Pursuit of Comfort and Pursuit of Harmony: Culture, Relationships, and Social Support Seeking

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This research examined whether people from collectivistic cultures are less likely to seek social support than are people from individualistic cultures because they are more cautious about potentially disturbing their social network. Study 1 found that Asian Americans from a more collectivistic culture sought social support less and found support seeking to be less effective than European Americans from a more individualistic culture. Study 2 found that European Americans' willingness to seek support was unaffected by relationship priming, whereas Asian Americans were willing to seek support less when the relationship primed was closer to the self. Study 3 replicated the results of Study 2 and found that the tendency to seek support and expect social support to be helpful as related to concerns about relationships. These findings underscore the importance of culturally divergent relationship patterns in understanding social support transactions.

Keywords: culture; social support; relationship; stress

Negative events such as failing an exam or finding out about a high cholesterol level can lead people to take many different courses of action. Individuals may change their study or eating habits, try to convince themselves that the problem is not very grave, or talk to close others to solicit their help and sympathy. The course of action people take and how effectively those actions resolve the stressor obviously depend on the exact nature of the problem and the social circumstances. However, among many different strategies, social support is one of the most effective coping strategies by which a person can alleviate the negative impact of stress (Seeman, 1996; Taylor, in press; Thoits, 1995). Consequently, soliciting social support from close others is encouraged and generally brings about positive coping outcomes (Taylor, in press).

However, there are many factors that affect the extent to which people seek social support (Cohen, Sherrod, & Clark, 1986; Dunkel-Schetter, Folkman, & Lazarus, 1987). For instance, research on culture and social support seeking shows that Asians/Asian Americans are less willing to seek social support in dealing with their stressful events compared to European Americans (Taylor et al., 2004). This research also showed that the cultural difference in support seeking is due to Asians/Asian Americans feeling more concerned about the negative implications of social support seeking for their relationships, such as burdening others and losing face. Building on these earlier findings, the present research examined how those from more collectivistic cultures and those from more individualistic cultures regard social support seeking, the act of explicitly soliciting support from others, and examined how helpful they perceived it to be when thinking about different social groups that vary in their connectedness to the self.

Social Support and Stress

Social support is defined as information from others that one is loved and cared for, esteemed and valued, and part of a network of communication and mutual obligations (Cobb, 1976; Cohen & Wills, 1985; Seeman, 1996; Taylor, in press). Social support may come from a spouse or companion, relatives, friends, coworkers, and community ties, such as belonging to a church or a club in a form of emotional (e.g., warmth and nurturance provided by other people) and/or instrumental support (e.g., tangible assistance or informational support). Social support has long been known to mute the experience of stress, reduce the severity of mental and physical health problems, and speed recovery from health disorders when they do occur (Cohen, 1988).

Despite the manifest benefits of having social support, there also can be costs involved in utilizing social support. Bolger, Zuckerman, and Kessler (2000), for example, found that when people actually drew on specific members of their social support networks for help during stressful times, support seeking served as an additional cause of distress. This may occur because drawing on another person for support taxes that other person's resources, such as time and attention, or because it reduces one's own self-esteem due to having to acknowledge a need for help (see Seidman, Shrout, & Bolger, 2006). As such, social support can be an additional source of concern and stress for the person in need. Similarly, a review by Lepore (1998) found that when social support manipulations were introduced into laboratory stress tasks, they had an irregular impact on physiological arousal and indicators of adjustment. This was because the presence of a supportive other sometimes increased, rather than decreased, stress. Explicit social support seeking can have a negative impact on relationships, especially in an intimate relationship in which people expect that support should be given without asking (Mills & Clark, 1984). Social support also could be costly for the provider, especially when the support involves burdensome caregiving (for review, see Taylor, in press).

Thus, although social support is generally beneficial and one of the strongest predictors of health and well-being (Taylor, in press), findings such as these suggest that there are some factors that can moderate the potential effectiveness of social support as a resource. One such factor is culture. Cultures differ in their expectations and norms about how a person is related to others (Adams & Plaut, 2003) and what the primary goal of the self should be (Fiske, Kitayama, Markus, & Nisbett, 1998; Markus & Kitayama, 1991). Thus, the exact nature of how people use social support should depend largely on the cultural context in which the support transaction takes place.

Culture, Self, and Social Support

In more individualistic cultures, such as in the United States, the dominant model of the self is an independent self that regards a person as possessing a set of self-defining attributes, which are used to take action in the expression of personal beliefs, the achievement of personal goals (Markus & Kitayama, 1991; Markus, Mullally, & Kitayama, 1997; Morris & Peng, 1994). Individuals are expected to make their own decisions based on their own volition (Markus & Kitayama, 1991). Relationships also take an independent form and are thought to be freely chosen and with relatively few obligations (Adams & Plaut, 2003). Thus, in social support transactions, people ask for help with the understanding that the other person also has the freedom to choose to help and when the other provides support, people assume that this act is a reflection of the others' own volition to help. Thus, in the individualistic cultural context, one can ask for social support with relatively little caution and support seeking generally leads to positive outcomes for both receiver and provider, as the voluminous research on social support attests.

By contrast, in more collectivistic cultures, such as in many Asian cultures, the interdependent view of the self is more common and it regards a person as a flexible, connected entity who is bound to others, who conforms to relational norms, and who views group goals as primary and personal beliefs, needs, and goals as secondary (Kim & Markus, 1999; Kitayama & Uchida, 2005; Markus & Kitayama, 1991). In these cultures, relationships also take an interdependent form in which relationships with others are less voluntary and more given. These interdependent relationships come with a greater sense of obligation and are more impactful on one's life than are independent relationships (Adams & Plaut, 2003). In this context, one has to be relatively more cautious about bringing personal problems to the attention of others for the purpose of enlisting their help. Thus, disclosing problems and explicitly soliciting social support may be a relatively uncommon approach that people adopt to receive social support.

To examine cultural differences in social coping, Taylor et al. (2004) conducted three studies that found that Asians/Asian Americans were significantly less likely to report drawing on social support for coping with stress than were European Americans, a pattern that was especially true for Asian nationals and Asian immigrants. When asked why they might not seek social support or help from others when dealing with a stressor, Asians and Asian Americans indicated that the primary reason was concern with their relationships. Specifically, they indicated that they were concerned about worrying others, disrupting the harmony of the group, losing face, and making the problem worse.

One important issue raised by these findings centers on the perceived effectiveness of social support seeking. To the extent that Asian Americans are hesitant to seek social support because of relational concerns, is there a smaller benefit when they do seek social support? That is, Asian Americans may be concerned about the relational implications of asking for help, and this concern might be an added stressor that dampens the benefit of social support. Thus, social support seeking may be less effective in resolving their problems and reducing their stress. To examine this issue, we assess the perceived effectiveness of social support seeking in dealing with stressors among people from collectivistic and individualistic cultures in the present studies.

