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BEYOND PARENTS AND PEERS: THE ROLE OF IMPORTANT NON-PARENTAL ADULTS (VIPS) IN ADOLESCENT DEVELOPMENT IN CHINA AND THE UNITED STATES

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To understand cross-cultural differences and similarities in the social contexts for adolescent development, 201 American and 502 Chinese 11th graders were surveyed about a non-parental adult who had played an important role in their lives (VIPs). Results showed that, compared to adolescents' VIPs in the United States, their Chinese counterparts were more likely to be teachers, to provide support in education-related areas, and to be considered role models. Chinese VIPs were also reported to exhibit fewer problem behaviors and depressive symptoms and express a higher level of sanctions against adolescent problem behaviors than American VIPs. Adolescents in both cultures reported that their VIPs' positive qualities surpassed those of parents and peers. VIPs' characteristics (e.g., sanctions, problem behavior, warmth, and depressed mood) were significantly associated with adolescent outcomes. These results suggest that although there are cross-cultural differences in the nature of VIPs, VIPs are a very important part of social context for adolescent development in both the United States and China. © 2003 Wiley Periodicals, Inc.

The importance of social contexts for child and adolescent development has been well-recognized (Steinberg, 1999). Although most of the research has focused on family and peers, a small but slowly growing literature has pointed to the importance of several other social contexts. For example, research during the past two decades (e.g., Greenberger & Steinberg, 1986; Mortimer et al., 1996) has clearly demonstrated the importance of the workplace for adolescent development (e.g., achievement and deviance). Other researchers have studied school contexts and their effects on adolescents' achievement and adjustment (e.g., Blum, McNeely, & Rinehart, 2002; Eccles et al., 1993, 1996; Simmons & Blyth, 1987). Still other researchers have focused on neighborhoods as social contexts and found the powerful effects of factors such as poverty and crime on adolescent development (Jencks & Mayer, 1990; Brooks-Gunn et al., 1997). Researchers also have treated leisure activities as a social context and examined their effects on adolescents' cognitive and social development (e.g., Csikszentmihalyi & Kleiber, 1991; Eccles & Barber, 1999; Fine et al., 1990). Finally, researchers have examined the role of mentors in adolescents' occupational development (e.g., Hamilton, 1990; Levinson, 1978) and in their general psychosocial development (e.g., Tierney, Grossman, & Resch, 1995).

In contrast to research that has focused on socially-defined extrafamilial contexts such as work, school, and neighborhoods, another approach to the study of adolescent development is to focus on the subjective social contexts that adolescents deem important. Using this approach, we (Beam et al., 2002; Greenberger et al., 1998) have recently shown that many adolescents report having a non-parental adult who plays the role of VIP. VIPs—non-parental adults who have had a significant influence on the adolescent and on whom the adolescent can rely for support—come from many different socially-defined contexts: extended family members, teachers, employers,

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church representatives, coaches, or older friends. Other researchers have referred to these "VIPs" as "natural mentors" (Rhodes, Ebert, & Fischer, 1992) or "significant others" (Blyth, Hill, & Thiel, 1982).

The importance of VIPs to youths as a source of comfort, guidance, or inspiration is evident both in the anecdotal literature (e.g., Coumo, 1999) and in research. For example, in their study of single African American young mothers, Rhodes et al. (1992) showed that those young women who had a "naturally-occurring" mentor in their lives reported better adjustment. Recently, Greenberger et al. (1998) reported that VIPs' behaviors and attitudes were positively associated with adolescents' social-emotional development. These studies are consistent with an older line of research that showed the positive effects of non-parental adults on children's resilience in the face of adversity (Garmezy, 1985, 1991; Herrenkohl, Herrenkohl, & Egolf, 1994; Rutter, 1985, 1989, 1990; Sameroff, Seifer, Baldwin, & Baldwin, 1993; Werner & Smith, 1977, 1982). These studies found that children and adolescents with extended social networks, especially non-parental adults who were important in their lives, were more likely to show positive outcomes than were those without an extended social network.

Taken together, various lines of research over the past two decades have afforded a more complete picture of the micro-, meso-, and exo-systems that constitute the ecology of adolescent development (Bronfenbrenner, 1979). In contrast, research on cultural variations (i.e., the macrosystem) in these contexts is very limited (Chen & Farruggia, 2002). Cross-cultural research on "naturally-occurring" mentors or VIPs is, to the best of our knowledge, non-existent. Nevertheless, cross-cultural variations in the roles and effects of important non-parental adults (VIPs) in adolescents' lives may be significant because of the importance of culture in shaping social contexts (Bronfenbrenner, 1979). In the present study, we compared adolescents' VIPs in two contrasting cultures: Chinese and American. Of the various differences between Chinese and American cultures, three aspects may be of particular significance in understanding adolescent-VIP relationships.

First, Chinese culture is believed to value "vertical collectivism" (Triandis, 1995) that emphasizes connectedness to the family as a collective and differences in authority across generations, whereas American culture tends to emphasize "horizontal individualism" marked by a preference of egalitarian relationships and personal autonomy. Because of the Chinese emphasis on bonds to the family, especially to parents, Chinese adolescents in this study were expected to form fewer important relationships with non-parental adults than American adolescents. For those Chinese youths who did report having a VIP, we expected that their VIPs, compared to those of American adolescents, would more often be kin members and older (thus having more authority).

Second, the centrality of education in adolescents' lives differs considerably between China and the U.S. Because of the great emphasis on education in Chinese culture, Chinese adolescents spend more time in school and more time outside of school on academic activities (Stevenson, Lee, Chen, Stigler, Hsu, & Kitamura, 1990). Moreover, Chinese teachers have a great deal of authority over their students and are very respected as a group. A recent study of Chinese adolescents (Dong & Chen, 2001) has shown strong, positive associations between the quality of adolescent-teacher relationships and adolescent outcomes (e.g., better psychological well-being and lower problem behavior). In contrast, American adolescents have a more varied life that includes part-time employment, sports and other extracurricular activities, and dating (Chen & Stevenson, 1995). Teachers in the U.S. do not enjoy the high status they have in China. Consequently, we expected that, among the non-kin VIPs identified by adolescents, more would be teachers in China than in the U.S. We also expected that Chinese adolescents would be more likely than their American counterparts to describe the functions of their teacher-VIPs as related to learning.

