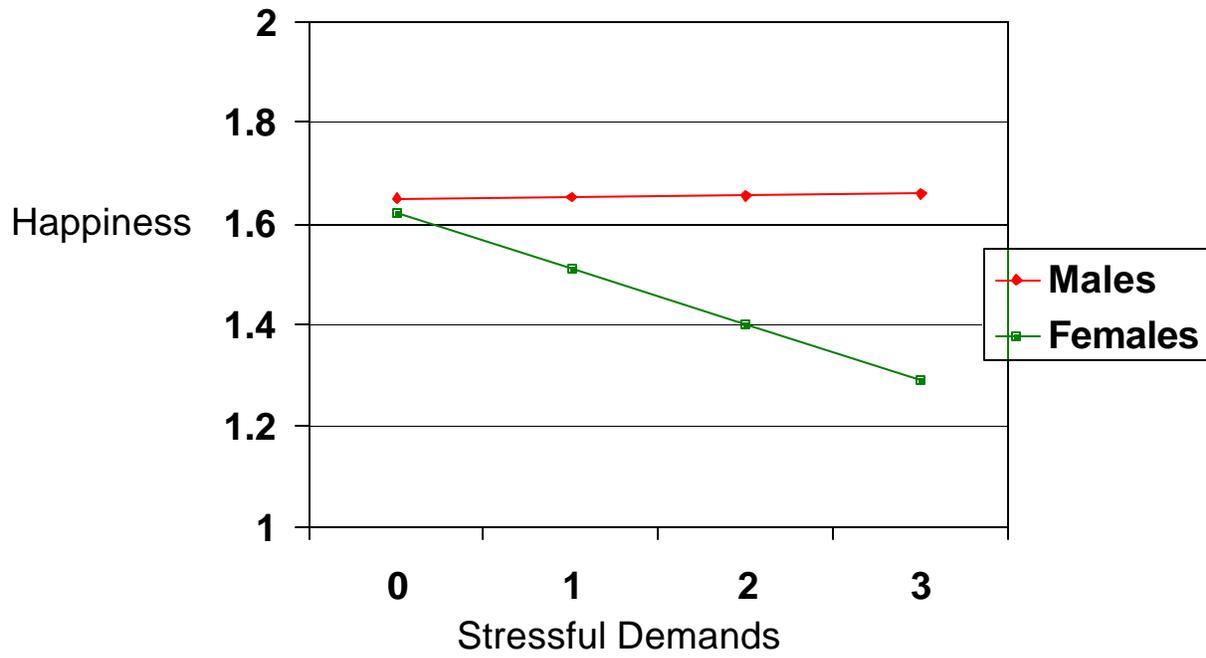*Figure 2:* Same day stress reactivity by gender

Figure 3: Reactivity to prior day stress by ethnic regard

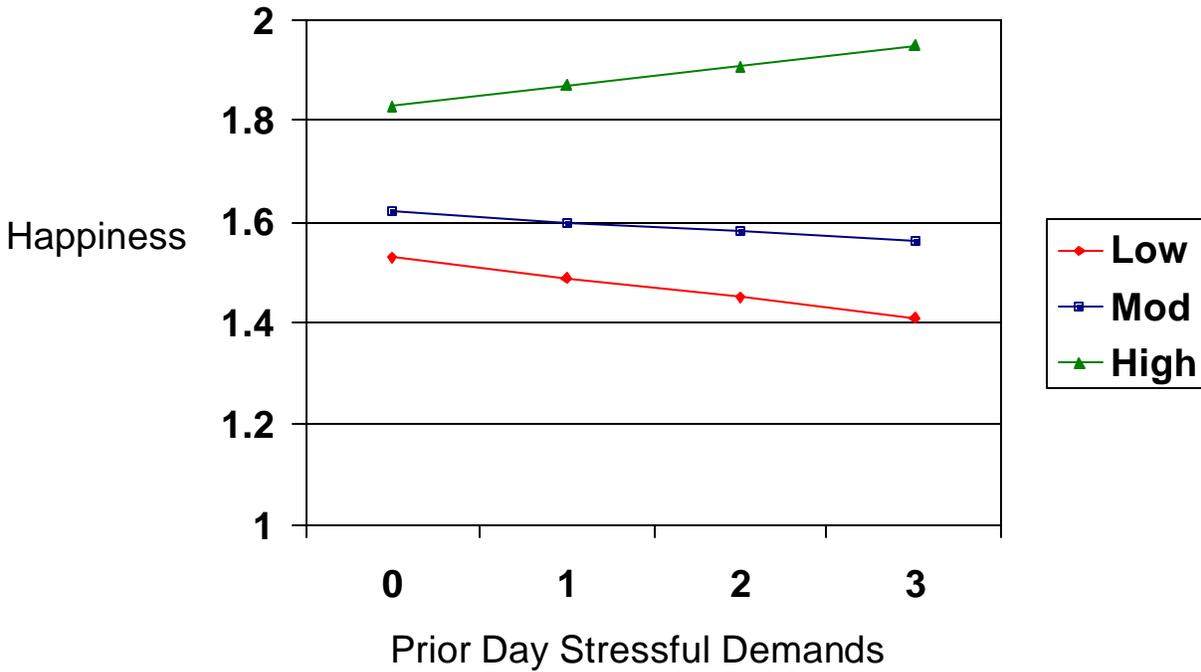## Same Day Stress Reactivity by Ethnic Regard

Note: Associations between daily stressful demands and daily levels of happiness plotted by

ethnic regard. Individuals "Mod" in regard were adolescents who scored at the midpoint of the

ethnic regard scale. Individuals "Low" in regard were those who scored below the midpoint of

the scale, whereas those "High" in regard scored above the midpoint.

Same Day Stress Reactivity by Gender

Note: Associations between daily stressful demands and daily levels of happiness plotted according to gender.

Reactivity to Prior Day Stress by Ethnic Regard

Note: Associations between daily stressful demands and daily levels of happiness one day later

plotted by ethnic regard. Individuals "Mod" in regard refers to those who scored at the midpoint

of the ethnic regard scale. Individuals "Low" in regard refers to those who scored below

midpoint of the scale, whereas those "High" in regard scored above the midpoint.