Second, people from different cultures also may define social support seeking differently because they construe relationships in different ways. People from more collectivistic cultural contexts in which relationships are construed to be less voluntary and associated with obligations are likely to be more cautious in support seeking. This tendency should become more pronounced when they are dealing with a group more closely associated with themselves (i.e., ingroup) than with a group with little personal connection (i.e., outgroup; cf. Iyengar, Lepper, & Ross, 1999). In contrast, people from more individualistic cultural contexts, in which relationships are construed to be more voluntary, are encouraged to directly and verbally express their own thoughts and needs (Holtgraves, 1997; Kim & Ko, in press; Kim & Sherman, in press), with the expectation that others also will reciprocate with responses based on their own volitions and needs. Social support seeking is an act to solve their problems by influencing their social environments (see also Morling, Kitayama, & Miyamoto, 2003). Thus, they may be less cautious about the negative relational implications of asking for social support. Because they are less concerned about upsetting relationships, whether the relationship is of great or little importance may be less of a deciding factor in whether to seek social support.

Overview

Three studies examined how perceptions of social support seeking and effectiveness vary as a function of culture and different degree of salience of social groups. Study 1 examined cultural differences in the effectiveness of social support seeking in the resolution of stressors. This study builds on our research examining cultural differences in social support seeking (Taylor et al., 2004). In the present studies, people from different cultural backgrounds indicated not only whether they sought or would seek social support but also how helpful they perceived this social support would be in resolving the stressor. In Study 2, we primed different relationships to examine how connectedness with social

groups (ingroup vs. outgroup vs. self) would affect social support seeking and its effectiveness among Asian Americans and European Americans. We expected that when Asian Americans assess whether to seek support from others, and gauge its effectiveness, they may be more influenced by the nature of a salient reference group (or lack of group) and more hesitant to seek social support and expect it to be less effective when their connection to the group is of personal importance (i.e., ingroup). When the connection to the group is minimal or the focus is on the self, Asian Americans are expected to be more willing to seek social support. In contrast, European Americans are expected to be relatively uninfluenced by this ingroup/outgroup distinction of the reference group as well as group/self-focus because they are less cautious about negative relational consequences of their request for social support. In Study 3, we replicated the findings from Study 2 with a few procedural changes and also examined possible explanations for the observed cultural difference. That is, we tested whether relational concerns associated with social support seeking would explain the difference in how much participants from different cultures are willing to seek social support.

STUDY 1

Study 1 investigated the effectiveness of social support seeking among Asian Americans and European Americans in dealing with a concrete and specific stressor concerning their health. Taylor et al. (2004) had focused on academic and social stressors, and so in this study, we wanted to generalize these findings to a new and common type of stressor. Moreover, social support has been linked to positive health outcomes among people confronting a wide range of health problems (Collins, Dunkel-Schetter, Lobel, & Scrimshaw, 1993; Marteau, Bloch, & Baum, 1987; VanderPlate, Aral, & Magder, 1988).

The study featured a questionnaire in which people were asked to describe a recent health stressor and report how they had coped with the stressor. The goal of the study was to examine if the cultural difference in the willingness to seek social support was associated with the perceived effectiveness of social support in resolving the stressor. We hypothesized that relative to European Americans, Asian Americans would report seeking social support less and perceive social support to be less successful in resolving stressors.

Method

Participants. Seventy-three undergraduate students (12 male and 18 female Asian Americans and 9 male and

34 female European Americans) from the University of California, Santa Barbara (UCSB), participated in the study in exchange for credit in their introductory psychology class.

Materials and procedures. Participants completed the questionnaire packet individually in a lab setting. In the questionnaire, participants first described a specific health issue that they faced within the past year in an open-ended format. Subsequent questions on coping pertained to their specific behaviors in regard to this health issue.

Participants' coping strategies were assessed via the Brief COPE (Carver, 1997). The Brief COPE measures the use of different coping strategies in response to stress. The main outcome of interest in our studies is social support, which includes emotional support (e.g., "I received emotional support from others") and instrumental support (e.g., "I tried to get advice or help from other people about what to do"). Other strategies assessed by the COPE include planning, active coping, positive reframing, denial, self-blame, behavioral disengagement, substance use, self-distraction, religion, acceptance, and humor (Carver, 1997). Because our interest was chiefly in social support, we supplemented the Brief COPE social support items with additional items from the long form of the COPE (Carver, Scheier, & Weintraub, 1989). Participants rated each coping statement in terms of how much they had used it to cope with the stressor, using scales anchored at 1 (*not at all*) and 5 (*very much*).

Finally, participants indicated the perceived outcome of the stressor. They reported how successfully the stressor was resolved on a scale anchored at 1 (*not at all successful*) and 7 (*very sscucessful*). They also reported how helpful their family was and how helpful their friends were in dealing with the stressor on scales anchored at 1 (*not at all helpful*) and 7 (*very helpful*). At the conclusion of the study, participants completed a demographic questionnaire, were thanked, and debriefed.

Results and Discussion

Social support seeking. We first looked at differences in social support seeking and coping outcomes among European Americans and Asian Americans using independent samples t tests. As in Taylor et al. (2004), we computed a nine-item social support index ($\alpha = .84$) that combined items assessing emotional support seeking and instrumental support seeking. Overall, Asian Americans ($M = 2.92$, $SD = .97$) reported seeking social support less than did European Americans ($M = 3.45$, $SD = .91$), $t(71) = 2.37$, $p = .02$. This pattern was consistent for both seeking instrumental social support (European Americans, $M = 3.40$, $SD = 1.02$; Asian Americans, $M = 2.87$, $SD = 1.09$), $t(71) = 2.13$, $p = .04$,

and for seeking emotional social support (European Americans, $M = 3.51$, $SD = 1.01$; Asian Americans, $M = 2.99$, $SD = .95$), $t(71) = 2.25$, $p = .03$. Overall, women ($M = 3.45$, $SD = .94$) reported using social support more than did men ($M = 2.70$, $SD = .84$), $F(1, 69) = 7.68$, $p = .007$. There were no other effects involving sex or interactions between sex and culture.

Effectiveness of support seeking. Next, we assessed how helpful family and friends were with the health stressor, using a 2-item composite of family and friends' helpfulness $r(73) = .59$, $p < .001$. European Americans reported that family and friends' support was more helpful in dealing with the stressor ($M = 5.23$, $SD = 93$) than did Asian Americans ($M = 4.20$, $SD = 1.26$), $t(71) = 4.02$, $p < .001$.

We also assessed the overall success in resolving the stressor. Asian Americans ($M = 4.87$, $SD = 1.31$) and European Americans ($M = 4.98$, $SD = 1.37$) *did not* significantly differ in how successfully the stressor was resolved, $t(71) = .34$, $p = .73$. To examine this pattern further, we performed a regression analysis to explore how social support seeking was associated with successful resolution of the stressor as a function of culture. We examined whether culture, different types of social support seeking (i.e., emotional and instrumental social support or combined), and the interaction between the two variables would predict success in alleviating the stressor. Overall, neither culture nor different types of support significantly predicted success in alleviating the stressor. However, there was a Culture × Emotional Support interaction, $\beta = .33$, $t(71) = 1.99$, $p = .05$. We conducted simple slopes analysis (Aiken & West, 1991) to determine the nature of the interaction. Among Asian Americans, there was a strong negative relationship between emotional support seeking and success, $\beta = -.44$, $t(69) = 2.28$, $p = .03$, whereas among European Americans, there was no relationship, $\beta = .05$, $t(69) = .32$, *ns.* In Figure 1, we plotted the predicted means for success at resolving the stressor at +1 and –1 *SD* on the emotional social coping predictor for the European Americans and Asian Americans, respectively. Similar relationships were found for instrumental support seeking and the combined measure, although they were not significant.