Third, Azuma (1994) has discussed cultural differences in styles of socialization. He believes that "osmosis" or role modeling is the mode of socialization that is emphasized in East Asia. Stevenson (1991) also discussed the importance of role models in moral socialization in China. Following these arguments, we anticipated that Chinese adolescents would be more likely to consider their VIPs to be role models than would American adolescents.

In addition to examining cross-cultural differences in the social role relationships and functions of VIPs, we investigated four key attributes of VIPs, specifically, their perceived warmth and acceptance, their level of depression, the sanctions they impose (i.e., disapproval of misconduct), and problem behaviors of the VIPs. These characteristics were selected because of the extensive research literature demonstrating the importance of these attributes of parents and peers for adolescent development. For example, parental warmth and acceptance has been found to be negatively associated with adolescent depression and misconduct in a variety of cultures including China and the U.S. (e.g., Chen et al., 1998; Greenberger & Chen, 1996; Greenberger et al., 1998). Greenberger et al. (2000) also found that peer warmth and acceptance plays an important role in lowering adolescent depression in China and the U.S. Other investigators (e.g., Dodge, 1990; Hops, 1996) have demonstrated that parental depression may influence adolescent outcomes (especially psychological well-being) through the negative effect it has on the quality of parent-adolescent interactions. Parental sanctions and parents' own problem behaviors are also positively related to adolescent misconduct (e.g., Greenberger et al., 1998; Loeber & Stouthamer-Loeber, 1986; Werner & Smith, 1982). Peer sanctions and peer problem behaviors are among the most significant predictors of adolescent misconduct (Chen et al., 1998; Duncan, Tildesley, Duncan, & Hops, 1995). Finally, the limited research on VIPs suggests that these characteristics of VIPs also affect adolescent problem behavior and depressive symptomatology (Greenberger et al., 1998).

In this study, we also compared the mean levels of perceived VIP warmth and acceptance, depressed mood, sanctions and behaviors with their analogous measures for peers and parents. We expected that in both cultures the overall level of VIP warmth would be similar to that of peer warmth, but that VIP sanctions would be similar to parental sanctions. This prediction was based on the results of a recent qualitative study in the U.S. (Beam, Chen, & Greenberger, 2002) showing that VIPs had both peer-like and parent-like qualities. They were like peers in terms of providing support but were like parents in terms of providing guidance and role models.

Finally, the present study investigated the association between VIP characteristics and adolescents' psychosocial outcomes (i.e., optimism, self-esteem, depressive symptoms, and misconduct). Based on earlier research (Greenberger et al., 1998), we expected that positive VIP characteristics (i.e., warmth and acceptance, sanctions against misconduct, few depressive symptoms, and low involvement in problem behaviors) would be associated with better adolescent outcomes in both cultures.

Method

Participants

Participants in the study were 201 11th graders from a high school in the Los Angeles metropolitan area (Mean age = 16.7 years) and 502 11th graders from 4 high schools in Tianjin, China (Mean age = 17.6 years). The schools in each location were characterized by average student achievement levels and family socioeconomic status relative to others in the whole city. Characteristics of the sample are summarized in Table 1. About half of the participants were males in each group (46% in the U.S. and 52% in China). The U.S. sample is ethnically diverse (53% European Americans, 16% Latinos, 12% Asian Americans, 11% African Americans, 9% others), reflecting the composition of the schools and communities in many parts of southern California.

Table 1
Summary Statistics for Demographic Variables

Variable	U.S. (n = 201)	China (n = 502)
Age (mean/SD)	16.7 (.57)	17.6 (.60)
Gender (% male)	46	52
Parent marital status		
(% married to each other)	58	94
Maternal education		
Junior high	8	53
High school	38	21
Some college/vocational school	33	19
4-year college	17	7
Master's or professional degree	4	0
Paternal education		
Junior high	8	40
High school	33	18
Some college/vocational school	32	30
4-year college	21	12
Master's or professional degree	6	0
Parental employment (% employed)		
Mothers	78	80
Fathers	92	94

The Chinese sample was homogeneous in its ethnic composition. As would be expected, the family structure of adolescents in the two cultures differed significantly, χ^2 (1, $N = 699$) = 135.54, $p < .001$. U.S. parents also had significantly higher levels of education than Chinese parents, $F(1,671) = 55.97$, $p < .001$, for the fathers and $F(1,680) = 109.16$, $p < .001$, for the mothers. These differences reflect the vast differences in educational opportunity in the two countries.

Procedures

All data were obtained by means of an anonymous, self-report questionnaire that was administered by the researchers and their assistants during a class period at school. In the U.S., informed consent was obtained from both adolescents and their parents. Of the 300 enrolled 11th graders in the school, 241 were present on the day of survey, and 201 (83% of those present; 67% of all eleventh graders) had obtained the necessary consent forms and completed the survey. In China, authority for students' participation in research is vested in the school; consequently all students present on the day of the survey took part in the study. In the U.S. schools, participants' names were entered in a raffle at the end of the class period, with 1–2 students in each class winning a gift certificate of $25 or more for use at a record store.

Measures

Initial versions of all measures were written in English. Translation into Chinese was then prepared by bilingual researchers in the U.S. and in China. Changes were made as needed and when made, were checked by bilingual members of the U.S. staff to insure that common meaning had been preserved.

Who Is the VIP? Participants were asked whether they had "an important adult" in their lives other than a parent—"someone at least 21 years old who has had a significant influence on you or whom you can count on in times of need." To stimulate participants' thinking on this topic, we provided examples of possible VIPs, such as an aunt, teacher, or a coach. Responses subsequently were coded into 16 categories: no VIP, grandparent, aunt/uncle, cousin, sibling, parent's significant other, friend's parent, neighbor, older friend, romantic partner, parent or other relative of boyfriend/girlfriend, teacher, coach, academic or psychological counselor, church representative, and other. Participants also reported the VIP's sex and approximate age. For screening purposes, participants also rated the importance of the VIP in their lives on a 5-point scale marked 1 = "not really all that important," 2 = "somewhat important," 3 = "important," 4 = "very important," and 5 = "a truly key person." When adolescents rated their VIPs lower than 3, the cases were recoded as having no VIP because they did not meet the criterion of "important" non-parental adults (see Greenberger et al., 1998).

Functions of the VIPs. In an open-ended question, respondents were asked to explain in which specific ways the VIP was important to them. The coding manual was prepared after a review of responses from both the American and Chinese samples. Resulting codes are shown in Table 2. Two coders in each country were trained to use the manual. Multiple responses (up to three responses) were coded for each participant. Interrater agreement rate was 92% in the U.S. and 93% in China. Disagreements, which were few, were resolved by consultation with the senior members of the research team.