STUDY 2

In Study 2, using a priming method, we examined how participants are affected by making salient goals of different relationships to the social group from whom they might seek social support. We chose to prime participants with goals because social support seeking is an act with a clear goal of either solving a stressor or making oneself feel better. Consequently, we sought to examine the effect of making salient either the goals of
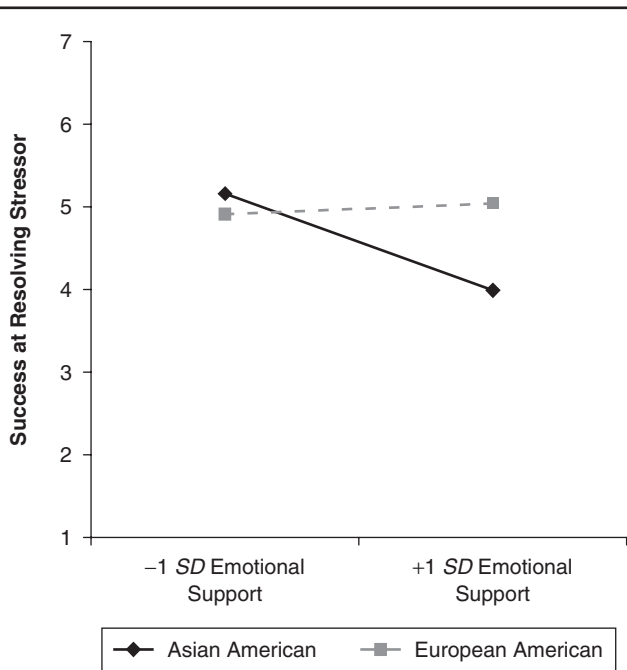
Figure 1   Success in resolving stressor as a function of emotional support seeking and culture in Study 1.

the self or the goals of others that could vary in their relationship to the self and affect the likelihood of seeking (or not seeking) social support. Thus, in this study, we primed Asian American and European American participants with self-goals, ingroup goals, outgroup goals, or no goals and examined the effect of these primes on their willingness to seek social support as well as their expectation of social support seeking outcome. Thinking about the goals of close others (ingroup), distant others (outgroup), or themselves should affect participants' decisions to seek social support and their expectations of its helpfulness more for participants who are cautious about relational implications of support seeking. For those who are less concerned about negative implications, the decision to seek support should not differ depending on whether group (of either type) or self-goals are made salient.

We hypothesized that Asian Americans would seek social support less when they are primed with ingroup goals than self-goals or outgroup goals, whereas European Americans would not differ among different conditions. That is, for Asian Americans, the implications of social support seeking are greater when the relationship in question matters more to themselves than when the relationship is unimportant or even nonexistent. Thus, we predicted that when primed to think about the goals of a group to whom they do not feel connected, Asian Americans would be as willing to

seek support as when self-goals are salient, whereas they would be less willing to seek support when ingroup goals (i.e., goals of those whose relationships are personally important) are salient. We also hypothesized that Asian Americans' willingness to seek social support in the control condition would be comparable to the ingroup condition, supporting the idea that the relative reluctance to seek social support among Asian Americans is due to their (chronic) concern for affecting relationships. Moreover, we hypothesized that Asian Americans would expect social support to be less helpful in resolving the stressor than would European Americans in the control and the ingroup conditions, replicating the findings from Study 1, but not in the outgroup or the self-condition.

Method

Participants. Three hundred seventy-nine undergraduate students (27 male and 75 female Asian Americans and 89 male and 188 female European Americans) from UCSB participated in the study. Participants received course credit or payment.

Materials and Procedures. The first part of the study consisted of the goals prime. Participants were randomly assigned to one of four conditions. Participants in the Self-Goals condition were asked to write about their five most important personal goals. Space was provided for them to list their top five most important personal goals. Participants in the Ingroup Goals condition were first told that an ingroup is a group of people with whom you feel very close and share common goals. They were then asked to write down the first ingroup1 that came to mind and then to list the top five most important goals of this ingroup. Participants in the Outgroup condition were first told that an outgroup2 is a group of people with whom you do not feel particularly close and do not share common goals. They were then asked to write down the first outgroup of theirs that came to mind and then to list the top five most important goals of this outgroup. Participants in the control condition did not write about any group or goals and merely completed the social stressors part of the study.

Unlike Study 1, which focused on reports of past stressors, in Study 2, we asked participants to think about current stressors and their future plan for action because we were interested in the role of relationship prime in their decisions to seek or not seek social support. Participants completed a questionnaire utilized in Taylor et al. (2004) that assesses social support seeking in response to stress. Participants were asked,

> Most people encounter social stressors on a fairly regular basis. You might have roommate problems, difficulties with a boyfriend or girlfriend, conflicts with your parents, a falling out with a friend, or just plain be

lonely. What is the greatest social stressor you are currently facing? Describe it briefly in the space below.

Participants were given a page to write about their greatest social stressor.

Participants then completed the Brief COPE (Carver, 1997) that was used in Study 1. From this, we obtained measures of social support seeking. Participants rated each coping statement in terms of how much they would use it to manage their stressful event using scales anchored at 1 (*not at all*) and 5 (*very much*). We revised the items of the Brief COPE to represent the future tense so that participants responded in terms of how much they would use a certain coping strategy. Then, participants indicated how successfully they thought they would be able to resolve the stressor on a scale anchored at 1 (*not at all successful*) and 7 (*very successful*). At the conclusion of the study, participants completed a demographic questionnaire, were thanked, and debriefed.

Results

Social support seeking. We computed a social coping composite that consisted of items assessing whether participants sought emotional social support and instrumental social support (as in Study 1). The nine-item composite of social coping had very good reliability (α = .92) and was subjected to a 2 (culture: European Americans vs. Asians) × 4 (relationship condition: control vs. self vs. ingroup vs. outgroup) ANOVA. There was a main effect of coping condition, $F(3, 370) = 4.12$, p = .007. However, this main effect was qualified by a Culture × Relationship Condition interaction, $F(3, 370) = 3.16$, p = .025 (see Figure 2). Among the European American participants, no differences emerged among the four conditions because they sought social support to the same extent regardless of whether there was a relationship primed or what the primed relationship was, $F(3, 268) = .16$, *ns.* In contrast, the Asian American participants differed in their willingness to seek social support as a function of which relationship was primed, $F(3, 98) = 6.68$, $p < .001$. We conducted planned contrasts using a Least Significant Difference (LSD) test and found that Asian Americans, compared to the control condition ($M = 3.18$, $SD = .93$), were more willing to seek social support when primed with self-goals ($M = 4.05$, $SD = .66$, $p < .001$) or outgroup goals ($M = 3.99$, $SD = .79$, $p < .001$). By contrast, Asian American participants primed with the ingroup goals ($M = 3.56$, $SD = .70$) were different from those in the control group, albeit marginally ($p = .09$), but were much less willing to seek social support than those primed with self-goals ($p = .02$) or outgroup goals ($p = .04$; see Figure 2). There was a marginal cultural difference in the control condition; Asian Americans sought less social support ($M = 3.18$, $SD = .93$) than European Americans ($M = 3.64$, $SD = 1.04$), $t(74) = 1.81$, $p = .075$. In terms of gender differences, women ($M = 3.85$, $SD = .83$) reported using social support more than did men ($M = 3.34$, $SD = .93$), $F(1, 362) = 20.28$, $p < .001$. There were no other effects involving sex.

Effectiveness of social support. Participants' assessment of how successful they thought the stressor would be resolved was subjected to a 2 (culture) × 4 (relationship condition) ANOVA. There were no main effects of culture or relationship condition but there was a significant interaction, $F(3, 369) = 2.57$, $p = .05$. The European Americans did not differ as a function of condition, $F(3, 271) = .47$, *ns.* In contrast, the Asian Americans did differ, $F(3, 98) = 2.98$, $p = .04$. In particular, Asian Americans primed with the ingroup goals thought their stressor would be resolved less successfully ($M = 4.30$, $SD = .99$) than did those primed with outgroup goals ($M = 5.16$, $SD = 1.03$, $p = .009$) or those primed with self-goals ($M = 5.13$, $SD = 1.26$, $p = .02$) but did not differ from those in the control condition ($M = 4.77$, $SD = 1.54$, *ns*). That is, when Asian American participants were instructed to think about the goals of their ingroup, they thought that their stressor would be less successfully resolved. The only condition in which cultural differences emerged was in the ingroup condition because Asian Americans thought the stressor would be less successfully resolved ($M = 4.30$, $SD = .99$) than did European Americans ($M = 4.97$, $SD = 1.29$), $t(101) = 2.48$, $p = .02$.

Then, given the findings from Study 1, we predicted that among Asian Americans, there would be a negative relationship between social support seeking and perceived success in resolving the stressor in the ingroup and the control conditions. We also predicted a different relationship (i.e., no relationship or more positive relationship) in the self- and outgroup conditions. Thus, for each condition, we conducted a regression analysis in which culture and social support seeking (mean centered) and the interaction were predictors and the outcome was the expected success of the resolution of the stressor. The only significant effect was found in the ingroup condition in which there was a main effect of culture ($\beta = -.27$), $t(99) = -2.76$, $p = .007$ (reflecting, as noted above, that Asian Americans in the ingroup condition thought the stressor would be less successfully resolved than European Americans). However, this was qualified by the Social Support Seeking × Culture interaction ($\beta = -.26$), $t(99) = -2.01$, $p = .047$. To understand this interaction, we conducted simple slopes analysis (Aiken & West, 1991). For European Americans, there was a positive relationship between social support seeking and successful resolution of the stressor ($\beta = .15$),
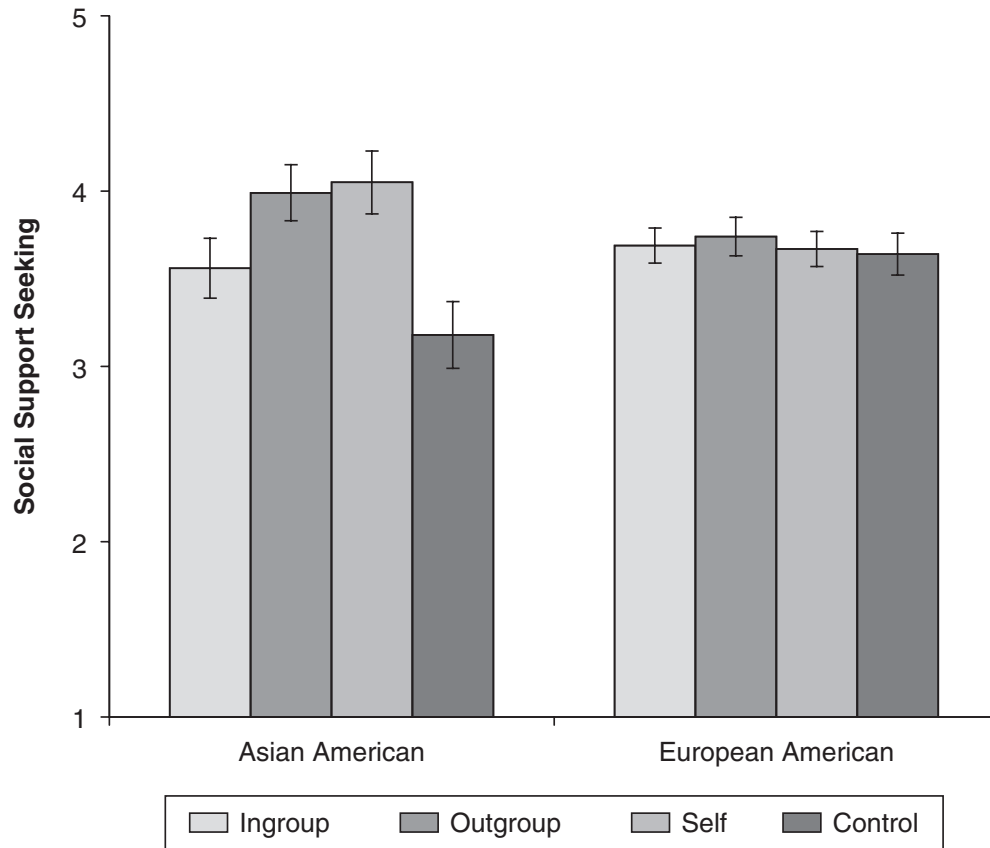
Figure 2   Use of social coping in alleviating stress as a function of prime and culture in Study 2.

$t(99) = 1.40$, $p = .17$. In contrast, for Asian Americans, there was a negative relationship ($\beta = -.38$), $t(99) = 1.58$, $p = .11$. In the other three conditions, there was no significant Culture × Social Support Seeking interaction or significant main effects.

Discussion

Our contention is that Asian Americans are more cautious about seeking social support because they are more concerned about the potentially negative relational consequences than are European Americans. Thus, we hypothesized that willingness to seek support among Asian Americans would differ more as a function of different types of relationship prime than would be true of European Americans, both in terms of the willingness to seek social support and the effectiveness of social support seeking. This hypothesis was supported. As predicted, the manipulation had no effect for European Americans. European Americans, who are less concerned about social support seeking affecting relationships negatively by either burdening or losing face to others, reported seeking support to a similar

degree regardless of what relationship was primed. Asian Americans who thought about their ingroup's goals were more similar to those in the control group. This pattern suggests that concerns about the relationship implications of support seeking are more chronically accessible to Asian Americans and may lead them to seek less social support. Asian Americans, who consider their fates to be more yoked with those of close others, were less likely to seek social support when they were primed to think about close others. Moreover, in general, the expected effectiveness of social support differed between cultural groups because European Americans expected their social support seeking would be more successful in resolving the stressor than did Asian Americans. Our prediction regarding the cultural difference in the effectiveness of social support seeking was not supported in the control condition. However, as predicted, Asian Americans expected social support seeking to be less effective than did European Americans in the ingroup condition. Also, as expected, no cultural difference in the expected effectiveness of social support seeking was found in the self- and outgroup conditions.