Table 2
Coding Categories of Functions of VIPs

Categories	Examples
Support/motivation for schoolwork and learning	"Changed my attitude towards school."
Support for interpersonal problems, issues, and relationships	"Helped me understand my parents' divorce." "Helped me learn to respect people."
Support for personal development, issues, and problems	"Convinced me I could make something of my life." "Got me to stop taking things so hard."
Support for activities and interests	"Got me interested in music." "Got me onto the baseball team."
Financial support	"Gave me money so I could do things other kids do."
Unspecified or general support	"Listens to me." "I know I can count on him." "Really cares about me."
Companionship, fun	"Do things together."
Self-disclosure and intimacy	"I can tell him . . . stuff that might get me in trouble, and he keeps it in confidence." "We tell each other things."
Role model	"The kind of person I want to be."
Support for individuality or equality	"Respects my views." "Treats me like an adult."
Other or uncodable responses	"I can't really explain it."

VIP Warmth and Acceptance. Participants answered five questions on their perceptions of their VIP's warmth and acceptance (1 = "strongly disagree," 2 = "disagree," 3 = "slightly disagree," 4 = "slightly agree," 5 = "agree," and 6 = "strongly agree.") These items were drawn from the 11-item Parental Warmth and Acceptance scale (Greenberger et al., 1998; also see below). The scale includes items such as "This person really understands me" and "I know that this person will 'be there' for me if I need him or her." The coefficient alpha was .83 for the U.S. sample and .80 for the Chinese sample.

Parental Warmth and Acceptance. Participants completed the 11-item measure of perceived parental warmth and acceptance (Greenberger et al., 1998). The Cronbach alphas for this scale were .88 (U.S.) and .76 (China). In order to compare the VIP with the parent scale, only the five items that the scales shared in common were used in this study. The Cronbach alphas for this shortened scales were .76 (U.S.) and .62 (China).

Peer Warmth and Acceptance. The Peer Warmth and Acceptance Scale (Greenberger et al., 2000) includes items identical in content to the Parental Warmth and Acceptance scale. Cronbach alphas were .85 (U.S.) and .75 (China). The shortened five-item scale, which was identical in content to the VIP and parental versions of the scale, had reliability coefficients of .75 (U.S.) and .73 (China).

Family Members', Friends', and VIPs' Depressed Mood. Perceived depressed mood of others was assessed by a 3-item scale for each of the three social contexts (Beam, Gil-Rivas, Greenberger, & Chen, 2002). These three items were selected from the Center for Epidemiologic Studies–Depression (CES-D) scale (Radloff, 1977). Participants were asked to report whether a family member and the VIP had "acted depressed," "said his/her life had been a failure," and "looked or said he/she was sad" during the past six months. Adolescents also were asked whether "none" (0), "some" (1), or "many" (2) of their friends had shown those depressive symptoms. Cronbach alphas for family members' depressed mood were .71 (U.S.) and .67 (China); those for friends' depressed mood were .77 (U.S.) and .64 (China); and those for the VIPs were .65 (U.S.) and .63 (China).

Parents', Friends', and VIPs' Sanctions. Identical 11-item scales were used to assess the sanctions or reactions adolescents believed their misconduct would elicit from parents, peers, and VIPs. The 11 items were drawn from the longer (69-item) Adolescent Problem Behaviors scale and represented all of the categories of misbehavior (e.g., risk-taking, school misconduct, physical aggression, etc.) on that measure (see below for a description of the scale and categories). Respondents answered on a three-point scale. For peer sanctions, the responses were "would express approval," "would not say anything," and "would express disapproval." For parental and VIP sanctions, they were "would not care," "would be somewhat upset," and "would be very upset." In order to compare the VIP and parental sanctions with peer sanctions, all responses were recoded to reflect disapproval (scored as 2) versus implicit approval ("would not care" or "would not say anything") and explicit approval ("would express approval") (both scored as 1). Cronbach alphas were .84 (U.S.) and .76 (China) for Parental Sanctions; .85 for both groups for Peer Sanctions; and .87 (U.S.) and .75 (China) for VIP Sanctions.

Family Members', Friends', and VIPs' Problem-Related Behaviors. Adolescents were asked to indicate whether "none," "some" or "many" of their friends had engaged in ten types of misbehavior over the past six months, including school deviance, physical aggression, theft, and substance use, among others. The ten items were a subset of the 69-item Adolescent Problem Behaviors scale (see below). Cronbach alphas were .90 and .75 for the U.S. and Chinese samples,

respectively. Respondents also indicated (yes/no) whether a family member or their VIP had engaged in frequent substance use (e.g., alcohol, nicotine, marijuana or other illegal drugs), or engaged in physical aggression or theft in the past six months. Alphas for these 7-item scales were .62 and .53 for U.S. and Chinese family members' behavior, and .78 and .71 for VIPs' behavior, respectively.

Adolescent Problem Behaviors. The measure of Problem Behaviors was developed jointly by Chinese and American researchers in an effort to include items that were culturally relevant in each setting. In addition to drawing on a variety of Problem Behavior lists in the published literature (Arnett & Balle-Jensen, 1993; Chen et al., 1998; Feldman et al., 1991; Fletcher et al., 1995), a pilot survey of 20 high school teachers in China generated additional items of problem behaviors. The domains of problem behaviors in the final version of the measure included risk-taking (e.g., "deliberately went someplace I knew was dangerous"); school-related deviance (e.g., "cheated on a test"), status offenses (e.g., "ran away from home"), physical aggression (e.g., "hit or threatened to hit someone"), vandalism (e.g., "painted graffiti on walls"), substance use, theft, and other offensive behavior. Respondents indicated how often during the past six months they had done these things on a four-point scale: "never," "once or twice," "three or four times," or "more often." Coefficient alpha for the 69-item scale that was administered to all participants was .96 for the U.S. sample and .92 for the Chinese sample.

Adolescents' Depressed Mood. Depressed mood was assessed by the Center for Epidemiologic Studies-Depression scale (Radloff, 1977). Sample items include "I felt depressed" and "I was bothered by things that usually don't bother me." Participants answered on a four-point scale ranging from "never" to "almost everyday" during the past month. Alphas were .89 and .86, for U.S. and Chinese adolescents, respectively.

Optimism. Optimism was assessed by the nine-item Life Orientation Test (Scheier & Carver, 1985). Sample items include "I generally look at the bright side of things" and "If something can go wrong for me, it will" (reverse scored). Participants responded on a 6-point scale from "strongly disagree" to "strongly agree." Cronbach alphas were .85 (U.S.) and .64 (China).

Self-esteem. Self-esteem was measured by the ten-item Rosenberg Self-Esteem Scale (Rosenberg, 1965). Sample items include "On the whole I am satisfied with myself" and "I certainly feel useless at times" (reversed scored). The six-point response scale ranged from "strongly disagree" to "strongly agree." Cronbach alphas for the scale were .88 (U.S.) and .71 (China).

Results

A large majority of adolescents in both cultures (85% Americans and 80% Chinese) reported having an important non-parental adult in their lives. These percentages did not differ significantly from each other, χ^2 (1, N = 698) = 1.77, n.s. However, the perceived importance of these non-parental adults was significantly different for the two cultures, χ^2 (4, $N = 572$) = 113.45, $p < .001$. American adolescents deemed these individuals more important than did Chinese adolescents. Almost one-third (31%) of American adolescents, but only 5% of Chinese adolescents rated their VIPs as "a truly key person." The percentages for the other four categories of importance were: 33% (U.S.) and 19% (China) for "very important," 26% (U.S.) and 34% (China) for "important," 8% (U.S.) and 29% (China) for "somewhat important," and 2% (U.S.) and 13% (China) for "not really all that important." Using the prior definition of VIPs (i.e., excluding those who were

"not really all that important" or "somewhat important"),[1] American adolescents reported a greater number of VIPs (76% of the sample) than did Chinese adolescents (47% of the sample), χ^2 (1, N = 699) = 49.83, $p < .001$.

Given the significant cross-cultural differences in family structure and socio-economic status, it is necessary to examine whether they may account for cross-cultural differences in the proportion of adolescents who reported having a VIP. Results showed that adolescent reports of having a VIP or not were not related to family structure, maternal education, and paternal education in either of the two cultures (r's ranged from −.05 to .02).

As we expected, the mean age of Chinese adolescents' VIPs was significantly older than that of their American peers. The mean age for the American VIPs was 36.92 years (SD = 15.02) and 42.30 years (SD = 17.01) for the Chinese VIPs, t (378) = 3.15, $p < .01$. This difference was also true within the various role relationships. For example, the mean ages for teacher VIPs were 35.60 years in the U.S. and 43.88 years in China. Similarly, the mean ages of aunt or uncle VIPs were 38.79 years in the U.S. and 41.50 years in China. In addition, adolescent-VIP dyads were more likely than not to be of the same gender. Sixty five percent of the American males had a male VIP, whereas 73% of the females had a female VIP, χ^2 (1, N = 152) = 121.89, $p < .001$. Similarly but to a lesser extent, Chinese adolescent-VIP dyads were also more likely to be of the same gender: 57% of male adolescents had a male VIP and 59% female adolescents had a female VIP, χ^2 (1, N = 230) = 5.61, $p < .05$.

The Social Roles of VIPs

Table 3 presents the data comparing the role relationships of the VIPs selected by American and Chinese adolescents. As we expected, Chinese adolescents were significantly more likely than Americans to identify a teacher as their VIP (33% vs. 10%, for Chinese and Americans, respectively), χ^2 (1, N = 383) = 25.77, $p < .001$.

In contrast, American adolescents were more likely than Chinese to name church representatives and coaches as VIPs. Contrary to our prediction, Chinese youths who had an important non-parental adult were not appreciably more likely than Americans to specify an adult relative. We also examined whether family structure and parental education were related to the social roles of VIPs and, if they were, whether they would account for cross-cultural differences in social roles. There was no significant relation between family variables and the social roles of VIPs (r's ranged from −.10 to .12, n.s.).

The Functions of VIPs

American and Chinese youths also differed greatly in their reports of the functions of their VIPs (see Table 4). Compared to their American counterparts, Chinese adolescents were more likely to report that their VIPs provided support and motivation for academic achievement and more often indicated that their VIPs were role models for them. In contrast, American adolescents were more likely to report support for interpersonal relationships, general support, and fun and

[1]It is not clear whether these differences reflected true differences in the importance of non-parental adults or merely Chinese adolescents' avoiding the extremes on Likert scales because of cross-cultural differences in response style (Chen, Lee, & Stevenson, 1995). To avoid presenting results that may be biased one way or the other by including or excluding those non-parental adults who were considered to be either "somewhat important" or "not really that important," we analyzed the data in two ways: one involving all the subjects who reported having an important non-parental adult and the other involving only VIPs (i.e., those who were "important," "very important," or "truly key," as defined in Greenberger et al., 1998). Results showed that the inclusion or exclusion of the "less" important VIPs made no differences in the patterns of cross-cultural differences in the social roles, functions, and attributes of the VIPs. Therefore, we used the conventional definition of VIPs in the remainder of this article.

Table 3
Role Relationships of the Important VIPs (Percentage)

	U.S. (n = 152)	China (n = 232)	$\chi^{2\,a}$
Grandparent	13	15	.28
Aunt/uncle	16	20	.86
Cousin	6	4	.93
Sibling	16	14	.24
Parents' significant other	1	0	1.56[b]
Friend's parent	8	2	7.37
Neighbor	3	3	.19
Older friend	12	10	.43
Romantic partner	0	0	—
Romantic partner's relative	3	0	6.28[b]
Teacher	10	33	25.77***
Coach	5	0	11.08**[b]
Counselor	1	0	3.12[b]
Church representative	6	0	14.32***[b]
Other	1	0	.10[b]

Note: [a]Given the large of number of χ^2 tests, alpha was set at .01. [b]One or both cells had expected count less than 5, thus the χ^2 statistics should be interpreted with caution.
**$p < .01$; ***$p < .001$.

companionship. Interestingly, in both cultures, few adolescents reported that VIPs provided support for individuality or were important to them because they treated the adolescent as an equal.