STUDY 3

In Study 3, we sought to rule out several alternative explanations for the results in Study 2. First, we directly measure the explanations for not using social support to investigate why there is the cultural difference in support seeking. It is our contention that people from more collectivistic cultures seek social support less because they are more concerned about potential negative relationship implications. However, there are other possible explanations. One of them is the expectation of unsolicited social support. That is, people from more collectivistic cultures might be more hesitant to seek social support because they expect that others around them will provide social support without themselves having to ask. A few studies suggest that people from collectivistic cultures might be more helpful to others' needs than people from individualistic cultures. For example, those from collectivistic cultures tend to see helping others as a moral obligation that they take willingly (Miller, Bersoff, & Harwood, 1990) and also experience greater sympathy toward others (Uchida & Kitayama, 2001). Thus, it is certainly a very reasonable potential explanation that people in these cultures might not seek support because their close others are more sensitive to their needs and are able and willing to provide support without their seeking.

Another change we made was that we included Latino American participants as well as Asian Americans to generalize our findings to participants from another collectivistic culture. Given that we theorize that our cultural pattern of social support use is explained by the individualistic and collectivistic cultural orientations, our analysis should apply to other collectivistic cultural groups as well. Asian and Latino cultures are generally described as collectivistic, meaning that people are seen as fundamentally connected with their social surroundings (Hofstede, 2001; Lindsley & Braithwaite, 1996; Sanchez-Burks, 2002). Asian and Latino cultures provide clear contrasts to individualistic cultures, such as that of European American culture. Therefore, examinations of the social support use of people from two different collectivistic cultures allowed us to investigate the validity as well as generalizability of our theorizing.

Finally, we made a procedural change. In Study 2, the priming manipulation occurred before participants listed their current stressors. Thus, it leaves open the question of whether different priming manipulations made people think about different stressors and consequently led them to consider different coping strategies or the manipulation affected their choice of coping strategies even with the same types of stressors. Consequently, in Study 3, participants specified their stressor prior to the priming manipulation so that the priming could not affect the selection of stressor.

We hypothesized that the results from Study 3 will replicate the findings from Study 2 in that Asian/Latino Americans would seek social support less when they are primed with ingroup goals than self-goals, whereas European Americans would not differ among different conditions. We also hypothesized that Asian/Latino Americans would expect social support to be less helpful in resolving the stressor in the control and the ingroup condition but not in the self-condition, whereas European Americans would not differ among different conditions. Moreover, we predicted that the relational concern factor, rather than the expectation of unsolicited social support factor, would explain the observed cultural differences.

Method

Participants. One hundred fifty-two undergraduate students (21 female and 47 male Asian Americans, 4 female and 9 male Latino/Latina Americans, and 20 male and 51 female European Americans) from UCSB and University of California, Los Angeles (UCLA), participated in the study. Participants received money for their participation.

Materials and Procedures. Participants filled out the questionnaires in large group settings. The first part of the study was the specification of participants' stressful event. Participants were asked to write about the greatest social stressor they are currently facing. Then, participants were randomly assigned to one of three conditions: Self-, Ingroup, and Control conditions. Participants in the Self-Goals condition were asked to write about their five most important personal goals. Participants in the Ingroup Goals condition were asked to write down the first ingroup that came to mind and then to list the top five most important goals of this ingroup. Participants in the control condition did not write about any group or goals and merely completed the social stressors part of the study.

Participants then completed the Brief COPE (Carver, 1997) that was used in Studies 1 and 2. Participants rated each coping statement in terms of how much they would use it to manage their stressful event using scales anchored at 1 (*not at all*) and 5 (*very much*). Then, participants reported how helpful their family was, and how helpful their friends were in dealing with the stressor, on scales anchored at 1 (*not at all helpful*) and 7 (*very helpful*).[3] Next, participants completed a questionnaire designed to assess factors that might act to discourage the use of social support for coping. This questionnaire asked asking participants to
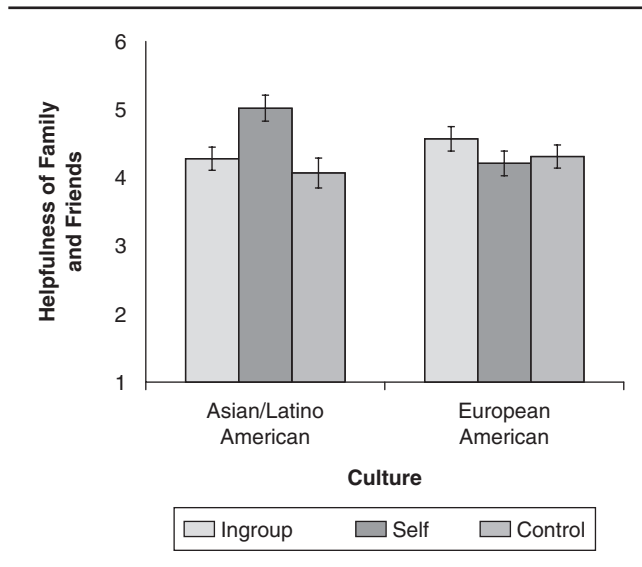
Figure 3   Expected helpfulness of support from family and friends in dealing with stressor as a function of prime and culture in Study 3.

rate how important each of the listed concerns would be for them in deciding whether to seek or use social support. Participants then rated 13 items constructed to map onto the two categories of explanations: relational concerns and expectation of unsolicited social support.

The relational concerns factor included items tapping various reasons for not seeking social support that stem from their potentially negative relationship implications, such as desire to preserve the group harmony, belief that telling others would make the problem worse, concern that sharing problems would result in criticism or poor evaluations by others, and desire to save face and avoid embarrassment. The unsolicited social support factor included items such as, "I wouldn't seek help because I think that others who are close to me will take care of my needs without me having to ask." At the conclusion of the study, participants completed a demographic questionnaire, were thanked, and debriefed.