To investigate whether family structure and parental education may confound cross-cultural differences in VIPs' functions, we examined the relations between VIPs' functions and family

Table 4
Functions of the VIPs (Percentage[a])

	U.S. (n = 152)	China (n = 232)	$\chi^{2\,b}$
Support for learning	6	25	20.70***
Support for interpersonal issues	9	1	12.42**[c]
Support for personal issues	18	15	0.47
Support for activities	3	0	7.63[c]
Financial support	2	0	2.91[c]
General/unspecified support	70	47	17.70***
Fun, companionship	11	2	13.79***
Intimacy, disclosure	8	7	0.07
Role model	7	23	14.03***
Individuality/equality	2	0	1.37[c]
Other/uncodable	1	6	7.15**[c]

Note: [a]The numbers do not add up to 100 because of multiple responses (up to three responses). [b]Given the large of number of χ^2 tests, alpha was set at .01. [c]One or both cells had expected count less than 5, thus the χ^2 statistics should be interpreted with caution.
**$p < .01$; ***$p < .001$.

Table 5
Functions of the VIPs: Teachers vs. Non-Teachers in China (Percentage[a])

	Non-teacher (n = 156)	Teacher (n = 76)	$\chi^{2\ b}$
Support for learning	14	49	32.23***
Support for interpersonal issues	1	1	0.00[c]
Support for personal issues	11	24	6.52
Support for activities	0	0	—
Financial support	1	0	0.49[c]
General/unspecified support	51	40	2.86
Fun, companionship	3	0	1.98[c]
Intimacy, disclosure	10	1	6.02[c]
Role model	29	12	8.27**
Individuality/equality	1	0	0.49[c]
Other/uncodable	6	5	0.03[c]

Note: [a]The numbers do not add up to 100 because of multiple responses (up to three responses). [b]Given the large of number of χ^2 tests, alpha was set at .01. [c]One or both cells had expected count less than 5, thus the χ^2 statistics should be interpreted with caution.
** $p < .01$; *** $p < .001$.

structure and SES. None of the correlations was significant in the U.S. In China, two correlations reached the significance level of .05. One was between family structure and VIP support for interpersonal issues, $r = -.13$, $p < .05$. Chinese adolescents from intact families were less likely to report VIP support for interpersonal issues than were those from non-intact families. The other significant correlation was between paternal education and VIP support for learning, $r = -.16$, $p < .05$. Chinese adolescents with a higher level of paternal education were less likely to report VIP's support in the area of learning.

Because teachers accounted for about one-third of the VIPs for the Chinese, it is worth exploring whether the teachers performed different functions from those played by other VIPs (see Table 5). As one would expect, teachers were more likely than non-teachers to provide support related to school matters. Teachers were also more likely to provide personal support. Surprisingly, however, Chinese teacher VIPs were less likely to be considered role models than nonteacher VIPs, although the former were still twice as likely as American VIPs to be considered as role models by adolescents.

Attributes of VIPs as a Social Context

In this study, we sought to understand the type of social context VIPs provide for adolescent development. The two cultural groups of VIPs varied greatly. American adolescents perceived their VIPs to be warmer and more accepting (mean = 5.01, SD = .79) than did Chinese youths (mean = 4.22, SD = .92), t (383) = 8.68, $p < .001$. American adolescents also reported their VIPs as experiencing more depressive symptoms and displaying more problematic behaviors. The mean ratings (and standard deviations) for depressed mood were 1.22 (.32) for the U.S. and 1.12 (.24) for China, t (379) = 3.47, $p < .01$. Those for problem behaviors were 1.14 (.21) for the U.S. and 1.08 (.16) for China, t (379) = 3.65, $p < .001$. Finally, Chinese VIPs were perceived as having a higher level of sanctions against problem behaviors (mean = 1.95, SD = .11) than were American VIPs (mean = 1.83, SD = .23), t = (380) = -6.62, $p < .001$. Statistically, these differences ranged from moderate (about a third of a standard deviation) to large (about one standard deviation).

Table 6
Means (and Standard Deviations) of the Characteristics of VIPs, Parents, and Peers and Associated t*-Tests Comparing VIPs with the Other Two Social Contexts*

	VIPs	Parents	Peers	*t*-tests: VIPs versus Parents	*t*-tests: VIPs versus Peers
			U.S.		
Warmth	5.01 (.79)	4.14 (1.06)	4.79 (.88)	8.73***	2.73**
Depressed mood	1.22 (.32)	1.33 (.37)	1.66 (.45)[a]	−4.69***	—[a]
Sanctions	1.83 (.23)	1.70 (.33)	1.43 (.29)	4.92***	16.23***
Behaviors	1.13 (.21)	1.23 (.23)	1.81 (.51)[a]	−5.28***	—[a]
			China		
Warmth	4.22 (.92)	4.36 (.85)	4.30 (.88)	−1.90	−1.05
Depressed mood	1.12 (.24)	1.18 (.29)	1.42 (.38)[a]	−3.37**	—[a]
Sanctions	1.95 (.11)	1.79 (.25)	1.72 (.26)	9.71***	12.93***
Behaviors	1.08 (.16)	1.12 (.15)	1.29 (.25)[a]	−4.27***	—[a]

Note: [a]Peer depressed mood and behaviors were measured on a different response scale and thus could not be compared with VIP depressed mood and behaviors. Means and standard deviations are presented here for cross-cultural comparisons (see text for statistics).
df = 143 to 149 in the U.S. and 223 to 231 in China
$^{*}p < .05$; $^{**}p < .01$; $^{***}p < .001$.

Despite these statistically significant cross-cultural differences, in general, VIPs in both cultures were rated high in warmth and acceptance, low in depressed mood and problem behaviors, and high in sanctions.

Another way of gauging the quality of VIPs as a social context is to compare them with parents and peers. A series of *t*-tests were conducted to compare four characteristics of the VIPs with those of parents/family. In addition, we compared VIPs and peers on two characteristics (warmth and sanctions) for which we had comparable measures. [Measures of the other two characteristics—depressed mood and problem behavior—had different response scales for VIPs and peers.]

Comparisons Between VIPs and Parents. In the U.S., VIPs were rated higher than parents in perceived warmth and acceptance and in sanctions against problem behaviors, but lower in depressed mood and problem behavior (see Table 6). In other words, VIPs appeared to have a more positive profile than adolescents' parents. In China, VIPs were also perceived to impose more sanctions and have fewer depressive symptoms and problem behaviors than parents, although perceived VIP warmth and parental warmth were not significantly different (see Table 6).

Comparisons Between VIPs and Peers. A comparison with peer characteristics was available for sanctions and perceived warmth and acceptance. In both the U.S. and China, VIPs' sanctions for misconduct were perceived as significantly stronger than those of peers (see Table 6). Ratings of VIPs' warmth and acceptance did not differ from those of friends in China, but VIPs were rated slightly higher on this characteristic than were friends in the U.S.