Results

Social support seeking. The nine-item composite of social coping had very good reliability ($\alpha = .91$) and was subjected to a 2 (culture: European Americans vs. Asian/Latino Americans[4]) × 3 (relationship condition: control vs. self vs. ingroup) ANOVA. There was no significant main effect, although the main effect of culture was in the predicted direction ($M = 3.58$, $SD = .99$ for Asian/Latino Americans; $M = 3.83$, $SD = .86$ for European Americans), $F(1, 146) = 2.60$, $p = .11$. However, there was the expected Culture × Relationship

Condition interaction, $F(2, 146) = 3.16$, $p = .05$. Among the European American participants, no differences emerged among the three conditions. They sought social support to the same extent regardless of priming, $F(2, 68) = .59$, *ns.* In contrast, the Asian/Latino Americans participants differed in their willingness to seek social support as a function of which relationship was primed, $F(2, 78) = 3.79$, $p = .03$. We conducted planned contrasts using LSD and found that Asian/Latino Americans, compared to the control condition ($M = 3.23$, $SD = .93$), were more willing to seek social support when primed with self-goals ($M = 3.97$, $SD = .95$, $p < .01$). In contrast, Asian/Latino Americans participants primed with the ingroup goals ($M = 3.55$, $SD = .99$) fell between the control condition and the self-condition as in Study 2, although the differences were not statistically significant ($p = .22$ with the control condition and $p = .12$ with the self-condition). There was a significant cultural difference in the control condition; Asian/Latino Americans sought less social support ($M = 3.23$, $SD = .93$) than did European Americans ($M = 3.83$, $SD = .86$), $t(45) = 2.19$, $p = .03$. Women ($M = 3.80$, $SD = .92$) reported using social support more than did men ($M = 3.45$, $SD = .93$), $F(1, 140) = 4.01$, $p = .05$, but there were no other effects or interactions involving sex.

Effectiveness of social support. To examine the effectiveness of the support as a function of culture and condition, a two-item composite of family and friends' helpfulness, $r(152) = .44$, $p < .001$, was subjected to a 2 (culture: European Americans vs. Asian/Latino Americans) × 3 (relationship condition: control vs. self vs. ingroup) ANOVA. There was no significant main effect. However, there was the marginal Culture × Relationship Condition interaction, $F(2, 146) = 2.59$, $p = .08$. Among the European American participants, as expected, no differences emerged among the three conditions because they expected their family and friends' support to be equally helpful, $F(2, 68) = .44$, *ns.* In contrast, also as expected, the Asian/Latino Americans participants differed in their expectation for the helpfulness of family and friends' support as a function of the priming, $F(2, 78) = 3.84$, $p = .03$. We conducted planned contrasts using LSD and found that Asian/Latino Americans, compared to the self-condition ($M = 5.02$, $SD = 1.12$), expected their family and friends' support would be less helpful in the control condition ($M = 4.07$, $SD = 1.43$, $p < .01$) and the ingroup condition ($M = 4.28$, $SD = 1.23$, $p = .04$). The expectations in the control and the ingroup conditions did not differ ($p = .54$; see Figure 3).

Reasons for not seeking social support. We examined whether relationship concerns ($\alpha = .89$) or unsolicited social support ($\alpha = .71$) could account for the cultural

TABLE 1:   Correlations Among Support Seeking, Expected Effectiveness of Support Seeking, Relational Concerns, and Unsolicited Support Factors (N = 152)

	1	2	3	4
1. Helpfulness	—			
2. Relational concerns	−.21*	—		
3. Unsolicited support	.06	.49**	—	
4. Support seeking	.59**	−.37**	−.03	—

*p < .05. **p < .01.

differences in use of social support. To do so, we conducted a series of regression analyses (following the mediational analysis format of Baron & Kenny, 1986[5]), in which culture (European American vs. Asian/Latino American) was one predictor and use of social support for coping was the outcome. We then entered each of the potential explanations into the regression as a predictor to see whether it would account for the variance explained by the cultural differences. In the first step of the regression analysis, culture was a marginally significant predictor of social coping, $\beta(151) = .15$, $p = .07$. Next, we examined whether culture predicted each of the potential explanations. Culture significantly predicted both relationship concerns, $\beta(151) = −.21$, $p = .01$, and unsolicited support, $\beta(151) = −.29$, $p < .001$, indicating that Asian/Latino Americans endorsed both reasons more than did European Americans. Finally, we examined which of these factors would reduce the direct link between culture and social support seeking. When both relationship concerns and culture are entered simultaneously as predictors, relationship concerns were significant, $\beta(151) = −.35$, $p < .001$, and culture was no longer significant, $\beta(151) = −.07$, ns. The Sobel Test for the significance in the reduction of the direct path was significant ($z = 2.30$, $p = .02$). The unsolicited support factor did not account for the relationship between culture and social coping because when both were entered into the regression, culture remained marginally significant, $\beta(152) = .15$, $p = .07$, but the unsolicited support factor was not significant, $\beta(152) = .02$, ns.

We also examined the role of relational concerns and unsolicited support factors in explaining the expected helpfulness findings. Given that there was no main effect of culture on the expected helpfulness of family and friends, we could not conduct the same type of analysis as above. Instead, we examined the simple correlations among social support seeking, expected helpfulness, relational concerns factor, and unsolicited support factor. The results show that the relational concerns factor significantly correlates with expected effectiveness of support seeking, $r(152) = −.21$, $p = .01$, whereas the unsolicited support factor does not, $r(152) = .06$, $p = .44$ (see Table 1).

Discussion

The findings from Study 3 by and large replicated the findings from Study 2 in spite of the changes in the order of manipulation and stressor listing task. The experimental manipulation had little effect for European Americans, but Asian/Latino Americans who thought about their ingroup's goals reported that they would be less likely to seek social support than those who thought about their personal goals. In addition, Asian/Latino Americans in the control and ingroup conditions also expected social support from friends and family to be less helpful than in the self-condition, whereas European Americans, again, did not differ in their expectation of social support helpfulness regardless of manipulation. Moreover, the results show that the relational concerns explain the observed cultural difference in social support seeking, whereas the expectation of unsolicited social support did not explain the cultural difference in social support seeking, although Asian/Latino Americans expected unsolicited social support more than did European Americans. Finally, the relational concerns factor, but not the unsolicited support factor, was related to the expected effectiveness of support seeking.

GENERAL DISCUSSION

In the present research, we examined cultural differences in the effect of social relationship priming on the willingness to seek social support and the reported effectiveness of social support seeking for resolving stressors. We also examined the idea that people from more collectivistic cultures are less likely to seek social support than are people from more individualistic cultures because people from more collectivistic cultures are more concerned about negatively affecting their social network (Taylor et al., 2004). The results from three studies supported these hypotheses. First, people from more collectivistic cultures were more likely to seek social support when they were primed with the self or the outgroup than when they were primed with the ingroup or when there was no priming across different types of stressors. Second, Asian Americans (and Latino Americans in Study 3) consistently found and expected social support seeking to be less effective, even harmful, in dealing with stressors. Third, measured relational concerns explained the observed cultural difference in the willingness to seek social support, providing more direct evidence for our proposed reason for the observed cultural difference.

There are clear limitations in the reported studies in that these studies utilized self-reports about past and current stressors. How much the responses in the present studies reflect actual behaviors in real-life situations is an

important question to be addressed in future research. Also, the relationship between support seeking and effectiveness is correlational and, thus, caution is needed in assessing the relative effectiveness of the different strategies. It is also important to note that we are referring to the effectiveness of explicit seeking of social support rather than the effectiveness of social support in general. Rethinking the view of social support as primarily consisting of a transaction of explicit seeking and providing would seem to be necessitated by these cultural differences. Perhaps in more collectivistic cultures, social support involves different forms of processes and transactions, a topic we return to later in the discussion. Finally, social support transactions take places in dynamic interactions. One's decision to seek social support depends greatly on how the person expects others to react to such an action. Culture can influence many aspects of social support transaction. For instance, the expectation of how seeking support would affect potential providers can vary across cultures. Support providers in collectivistic cultures might feel more obligated to help (Miller et al., 1990) than in individualistic cultures and knowing that their request could pressure others to help could discourage them from seeking support. Although we focus on the seeker's perspective in the present research to untangle the complicated process, we recognize that examination of the transaction in a more interpersonally dynamic setting is necessary.

European American participants in Studies 2 and 3 were relatively unaffected by the goals priming manipulation because it made little difference whether the primed goals were their own or that of an ingroup or outgroup. The fact that making various relationships salient did not affect their seeking of social support suggests that European Americans are not as concerned about negative relationship implications when they seek support. Moreover, if European Americans consider the social support transaction to be a means to solve individual problems relying on relationships as valuable social resources, then they may be more likely to seek social support in general. In this context, explicit social support seeking may not only be condoned but expected and encouraged.

Our findings with European American participants may seem inconsistent with previous research from predominantly European American samples regarding the importance of the nature of relationship in their social support seeking. For example, research on social support seeking in close relationships shows that transactions in seeking and using social support are influenced by such factors as attachment style or relationship closeness (Collins & Feeney, 2000; Feeney & Collins, 2001; Hobfoll, Nadler, & Leiberman, 1986; Weiss, 1974). Relationship closeness, that is, the closeness of oneself

to the relationship, is an important factor in determining the helpfulness of social support (Cutrona, Cohen, & Ingram, 1990; Hobfoll et al., 1986; Weiss, 1974). Thus, clearly, European Americans are not impervious to factors such as relationship closeness when they seek social support. However, there is an important distinction between our present research and these previous findings. That is, the previous research generally focused on the role of the perceived supportiveness of others, and European Americans were affected by factors that moderate the quality and types of social support. By contrast, the present research suggests that European Americans may be relatively less concerned about the possibility of negative relational impact of their action in their decisions to seek social support.

Whereas we argue for a culturally different effect of social support seeking, we are not questioning the benefits of social support—having a supportive social network and knowing that one is cared for by close others—in buffering oneself against stressful events per se. Numerous research findings including studies with multicultural samples clearly show the benefit of both perceived and received support from close others (e.g., Collins et al., 1993; Dunkel-Schetter, Sagrestano, Feldman, & Killingsworth, 1996; Morling et al., 2003). Rather, we raise questions about cross-cultural relevance of conceptualizing social support as transactions of explicit seeking and provision.

Then, what are alternative forms of social support transactions that may be more beneficial for those from more collectivistic cultures? One study examining the use and effectiveness of coping strategies among Japanese and American women during pregnancy found that Japanese women rated social assurance as the most important strategy that led to less psychological distress (Morling et al., 2003). This social assurance in Morling et al. (2003) was defined as "aligning oneself with the influence of others" (p. 1534) by accepting others' decisions. That is, social assurance focused on a less agentic aspect of social support than support seeking. Thus, Asians may be more likely to use and benefit from social support when it takes this more interdependent form. It appears to be the explicit transaction of soliciting social support that is distressing to Asian Americans, not having social support per se.

Social support transactions that do not involve the solicitation of help may be more beneficial for Asians/Asian Americans. For instance, invisible social support (Bolger et al., 2000) in which support receivers are unaware of support provision may be particularly beneficial for Asian Americans because in these transactions they do not need to worry about the costs to others. Implicit types of social support that do not involve an explicit transaction of seeking and providing

also may be particularly beneficial for Asian Americans, such as belonging social support (Wills, 1991) or perceived support availability (Wethington & Kessler, 1986). That is, one might benefit from knowing that one is cared for, cherished by others, and part of a social group with obligations and responsibilities without actually seeking social support.

To close, the present research examines the cultural divergence in social support seeking and how people from different cultural contexts perceive the effectiveness of social support seeking. Although having others who care for oneself may be an important element of well-being, how much people are willing to seek social support and how much people benefit from it is likely to depend on whether social support is thought of as an effective use of social resources in time of need or as a potential source of relational complications. In a cultural context in which relationships are construed to be valuable resources in times of need, individuals may utilize these social resources in their pursuit of comfort. In a cultural context in which relationships are construed to be matrices of mutual obligation and constraint, individuals may choose to be on their own in their pursuit of harmony.

NOTES

1. There were four categories of ingroups: family, friends, social organizations (e.g., tennis club), and social groups (e.g., Californians). There were no cultural differences in the type of ingroup listed, $\chi^2(3, n = 102) = 1.93$, $p = .59$.

2. The overwhelming majority of participants in the outgroup condition listed social groups, such as racists or a political affiliation (i.e., liberals and conservatives), and a few participants listed social organizations. There were no cultural differences in the type of outgroup listed, $\chi^2(3, n = 73) = 2.59$, $p = .47$.

3. We measured the expected helpfulness of family and friends rather than measuring overall success in resolving stressor and linking it with social support seeking because they provided simpler and more direct measures of the expected helpfulness of social support.

4. We conducted an ANOVA comparing Asian Americans and Mexican Americans as different groups and found a strong main effect of condition, $F(2, 75) = 5.01$, $p = .01$, but neither significant main effect of culture, $F(2, 75) = 1.01$, ns, nor the interaction of culture, $F(2, 75) = 1.31$, ns, indicating that both groups were affected by the manipulation in the same way. Thus, we collapsed them in the subsequent analysis.

5. We measured the explanations after our dependent variables because asking for reasons why they did not seek social support would have influenced the way people would respond to the coping strategy questionnaire. Thus, we do not perform moderated mediation test. We simply examined the explanations for overall cultural difference in social support seeking, collapsing across three conditions.

REFERENCES

Adams, G., & Plaut, V. C. (2003). The cultural grounding of personal relationship: Friendship in North American and West African worlds. *Personal Relationships, 10,* 333-347.

Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions.* Newbury Park, CA: Sage.

Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology, 51,* 1173-1182.

Bolger, N., Zuckerman, A., & Kessler, R. C. (2000). Invisible support and adjustment to stress. *Journal of Personality and Social Psychology, 79,* 953-961.

Carver, C. S. (1997). You want to measure coping but your protocol's too long: Consider the Brief COPE. *International Journal of Behavioral Medicine, 4,* 92-100.

Carver, C. S., Scheier, M. F., & Weintraub, J. K. (1989). Assessing coping strategies: A theoretically based approach. *Journal of Personality and Social Psychology, 56,* 267-283.

Cobb, S. (1976). Social support as a mediator of life stress. *Psychosomatic Medicine, (38),* 300-314.

Cohen, S. (1988). Psychosocial models of the role of social support in the etiology of physical diseases. *Health Psychology, 7,* 269-297.

Cohen, S., Sherrod, D. R., & Clark, M. S. (1986). Social skills and the stress-protective role of social support. *Journal of Personality and Social Psychology, 50,* 963-973.

Cohen, S., & Wills, T. A. (1985). Stress, social support, and the buffering hypothesis. *Psychological Bulletin, 98,* 310-357.