Associations Between Characteristics of VIPs and Adolescent Outcomes

Before examining the associations between VIP variables and adolescent outcomes, we investigated the cross-cultural differences in adolescent outcomes. American and Chinese adolescents

Table 7
Correlations Between Characteristics of VIPs and Adolescent Outcomes

	Optimism	Self-esteem	Depression	Misconduct
		United States		
VIP Characteristics				
Warmth	.04	.14	.08	−.08
Depressed mood	−.04	−.15	.20*	.26**
Sanctions	.10	.12	−.03	−.51***
Behaviors	−.12	−.29**	.08	.59***
		China		
VIP Characteristics				
Warmth	.14*	.23**	−.13	−.07
Depressed mood	−.15*	−.14*	.15*	.09
Sanctions	.07	.09	−.18**	−.22**
Behaviors	.05	−.14*	.04	.12

Note: *N*s ranged from 142 to 150 for the U.S. and from 225 to 232 for China.
*$p < .05$; **$p < .01$; ***$p < .001$.

did not differ in optimism and depressed mood, t (375 and 379) = −.94 and −.18, n.s, respectively. American adolescents were higher in self-esteem and problem behavior than Chinese adolescents, t (383 and 378) = 3.04 and 7.48, $p < .01$, respectively.

Table 7 shows the correlations between the four variables that characterized the VIPs and the four indices of adolescent outcomes. These correlations ranged from strong to weak. In general they appear to support the notion that VIPs provided an important socialization context. Correlation coefficients were compared between the cultures using Fisher r-to-z transformation. Results showed two significant cross-cultural differences in correlations: $Z = 3.19$ for cross-cultural differences in the correlation between VIP sanctions and adolescent misconduct and $Z = 5.24$ for the correlations between VIP behavior and adolescent misconduct. One plausible explanation for these differences in correlations is that Chinese adolescents had less variation in their problem behavior because of a generally lower level of problem behavior. In fact, both Chinese VIPs and adolescents had less variation in problem behavior than their American counterparts, as indicated by Levene's test for equality of variances, $F = 62.77$, $p < .001$, for adolescent problem behavior; $F = 13.26$, $p < .001$, for VIPs' problem behavior; and $F = 81.63$, $p < .001$, for VIPs' sanctions.

Discussion

This cross-cultural study looked beyond parents and peers as contexts for adolescent development and focused on non-parental adults who were currently playing an important role in adolescents' lives. Differences in cultures between China and the U.S. led us to predict cross-cultural differences in the prevalence of non-parental VIPs and their age, social roles, and functions. Based on the strong emphasis in Chinese culture on family solidarity and respect for parents and elders in general, we expected that Chinese adolescents would report a lower prevalence of non-parental adults who were important to them. We also predicted that among those who had a VIP, Chinese adolescents would select a kin member and an older individual to a greater degree than American adolescents. Based on the centrality of education in Chinese culture and the emphasis on learning from the examples of others, we expected that Chinese adolescents, more often than

Americans, would select teachers as VIPs, describe them as role models, and characterize their functions as mostly specific to learning.

Results supported our hypotheses regarding cross-cultural differences in the prevalence rate (there were fewer VIPs among Chinese than among American adolescents), age of VIPs (Chinese VIPs were older), importance of teachers and academic support (more so among Chinese), and importance of role modeling (more frequently mentioned among Chinese). These results confirmed our expectations that culture plays a major role in shaping the role of VIPs as a context for adolescent development. It seems likely that culture shapes the role of the VIP in adolescents' experience in many different ways. For example, the greater prevalence of teachers among Chinese adolescents' VIPs is likely to result not only from the value Chinese culture places on education but by the educational practices that reinforce these values. Because Chinese teachers typically retain the same students for several years, they have enough time to develop a closer relationship than is possible with the every-year rotation of adolescents in the American education system. Future research should focus on the multiple processes involved in the shaping of the VIP context in different cultures.

Contrary to our prediction, kin members were not more likely to be mentioned as VIPs among Chinese than among Americans. This finding appears to contradict the popular notion that extended family networks are characteristic of collectivist cultures, such as China. One explanation that deserves close examination is that familism in today's China may not be so pervasive as assumed. Unlike other familistic societies such as Mexico, mainland China has undergone half a century of Communist influence in which extended family networks were viewed as a leftover of feudalist nepotism (e.g., Davis & Harrell, 1993). In fact, Freeman and Ruan and their colleagues (Freeman & Ruan, 1997; Ruan et al., personal communication, 1999) have documented that kin members make up a smaller proportion of adults' social support networks in China than in other countries (e.g., the Netherlands). The declining importance of kin members as providers of social support in China has continued in recent years (Ruan et al., 1997). More research is obviously needed to further explore whether familism is indeed eroding as a core value and shaper of behavior.

Culture not only affects the prevalence, social roles, and functions of VIPs, but also seems to moderate the effects of VIPs on adolescent development. For example, the present study found that VIPs' sanctions and behaviors were less highly correlated with adolescents' problem behavior in China than in the U.S. One explanation for the smaller effect of Chinese VIPs is that Chinese adolescents had lower levels of problem behavior.

We had also hypothesized that adolescents would describe VIPs' characteristics as similar to and different from parents and peers in specific ways, and that these findings would follow the same pattern across the two cultural groups. The various social contexts about which we queried adolescents appear to offer different types of social support and control. For example, according to adolescents in both cultures, parents and VIPs offered a higher level of sanctions than peers. VIPs were warmer and more accepting than parents and peers according to American adolescents. From the adolescents' perspective, VIPs in both cultures have fewer negative attributes, such as depressed mood and problem behaviors, than parents and peers. These results suggest that adolescents may be choosing non-parental adults who have more favorable profiles than their parents and peers. Alternatively, adolescents may know less about their important non-parental adults, on average, than they do about parents and friends and may overestimate the positive qualities of nonparental adults whom they feel have "mattered" in their lives and on whom they believe they can rely.

Limitations in the conduct of this study require that the findings be viewed with caution. One of the study's main weaknesses is that all information about the VIPs and other social contexts were obtained from adolescents. Although perceptions of others' attitudes and behaviors are powerful predictors of individuals' own attitudes and behaviors, it would also be valuable to obtain

data from VIPs, parents, and peers themselves about their levels of problem behavior and depressive symptomatology, and about their feelings of warmth and acceptance for adolescents and attitudes toward the misconduct of adolescents. It is encouraging that research using data from multiple sources typically has shown a moderate level of congruency between adolescents' perceptions of their social contexts and others' reports of the same contexts (e.g., Beam et al., 2002; Chen et al., 1998). Another limitation of the current study is the modest reliability of some of the scales, especially among the Chinese sample. The degree of cross-cultural measurement nonequivalence and its consequence on research findings are largely unknown. However, some recent exploration of cross-cultural measurement equivalence of the following scales has been very encouraging: Center for Epidemiologic Studies-Depression Scale (Tally, Beam, Farruggia, Whang, Dong, & Chen, 2000), Rosenberg's Self-Esteem Scale (Farruggia, Dmitrieva, & Tally, 2001), and Parental Warmth and Acceptance Scale (Chen, Farruggia, Greenberger, & Powers, 2002). These studies generally found cross-cultural measurement equivalence and similarity in construct validity. A third limitation of the current study is its cross-sectional design. Longitudinal data are needed in order to study the long-term effects of VIPs on adolescent development. An abundance of research shows the lasting effects of parents and peers on children and adolescents. If anecdotal evidence is of any value, VIPs' effects may endure for many years (Cuomo, 1999). Clearly, future research should investigate the long-term effects of adolescents' relationships with their VIPs.

References

Arnett, J., & Balle-Jensen, L. (1993). Cultural bases of risk behavior: Danish adolescents. Child Development, 64, 1842–1855.

Azuma, H. (1994). Two modes of cognitive socialization in Japan and the United States. In P.M. Greenfield & R.C. Cocking (Eds.), Cross-cultural roots of minority child development. Hillsdale, NJ: Lawrence Erlbaum Associates.

Beam, M.R., Chen, C., & Greenberger, E. (2002). The nature of adolescents' relationships with their "Very Important" nonparental adults. American Journal of Community Psychology, 30, 305–325.

Beam, M.R., Gil-Rivas, V., Greenberger, E., & Chen, C. (2002). Adolescent problem behavior and depressed mood: Within and across social contexts. Journal of Youth and Adolescence, 31, 343–357.

Blum, R.W., McNeely, C.A., & Rinehart, P.M. (2002). Improving the odds: The untapped power of schools to improve the health of teens. Minneapolis: Center for Adolescent Health and Development, University of Minnesota.

Blyth, D.A., Hill, J.P., & Thiel, K. (1982). Early adolescents' significant others: Grade and gender differences in perceived relationships with familial and nonfamilial adults and young people. Journal of Youth and Adolescence, 11, 425–450.

Bronfenbrenner, U. (1979). The ecology of human development: Experiments by nature and design. Cambridge, MA: Harvard University Press.

Brooks-Gunn, J., Duncan, G.J., & Aber, J.L. (1997). Neighborhood poverty (Vols. 1 and 2). New York: Russell Sage.

Chen, C., & Farruggia, S. (2002). Culture and adolescent development. In W.J. Lonner, D.C., Dinnel, S.A. Hayes, & D.N. Sattler (Eds.), Online readings in psychology and culture. Bellingham, WA: Center for Cross-Cultural Research, Western Washington University. http://www.wwu.edu/~culture/chen-farruggia.htm.

Chen, C., Farruggia, S.P., Greenberger, E., & Powers, T. (2002). Measurement equivalence of the Parental Warmth and Acceptance Scale. Poster presented at the Annual Meetings of the Western Psychological Association, Irvine.

Chen, C., Greenberger, E., Lester, J., Dong, Q., & Guo, M.-H. (1998). A cross-cultural study of family and peer correlates of adolescent misconduct. Developmental psychology, 34, 770–781.

Chen, C., & Stevenson, H.W. (1995). Motivation and mathematics achievement: A comparative study of Asian-American, Caucasian-American, and East Asian high school students. Child Development, 66, 1215–1234.

Chen, C., Lee, S.Y., & Stevenson, H.W. (1995). Response-style and cross-cultural comparisons of rating scales among East Asian and North American students. Psychological Science, 6, 170–175.

Cuomo, M.R. (1999). The person who changed my life. Secaucus: Birch Lane Press.

Csikszentmihalyi, M., & Kleiber, D.A. (1991). Leisure and self-actualization. In B.L. Driver, P.J. Brown, & G.L. Peterson (Eds.), Venture. State College: Pennsylvania University Press.

Davis, D., & Harrell, S. (Eds.) (1993). Chinese families in the post-Mao era. Berkeley, CA: University of California Press.

Dodge, K.A. (1990). Developmental psychopathology and children of depressed mothers. Developmental Psychology, 26, 3–9.

Dong, Q., & Chen, C. (2001). The role of relationships with teachers in adolescent development among a national sample of Chinese urban adolescents. Chinese Journal of Applied Psychology, 7, 3–109.

Duncan, T.E., Tildesley, E., Duncan, S.C., & Hops, H. (1995). The consistency of family and peer influences on the development of substance use in adolescence. Addiction, 90, 1647–1660.

Eccles, J.S., & Barber, B.L. (1999). Student council, volunteering, basketball, or marching band: What kind of extracurricular involvement matters? Journal of Adolescent Research, 14, 10–43.

Eccles, J.S., Midgley, C., Wigfield, A., Buchanan, C., Reuman, D., Flanagan, C., & MacIver, D. (1993). The impact of stage-environment fit on adolescents' experiences in schools and families. American Psychologist, 48, 90–101.

Eccles, J.S., Lord, S.E., & Roeser, R.W. (1996). Round holes, square pegs, rocky roads, and sore feet: The impact of stage-environment fit on young adolescents' experiences in schools and families. In D. Cicchetti & S.L. Toth (Eds.), Adolescence: Opportunities and challenges. University of Rochester Press: Rochester, NY.

Farruggia, S.P., Dmitrieva, J., & Tally, S. (2001). Self-esteem in cross-cultural perspective: Measurement equivalence and relations to parental warmth and depression. Poster presented at the biennial meetings of the Society for Research on Child Development, Minneapolis.

Feldman, S.S., Rosenthal, D.A., Mont-Reynaud, R., Leung, K., & Lau, S. (1991). Ain't misbehaving: Adolescent values and family environment as correlates of misconduct in Australia, Hong Kong, and the United States. Journal of Research on Adolescence, 1, 109–134.