Collins, N. L., Dunkel-Schetter, C., Lobel, M., & Scrimshaw, S. C. M. (1993). Social support in pregnancy: Psychosocial correlates of birth outcomes and postpartum depression. *Journal of Personality and Social Psychology, 65,* 1243-1258.

Collins, N. L., & Feeney, B. C. (2000). A safe haven: An attachment theory perspective on support seeking and caregiving in intimate relationships. *Journal of Personality and Social Psychology, 78,* 1053-1073.

Cutrona, C. E., Cohen, B. B., & Ingram, S. (1990). Contextual determinants of the perceived supportiveness of helping behaviors. *Journal of Social and Personal Relationships, 7,* 553-562.

Dunkel-Schetter, C., Folkman, S., & Lazarus, R. S. (1987). Correlates of social support receipt. *Journal of Personality and Social Psychology, 53,* 71-80.

Dunkel-Schetter, C., Sagrestano, L., Feldman, P., & Killingsworth, C. (1996). Social support and pregnancy: A comprehensive review focusing on ethnicity and culture. In G. Pierce, B. Sarason, & I. Sarason (Eds.), *Handbook of social support and the family* (pp. 375- 412). New York: Plenum.

Feeney, B. C., & Collins, N. L. (2001) Predictors of caregiving in adult intimate relationships: An attachment theoretical perspective. *Journal of Personality and Social Psychology, 80,* 972-994.

Fiske, A. P., Kitayama, S., Markus, H. R., & Nisbett, R. E. (1998). The cultural matrix of social psychology. In D. Gilbert, S. Fiske, & G. Lindzey (Eds.), *Handbook of social psychology* (pp. 915-981). New York: McGraw-Hill.

Hobfoll, S. E., Nadler, A., & Leiberman, J. (1986). Satisfaction with social support during crisis: Intimacy and self-esteem as critical determinants. *Journal of Personality and Social Psychology, 51,* 296-304.

Hofstede, G. (2001). *Culture's consequences. Comparing values, behaviors, institutions, and organizations across nations.* Thousand Oaks, CA: Sage.

Holtgraves, T. (1997). Styles of language use: Individual and cultural variability in conversational indirectness. *Journal of Personality and Social Psychology, 73,* 624-637.

Iyengar, S. S., Lepper, M. R., & Ross, L. (1999). Independence from whom? Interdependence with whom? Cultural perspectives on ingroups versus outgroups. In D. Prentice & D. Miller (Eds.), *Cultural divides: Understanding and overcoming group conflict* (pp. 273-301). New York: Russell Sage.

Kim, H., & Markus, H. R. (1999). Deviance or uniqueness, harmony or conformity? A cultural analysis. *Journal of Personality and Social Psychology, 77,* 785-800.

Kim, H. S., & Ko, D. (in press). Culture and self-expression. In C. Sedikides & S. Spencer (Eds.), *Frontiers of social psychology: The self.* New York: Psychology Press.

Kim, H. S., & Sherman, D. K. (in press). "Express yourself": Culture and the effect of self-expression on choice. *Journal of Personality and Social Psychology.*

Kitayama, S., & Uchida, Y. (2005). Interdependent agency: An alternative system for action. In R. Sorrentino, D. Cohen, J. Olson, & M. Zanna (Eds.), *Cultural and social behavior: The Ontario symposium* (Vol. 10, pp. 137-164). Mahwah, NJ: Lawrence Erlbaum.

Lepore, S. J. (1998). Problems and prospects for the social support-reactivity hypothesis. *Annals of Behavioral Medicine, 20*, 257-269.

Lindsley, S. L., & Braithwaite, C. A. (1996). "You should 'wear a mask'": Facework norms in cultural and intercultural conflict in maquiladoras. *International Journal of Intercultural Relations. 20*, 199-225.

Markus, H. R., & Kitayama, S. (1991). Culture and the self: Implications for cognition, emotion, and motivation. *Psychological Review, 98*, 224-253.

Markus, H. R., Mullally, P., & Kitayama, S. (1997). Selfways: Diversity in modes of cultural participation. In U. Neisser & D. A. Jopling (Eds.), *The conceptual self in context: Culture, experience, self-understanding* (pp. 13-61). Cambridge, UK: Cambridge University Press.

Marteau, T. M., Bloch, S., & Baum, J. D. (1987). Family life and diabetic control. *Journal of Child Psychology and Psychiatry, 28*, 823-833.

Miller, J. G., Bersoff, D. M., & Harwood, R. L. (1990). Perceptions of social responsibilities in India and the United States: Moral imperatives or personal decisions? *Journal of Personality and Social Psychology, 58*, 33-47.

Mills, J., & Clark, M. S. (1984). Exchange and communal relationships. In L. Wheeler (Ed.), *Review of personality and social psychology* (Vol. 3, pp. 121-144). Newbury Park, CA: Sage.

Morling, B., Kitayama, S., & Miyamoto, Y. (2003). American and Japanese women use different coping strategies during normal pregnancy. *Personality and Social Psychology Bulletin, 29*, 1533-1546.

Morris, M. W., & Peng, K. (1994). Culture and cause: American and Chinese attributions for social and physical events. *Journal of Personality and Social Psychology, 67*, 949-971.

Sanchez-Burks, J. (2002). Protestant relational ideology and (in)attention to relational cues in work settings. *Journal of Personality and Social Psychology, 83*, 919-929.

Seeman, T. E. (1996). Social ties and health: The benefits of social integration. *Annals of Epidemiology, 6*, 442-451.

Seidman, G., Shrout, P. E., & Bolger, N. (2006). Why is enacted social support associated with increased distress? Using simulation to test two possible sources of spuriousness. *Personality and Social Psychology Bulletin, 32*, 52-65.

Taylor, S. E. (in press). Social support. In H. S. Friedman & R. C. Silver (Eds.), *Oxford handbook of health psychology*. New York: Oxford University Press.

Taylor, S. E., Sherman, D. K., Kim, H. S., Jarcho, J., Takagi, K., & Dunagan, M. S. (2004). Culture and social support: Who seeks it and why? *Journal of Personality and Social Psychology, 87*, 354-362.

Thoits, P. A. (1995). Stress, coping and social support processes: Where are we? What next? *Journal of Health and Social Behavior*, pp. 53-79.

Uchida, Y., & Kitayama, S. (2001). Development and validation of a sympathy scale. *Japanese Journal of Psychology, 72*, 275-282.

VanderPlate, C., Aral, S. O., & Magder, L. (1988). The relationship among genital herpes simplex virus, stress, and social support. *Health Psychology, 7*, 159-168.

Weiss, R. S. (1974). The provisions of social relationships. In Z. Rubin (Ed.), *Doing unto others* (pp. 17-26). Englewood Cliffs, NJ: Prentice Hall.

Wethington, E., & Kessler, R. C. (1986). Perceived support, received support, and adjustment to stressful life events. *Journal of Health and Social Behavior, 27*, 78-89.

Wills, T. A. (1991). Social support and interpersonal relationships. In M. S. Clark (Ed.), *Prosocial behavior* (pp. 265-289). Newbury Park, CA: Sage.