Fine, G.A., Mortimer, J.T., & Roberts, D.F. (1990). Leisure, work, and the mass media. In: S.S. Feldman & G.R. Elliott (Eds.), At the threshold: The developing adolescent. Cambridge, MA: Harvard University Press.

Fletcher, A.C., Darling, N.E., Steinberg, L., & Dornbusch, S. (1995). The company they keep: Relation of adolescents' adjustment and behavior to their friends' perceptions of authoritative parenting in the social network. Developmental Psychology, 31, 300–310.

Freeman, L.C., & Ruan, D. (1997). An international comparative study of interpersonal behavior and role relationships. L'Annee Sociologique, 47, 89–115.

Garmezy, N. (1985). Stress-resistant children: The search for protective factors. In J.E. Stevenson (Ed.), Recent research in developmental psychopathology. Journal of Child Psychology and Psychiatry Book Supplement, 4, 213–233.

Garmezy, N. (1991). Resilience and vulnerability to adverse developmental outcomes associated with poverty. American Behavioral Scientist, 34, 416–430.

Greenberger, E., & Chen, C. (1996). Perceived family relationships and depressed mood in early and late adolescence: A comparison of European and Asian Americans. Developmental Psychology, 32, 707–716.

Greenberger, E., Chen, C., & Beam, M.R. (1998). The role of "Very Important" nonparental adults in adolescent development. Journal of Youth and Adolescence, 27, 321–343.

Greenberger, E., Chen, C., Tally, S., & Dong, Q. (2000). Family, peer, and individual correlates of depressive symptomatology among U.S. and Chinese adolescents. Journal of Consulting and Clinical Psychology, 68, 209–219.

Greenberger, E., & Steinberg, L. (1986). When teenagers work: The psychosocial and social costs of adolescent employment. New York: Basic Books.

Hamilton, S.F. (1990). Apprenticeship for adulthood: Preparing youth for the future. New York: Free Press.

Hamilton, S.F., & Darling, N. (1989). Mentors in adolescents' lives. In K. Hurrelman & U. Engel (Eds.), The social worlds of adolescents. Berlin: Walter de Gruyter.

Herrenkohl, E.C., Herrenkohl, R.C., & Egloff, B. (1994). Resilient early school-age children from maltreating homes: Outcomes in late adolescence. American Journal of Orthopsychiatry, 64, 301–309.

Hops, H. (1996). Intergenerational transmission of depressive symptoms: Gender and developmental considerations. In C. Mundt, M.J. Goldstein, K. Harlweg, and P. Fieldler (Eds.), Interpersonal factors in the origin and course of affective disorders. London: Gaskell.

Jencks, C., & Mayer, S.E. (1990). The social consequences of growing up in a poor neighborhood. In L.E. Lynn, Jr. & M.H. McGeary (Eds.), Inner-city poverty in the United States (pp. 111–186). Washington, D.C.: National Academy Press.

Levinson, D. (1978). The Seasons of a man's life. New York: Knopf.

Loeber, R., & Stouthamer-Loeber, M. (1986). Family factors as correlates and predictors of juvenile conduct problems and delinquency. In N. Morris & M. Tonry (Eds.), Crime and justice: An annual review of research (Vol. 7). Chicago: University of Chicago Press.

Mortimer, J.T., Finch, M.D., Ryu, S., Shanahan, M.J., & Call, K.T. (1996). The effects of work intensity on adolescent mental health, achievement, and behavioral adjustment: New evidence from a prospective study. Child Development, 67, 1243–1261.

Radloff, L.S. (1977). The CES-D Scale: A self-report depression scale for research in the general population. Applied Psychological Measurement, 1, 133–145.

Rhodes, J.E., Ebert, L., & Fischer, K. (1992). Natural mentors: An overlooked resource in the social networks of young, African American mothers. American Journal of Community Psychology, 20, 445–461.

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

Ruan, D., Freeman, L.C., Dai, X., Pan, Y., & Zhang, W. (1997). On the changing structure of social networks in urban China. Social Networks, 19, 75–89.

Rutter, M. (1985). Resilience in the face of adversity: Protective factors and resistance to psychiatric disorder. British Journal of Psychiatry, 147, 598–611.

Rutter, M. (1989). Pathway from childhood to adult life. Journal of Child Psychology & Psychiatry, 30, 22–51.

Rutter, M. (1990). Psychosocial resilience and protective mechanisms. In J. Rolf, A.S. Masten, D. Cicchetti, K. Neuchterlein, & S. Weintraub (Eds.), Risk and protective factors in the development of psychopathology (pp. 181–214). New York: Cambridge University Press.

Sameroff, A.J., Seifer, R., Baldwin, A., & Baldwin, C. (1993). Stability of intelligence from preschool to adolescence: The influence of social and family risk factors. Child Development, 64, 80–97.

Scheier, M.F., & Carver, C.S. (1985). Optimism, coping, and health: Assessment and implications of generalized outcome expectancies. Health Psychology, 4, 219–247.

Simmons, R.G., & Blyth, D.A. (1987). Moving into adolescence: The impact of pubertal change and school context. Hawthorne, NY: Aldine De Gruyter.

Steinberg, L. (1999). Adolescence (5th ed.). Boston: McGraw-Hill.

Stevenson, H.W. (1991). The development of prosocial behavior in large-scale collective societies: China and Japan. In R.A. Hinde & J. Groebel (Eds.), Cooperation and prosocial behavior (pp. 89–105). New York: Cambridge University Press.

Stevenson, H.W., Lee, S.Y., Chen, C., Stigler, J.W., Hsu, C.C., & Kitamura, S. (1990). Contexts of achievement: A study of American, Chinese, and Japanese children. Monographs for the Society for Research in Child Development, 55 (Serial No. 221).

Tally, S., Beam, M.R., Farruggia, S., Whang, S., Dong, Q., & Chen, C. (2000). Cross-cultural measurement equivalence of the CES-D in five adolescent populations. Poster presented at the Biennial Meetings of the Society of Research on Adolescence, Chicago.

Tierney, J.P., Grossman, J.B., & Resch, N.L. (1995). Making a difference: An impact study of Big Brothers/Big Sisters. Philadelphia: Public/Private Ventures.

Triandis, H.C. (1995). Individualism and collectivism. Boulder, CO: Westview Press.

Werner, E.E., & Smith, S. (1977). Kauai's children come of age. Honolulu, HI: University of Hawaii Press.

Werner, E.E., & Smith, S. (1982). Vulnerable but not invincible: A study of resilient children. New York: McGraw Hill.